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CHARACTERISTICS OF RAPE AND SEXUAL ASSAULT

Medical Research in the Ancient and the Biblical Times from the Viewpoint of Contemporary Perspective

Examination of Passages from the Bible, Exactly as Written

Liubov Ben-Nun

Sexual violence occurs in all societies, and across all social classes. Sexual assault permeates all socioeconomic classes and affects millions worldwide. Most victims do not report the assault; those that do often present to an emergency department.

Comprehensive understanding of rape and sexual assault can give health care providers the tools for more effectively handling of these issues. What is the history of rape/sexual assault? What is the epidemiology of sexual violence? What are health effects of sexual assault? What are the psychological aspects of sexual assault on women? What are the characteristics of sex offenders? How can health care providers manage sexual violence towards women? Is sexual violence described in the Bible? The Biblical texts were examined and verses that describe the rape of women were studied closely from the contemporary viewpoint.

80th Book

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CHARACTERISTICS OF RAPE AND SEXUAL ASSAULT

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The rape.
Eustache Le Sueur. c. 1640.

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MY VIEW

MEDICINE IN THE BIBLE AS A RESEARCH CHALLENGE

This is a voyage along the well-trodden routes of contemporary medicine to the paths of the Bible. It covers the connection between body and soul, and the unbroken link between our earliest ancestors, accompanied by spiritual yearning and ourselves. Through the verses of the Bible flows a powerful stream of ideas for Medical Research combined with study of our roots and the Ancient texts.

The Bible exists as evidence in the Book of Books, open to all humankind. The text has been translated into hundreds of languages and dialects, and remains our eternal taboo.

Many people ask me about the connection between the Bible and medical science. My reply is simple: the roots of science are buried deep in the Biblical period and I am just the archeologist and medical researcher. This scientific medical journey to the earliest roots of the nation in the Bible has been and remains moving, exciting and enjoyable. It has created a kind of meeting in my mind between the present and those Ancient times, through examining events frozen in times.

Sometimes it is important to stop, to look back a little. In real time, it is hard to study every detail, because time is passing as they appear. However, when we look back we can freeze the picture and examine every detail, see many events that we missed during that fraction of a second when they occurred.

The Book of Books, the Bible, is an essential source for the whole world.

FOREWORD

Violence can be considered "infectious" in rape-prone cultures that celebrate violence and domination. The number of annual injuries and deaths due to violence against women and girls is high enough to demand the type of active interventions and public policies that have been targeted at infectious diseases by public health agencies. Data on the physical and mental health effects that violence has on victims of domestic violence, rape, stalking, and sexual harassment were reviewed. The economic costs to the health care system, business and industry, families, and the broader society that accrue as a result of the widespread violence against women and girls were evaluated. Victims' suffering can never be accounted for by economic data, but those data may be helpful in pushing governments to allocate funds and agencies to take preventive actions (1).

Sexual assault continues to represent the most rapidly growing violent crime in America. Vital legal reforms are underway, but statistics prove a persistent rise in rape incidence with poor conviction rates. This knowledge, along with the vast multitude of emotional sequelae of rape and self-perceived inferior legal status of women, results in a high percentage of unreported cases. It is imperative that health care providers understand the horrific nature of sexual assault in order to provide appropriate care. All medical care personnel involved in the care of potential rape victims should be briefed in historic and modern legalities of sexual assault. Specific training in emergent and chronic care, both physical and mental, in conjunction with an understanding of rape legislation is vital if health care professionals are to appropriately care for victims of rape (2).

Date rape or acquaintance rape is far more common than rape by strangers and can lead to serious health and adjustment problems for girls and women. Women and men are similar in many of their views about sexual assault. However, studies on attribution of blame have highlighted differences in the ways in which men and women attribute blame in sexual assault. Men attribute less blame to perpetrators of sexual assault than do women, regardless of whether the perpetrator is female or male. This suggests that men identify with the power associated with the role of perpetrator. Ways of

reducing the prevalence of men's sexual aggressiveness toward women are addressed (3).

Rape and sexual violence occur in all societies, and cut across all social classes. Prevalence estimates of rape victimization range between 6% and 59% of women having experienced sexual abuse from their husbands or boyfriends in their lifetime. Two population-based studies from South Africa have found that 28% and 37% of men, respectively, have perpetrated rape. Estimates of rape perpetration from high-income countries seem to be lower than those from low- and middle-income countries; however, current data make it impossible to confirm this. Women and girls are much more likely to be the victims and men the perpetrators and, in most instances, the perpetrator is known to the victim. Children are particularly vulnerable to sexual abuse, with girls being at greater risk, especially while at school and at home. High rates of child sexual abuse are emerging from the research, with an increasing understanding of the effect of child sexual abuse on later perpetration and victimization, highlighting the importance of primary prevention for sexual violence to address childhood exposures to violence. Much of our knowledge about sexual violence has historically been based on research undertaken in high-income countries. This, however, is changing with the emergence of good-quality studies from other settings, particularly in Africa, alongside an increasing number of multi-country studies looking at interpersonal and sexual violence. Most countries lack population data on perpetration of sexual violence, across all categories, including children, and a major gap exists in research on sexual violence among sub-groups and populations. Much of the existing research has limitations that affect cross-study comparability, owing to differences in definitions, research tools, methods and sampling used. Improved research is essential. Research priorities for understanding the magnitude of sexual violence prevalence include assessment of the prevalence and patterns of sexual violence victimization and perpetration in a range of settings, across a range of acts of sexual violence, in men and women, in adults and children, using methodologies based on best practice in gender-based violence research and standard measures of different forms of sexual violence; research on the social context of sexual violence perpetration and victimization by both men and women; and

methodological research to measure sexual violence for particular population sub-groups or violence types, such as child perpetrators or young child victims, or sexual harassment at work and school (4).

The most recent literature on adolescent sexual assault is examined, and new findings regarding prevalence, risk factors, sequelae, cultural factors, genital injury, legal issues and practice implications are summarized. Child and adolescent sexual-assault victims are at risk for a range of negative outcomes, including comorbid post-traumatic stress disorder and major depressive episode, comorbid post-traumatic stress disorder and substance abuse, eating disorders, delinquency, and revictimization. Cultural factors and severity levels of trauma may serve as risk factors to such outcomes in adolescent sexual-assault victims. Compared with adults, adolescent sexual-assault victims have a greater frequency of rape-related anogenital injuries, but data on healing of injuries in this population are lacking. Factors related to a child sexual-assault victim's demeanor and intelligence can influence the perceived credibility of the child as a witness to the abuse. Recent papers investigating prevalence, risk factors, and sequelae of child and adolescent sexual assault highlight the need for educational programs and primary prevention interventions to educate pre-pubescent children and adolescents about sexuality, including sexual assault. Further research is warranted in the area of statutory rape reporting to determine its effects on adolescent health-service-seeking behaviors and outcomes. Although most adolescent sexual assault victims do not seek acute post-rape medical care, forensic nurse examiners are often the first clinicians to encounter the adolescent sexual assault victim. Nursing protocols that standardize evidence collection as well as psychological support are important in the comprehensive care of these traumatized teens (5).

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INTRODUCTION

Sexual assault is a problem that permeates all socioeconomic classes and affects hundreds of thousands in the U.S. and millions worldwide. Most victims do not report the assault; those that do often present to an emergency department. Care must encompass the patients' physical and emotional needs. Providers must be cognizant regarding handling of evidence and possible legal ramifications. Special circumstances include intimate partner violence, male examinations, pediatric examinations, suspect examinations, and drug-facilitated assaults (1).

Sexual violence is a by-product of conflict commonly seen, but poorly addressed, in humanitarian emergencies. Extraordinary numbers of women and girls suffer physical, psychological, and social consequences of sexual violence during conflict, when fleeing conflict, and during displacement. All sectors of the humanitarian community have a role to play in the prevention of and response to sexual violence. Improvements are needed: in the short-term to meet the needs of survivors of sexual violence; in collecting data related to sexual violence in humanitarian emergencies; and, perhaps most importantly, to address the widespread tolerance for high rates of sexual violence in humanitarian settings (2).

The experiences of women who have suffered sexual violence and the impact and importance of that violence on their lives are evaluated. Sexual violence against women is a serious problem worldwide. Studies need to investigate how women reorganize their lives after experiencing sexual violence. A qualitative design was used to explore women's experiences. Semi structured interviews of 11 women who had experienced a sexual assault were analyzed. The interviews were performed at a specialized walk-in clinic at a university hospital in the interior of São Paulo State, Brazil. A thematic analysis of the content led to the identification of the following themes: 1] impact and meaning of the violence; 2] feelings; 3] overcoming the violence and 4] expectations for the future. Sexual violence had a devastating impact on the lives of these women. The

women's post violence experiences caused feelings of guilt, impotence, fragility and immobility. These experiences also instilled a belief that they may have 'provoked' the violence. Nevertheless, the women showed resilience, investing all of their energy in returning their lives to pre-violence conditions. Family, friends and other important people, as well as the care that the women received from health services, were cited as factors that sustained this attitude of resilience. The data indicate that providing appropriate care to female victims of sexual assault requires not only treating the physical damage caused by the violence but also evaluating the particularities of the experience's emotional impact on each woman and the psychosocial repercussions of the experience. Health professionals should follow up with women during their recovery period (3).

Sexual violence occurs in all societies, and across all social classes. Sexual assault permeates all socioeconomic classes and affects millions worldwide. Most victims do not report the assault; those that do often present to an emergency department.

Comprehensive understanding of rape and sexual assault can give health care providers the tools for more effectively handling of these issues. What is the history of rape/sexual assault? What is the epidemiology of sexual violence? What are health effects of sexual assault? What are the psychological aspects of sexual assault on women? What are the characteristics of sex offenders? How can health care providers manage sexual violence towards women? Is sexual violence described in the Bible? The Biblical texts were examined and verses that describe the rape of women were studied closely from the contemporary viewpoint.

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THE BIBLICAL DESCRIPTIONS

TAMAR

Absalom, the son of David had a beautiful sister, Tamar. Another son of David, Amnon, loved Tamar "*And Amnon was so distressed that he fell sick for his sister Tamar; for she was a virgin; and Amnon found it hard to contrive any thing with regard to her*" (II Samuel 13:2). Jonadab, Amnon's friend, asked him "*Why art thou, being the king's son, so lean, from day to day*?" (13:4). Amnon told him that he loved Tamar. Following Yehonadab's plan, Amnon pretended he was sick. When the King, his father came to visit him, Amnon asked his permission "*…let Tamar my sister come, and make me a couple of cakes in my sight, that I may eat at her hand*" (13:6). With their father's agreement, Tamar was summoned to Amnon. Therefore, she prepared cakes and brought them to Amnon. Meanwhile, Amnon dismissed all the men from his room and demanded "*Come lie with me, my sister*" (13:11).

Amnon and Tamar. Jan Steen.

Tamar refused "*..No, my brother do not force me; for no such thing ought to be done in Israel: do not do this shameful deed*" (13:12). However, Amnon "*...being stronger than she, forced her, and lay with her*" (13:14). After these sexual relations, Amnon's world turned around and he developed feeling of hatred towards Tamar. Therefore, he called his servant who threw her out of his room.

Amnon and Tamar. Giovanni Domenico Cerrini (1609-1681).

Tamar suffered greatly: she "*..put ashes on her head, and tore her sleeved garments that was on her, and laid her hand on her head, crying aloud as she went*" (13:19). In spite of Amnon's disgraceful sexual behavior, Absalom advised her.."*…keep silence, my sister...So, Tamar remained desolate in her brother Absalom's house. But when king David heard of all these things, he was very angry*" (13:20,21). Following this disgusting sexual assault, relations between Absalom and Amnon were destroyed, and they did not speak with each other. An internal family system was disrupted.

Tamar, King David's daughter, was a victim of sexual assault perpetrated by her half-brother Amnon, the son of King David. Firstly, Amnon fell in love with his beautiful sister and consequently suffered from an eating disorder. He dreamed about his sister but could not have sexual relations with her. With the help of his friend, a plan was prepared. Pretended to be sick, Amnon got permission from his father, the King, for Tamar to visit her "sick" brother. During this visit, Tamar was forced to have sexual relations with him. Since the sexual relations were carried out against Tamar's will, they can be classified as sexual abuse. This assault occurred within the family system, in the home, with a brother as perpetrator.

Amnon and Tamar. Guercino.

How did King David's family cope with Tamar's rape? Amnon's relationships with a surrounding environment were broken. Relationship between Amnon and his half-brother Absalom were damaged and could not be repaired. No one could forgive this nasty attack on the family member and thus changing Tamar's life forever. Absalom did not forget that Amnon had defiled their sister, and he was eager for revenge. There was no way to achieve a peaceful reconciliation between the two brothers. The painful triangle - Tamar, Absalom, and Amnon - could never achieve a peaceful coexistence. No resources were used to solve this family crisis. Even the King did not intervene or make any efforts to reconcile this triangle.

After 2 years, at the first opportunity, Absalom commanded his men to kill Amnon and the mission was performed "..*Smite Amnon; then kill him, fear nor.. be courageous, and be valiant*.. … *the servants of Absalom did to Amnon as Absalom had commanded. Then all the King's sons arose, and every man rode on his mule, and fled*" (II Samuel 13:28,29). With the aid of external forces, Amnon paid with his life for his disgusting behavior.

There was no room for any compromise; the behavior of Amnon had reached such extremely negative point that now it was only a question of when and where Amnon would pay the price. The internal tension and hatred between Absalom, Amnon and beautiful Tamar led to Amnon's assassination. In spite of Amnon's dreadful behavior that led to his death, the King mourned for his son. Here we see a very special characteristic of the King's character – he loved his son and was ready to forgive him for his disgusting behavior.

Amnon was not supposed to die. Following his behavior, Amnon's relationships with his half-brother Absalom and his sister Tamar were

broken, and reached a point from where there was no way to return to the previous level of normative affectionate relations.

DINAH

Dinah, Jacob and Leah's daughter, one day met a young man, Shechem, who had sexual relations with her "*..went out to see the daughters of the land. ...When Shechem the son of Hamor, Prince of the country, saw her, he took her, and lay with her, and raped her*" (Genesis 34:1,2). In spite of this act, Shechem fell in love with Dinah. According to the custom at that time, he asked his father "*Get me this damsel to wife*" (34:4). So his father Hamor, went to Jacob *"...I* (the father) *pray you give her him to wife*" (34:8), proposing coexistence between the two peoples based on marriages and trading.

Here, Dinah's brothers set a condition: "*..every man of you be circumcised*" (34:15). Only "*then will we give our daughters to you and we will take your daughters to us, and we will dwell with you, and we will become one people*" (34:16). The local people accepted this proposal, but in spite of this agreement, "*...Simeon and Levi, Dinah's brethren took each man his sword, and came upon the city boldly, and slew all the males. And they slew Hamor and Shehem his son....*" (34:25,26). Jacob accused Simeon and Levi of slaughter that jeopardized his status among the Canaanites and Perizzites.

The Biblical words "*he* (Shechem) *took her, and lay with her, and defiled her*" indicate that sexual relations were performed against Dinah's will. These sexual relations can be defined as rape with Dinah as the victim. This is the biblical case of sexual abuse.

DEFINITIONS

Forcible sex offences are described as any sexual act directed against another person, forcibly and/or against that person's will; or not forcibly or against the person's will where the victim is incapable of giving consent because of his/her temporary or permanent mental or physical incapacity. Forcing rape (except "statutory rape") is the carnal knowledge of a person, forcibly and/or against that person's will; or not forcibly or against the person's will where the victim is

incapable of giving consent because of his/her temporary or permanent mental or physical incapacity. If force was used or threatened, the crime should be classified as forcible rape regardless of the age of the victim. If no force was used or threatened and the victim was under the statutory age of consent, and the crime should be classified as statutory rape (1).

Most definitions of sexual assaults contain four components: 1] the use of threat, duress, physical force, intimidation, or deception; 2] sexual contact; 3] non-consent of the victim; and 4] it is a crime of violence that puts the victim at risk of physical injury, emotional disturbance, pregnancy, and sexually transmitted diseases (STDs) (2,3). Women can be victims of unwanted touching, grabbing, oral sex, anal sex, sexual penetration with an object, and/or sexual intercourse.

Rape is a type of sexual assault usually involving sexual intercourse or other forms of sexual penetration perpetrated against a person without that person's consent. The act may be carried out by physical force, coercion, abuse of authority or against a person who is incapable of giving valid consent, such as one who is unconscious, incapacitated, has an intellectual disability or below the legal age of consent (4-6). The term rape is sometimes used interchangeably with the term sexual assault (7).

The definition of rape is inconsistent between governmental health organizations, law enforcement, health providers and legal professions (8). It has varied historically and culturally (8). Originally, rape had no sexual connotation and is still used in other contexts in English. In Roman law, it or raptus was classified as a form of crimen vis, "crime of assault" (9,10). Raptus described the abduction of a woman against the will of the man under whose authority she lived, and sexual intercourse was not a necessary element. Other definitions of rape have changed over time. In 1940, a husband could not be charged with raping his wife. Sixty years ago, in some states, a white woman having consensual sex with a black man was considered rape (11).

The Biblical verses: Amnon "*...being stronger than she* (Tamar)*, forced her, and lay with her*" (13:14) and "*he* (Shechem) *took her, and lay with her, and raped her*" indicate that sexual relations were performed against Tamar and Dinah's will. These sexual relations can be defined as rape

with these two women as the victims. These are the Biblical cases of sexual abuse and rape.

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MYTHOLOGY AND HISTORY

Rape is a common topic in history and mythology. A list of notable victims from history and mythology includes (1-3):

Leda from Greek mythology, raped by Zeus in the form of a swan.

Cassandra from Greek mythology, raped by Ajax the Lesser.

Chrysippus from Greek mythology, raped by his tutor Laius.

Antiope from Greek mythology, raped by Zeus.

Persphone daughter of Demeter from Greek mythology, raped by Hades also in Roman mythology as the rape of Proserpina.

Lucretia from Roman legend/history, raped by a prince, Sextus Tarquinius.

Rape of Lucretia. Giulio Cesare Procaccini.

Medusa from Greek mythology, raped by Poseidon.

Philomela from Greek and Roman mythology, raped by her brother in law.

Rindr from Norse mythology, raped by Odin in Saxo Grammaticus' version of the engendering of Baldr's avenger.

Rogneda of Polotsk from Belarus/Scandinavian history, raped by Vladimir, half-brother of her betrothed Yaropolk I of Kiev, in the presence of her parents (10th century).

The Sabine women, raped by the founders of Rome according to its legendary history.

The daughters of Leucippus, Phoebe and Hilaeira, were abducted, raped and later married by Castor and Pollux. In return, Idas and Lynceus, nephews of Leucippus and rival suitors, killed Castor.

The Rape of the Daughters of Leucippus. Peter Paul Rubens.

Agnes of Rome was a young girl of around 12 or 13 years of age, who consecrated her virginity to Christ, and was dragged to a brothel to be raped, in a bid to make her recant her Christian faith. Instead,

many of the men who tried to molest her ended up being inflicted with blindness or even died.

In Roman law, raptus (or raptio) meant primarily kidnapping or abduction (4); sexual violation is a secondary issue. The "abduction" of an unmarried girl from her father's household in some circumstances was a matter of the couple eloping without her father's permission to marry. Rape in the English sense of "forced sex" was more often expressed as stuprum, a sex crime committed through violence or coercion (cum vi or per vim). Raptus ad stuprum, "abduction for the purpose of committing a sex crime," emerged as a legal distinction in the late Roman Republic (5). The Lex Julia de vi publica (6), recorded in the early 3rd century AD but dating probably from the dictatorship of Julius Caesar, defined rape as forced sex against "boy, woman, or anyone" (7).

Although Roman law in the historical period recognized rape as a crime, the rape of women is a pervasive theme in the myths and legends of early Rome. The Augustan historian Livy seems "embarrassed" by the rape motif, and emphasizes the redeeming political dimension of traditional stories. The "rape" of the Sabine women was interpreted as Rome was constituted as a "blended" population in which people resolved violence and coexisted by consent and treaty. The rape of the exemplary woman Lucretia by the king's son led to the overthrow of the monarchy and the establishment of the Republic (8). In the 50s BC, the Epicurean poet Lucretius condemned rape as a primitive behavior outside the bounds of an advanced civilization (9) describing it as "a man's use of violent force and imposition of sexual impulse" (10).

Intercourse by force or compulsion, even if it took place under circumstances that were otherwise unlawful or immoral (11), left the victim legally without blame (12). The official position under the emperor Diocletian (reigned 284–305 AD) held that (13): the laws punish the foul wickedness of those who prostitute their modesty to the lusts of others, but they do not attach blame to those who are compelled to stuprum by force, since it has, moreover, been quite properly decided that their reputations are unharmed and that they are not prohibited from marriage to others. The laws punish the foul wickedness of those who prostitute their modesty to the lusts of others, but they do not attach blame to those who are compelled to stuprum by force, since it has, moreover, been quite properly

decided that their reputations are unharmed and that they are not prohibited from marriage to others (14).

As a matter of law, rape could be committed only against a citizen in good standing. The rape of a slave could be prosecuted only as damage to the owner's property (15). People who worked as prostitutes or entertainers, even if they were technically free, suffered infamia, the loss of legal and social standing. A person who made his or her body available for public use or pleasure had in effect surrendered the right to be protected from sexual abuse or physical violence (16).

According to the ius gentium ("law of nations" or international law), inhabitants of a conquered town were spared personal violence if the war or siege ended through diplomatic negotiations. If the army entered the town by force, mass rape of women, girls, and boys was among the punitive measures that might be taken by Greek, Persian, or Roman troops (17). Some portion or all of the population of a town taken by force might also become slaves, who lacked legal protections against rape and who might be exploited as prostitutes or non-consensual sexual companions (18).

Rape, as an adjunct to warfare, was prohibited by the military codices of Richard II and Henry V (1385 and 1419, respectively). These laws formed the basis for convicting and executing rapists during the Hundred Years' War (1337–1453) (18).

Napoleon Bonaparte found rape committed by soldiers particularly distasteful. During his Egyptian Expedition, he declared that “everywhere, the rapist is a monster” and ordered that “anyone guilty of rape would be shot” (19,20).

The Bulgarian martyresses, a painting depicting the rape of Bulgarian women by Ottoman troops during the April Uprising of 1876.

ASSESSMENT: throughout the long history of human existence women have been raped. As shown previously, the Bible documents the rape of Tamar by her half-brother Amnon, while Dinah was raped by a Canaanite prince and avenged by her brothers. These two women can be added to the long list of women who were raped.

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EPIDEMIOLOGY

In a stratified sample of the general population, adult sexual assault is reported among 941 participants by 22% of women and 3.8% of men. Risk factors for adult sexual assault include a younger age, being female, having been divorced, sexual abuse in childhood, and physical assault in adulthood (1).

The lifetime prevalence of sexual assault is 38% among women and 6% among men among the veteran population (2). Among a sample of college students, roughly 30% of the women and 12% of the men reported having been the victim of a sexual assault sometime in their lives (3). In secondary analysis, which included a representative population-based sample of 8,080 students, 14 years and older at 87 New York City public high schools, lifetime history of sexual assault was reported by 9.6% of females and 5.4% of males (4). Sexual abuse rates in the general female population range between 15% and 25%, and sexual abuse has a long-term impact on a woman's health (5).

The current report examined data for 872 female adolescents obtained during the initial and follow-up interviews of the National Survey of Adolescents, a nationally representative sample, U.S. Lifetime prevalence of violence exposure reported was 12% and 13% for sexual assault, 19% and 10% for physical assault/punishment, and 33% and 26% for witnessing violence at Waves I and II, respectively. Racial/ethnic status, posttraumatic stress disorder (PTSD), childhood sexual abuse, and family drug problems emerged as significant predictors of new rape. Each of the PTSD symptom clusters significantly predicted new rape and analyses supported the meditational role of PTSD between childhood sexual abuse and new rape. African American or other racial identity was associated with lower risk (6).

Dating violence is an important public health concern in adolescents. A nationally representative sample of adolescents (n=3,614), the U.S., completed a telephone-based interview that assessed serious forms of dating violence (i.e., sexual assault, physical assault, and/or drug/alcohol-facilitated rape perpetrated by a girlfriend, boyfriend, or other dating partner). Prevalence of dating violence was 1.6% (2.7% for girls, and 0.6% for boys), equating to approximately 400,000 adolescents in the U.S. population. Risk factors included older age, female sex, experience of other potentially traumatic events, and experience of recent life stressors. Dating violence was associated with PTSD and major depressive episode after controlling for demographic variables, other traumatic stressors, and stressful events (7).

In Mexico, an estimated prevalence of sexual abuse in women reached 17.3%, half of them in youngsters less than 15 years old (8).

Demographic and event characteristics of patients presenting to the emergency department for evaluation after sexual assault, using a Sexual Assault Nurse Examiner standardized database were analyzed. Data were collected on 1,172 patients; 92% were women, with a mean age of 27 years. The sample was 59.1% black, 38.6% white, and 2.3% "other". Survivors of sexual assault were overwhelmingly female, relatively young, who often knew the perpetrator of the event, and were likely to be threatened and showed signs of physical trauma (9).

The prevalence of drug-related sexual assaults was examined, the frequency of assaults that occur following voluntary vs. involuntary drug or alcohol consumption was identified, and contextual correlates of drug-related assaults were identified. Participants included 314 college-student females. Volunteers reported experiences with forcible and drug-related sexual assaults in the spring semester of 2004. Follow-up queries regarding the most severe drug-related assaults determined whether the assaults followed voluntary or involuntary alcohol or drug consumption. Of the respondents, 29.6% (n=93) reported a drug-related sexual assault or rape; 5.4% (n=17) reported a forcible sexual assault or rape. Voluntary incapacitation preceded 84.6% of drug-related assaults and involuntary incapacitation preceded 15.4% of drug-related assaults. The majority of drug-related assaults (96.1%) involved alcohol consumption prior to assault. The data indicate that drug-related

sexual assaults on college campuses are more frequent than are forcible assaults and are most frequently preceded by voluntary alcohol consumption (10).

Stigma, discrimination and violence contribute to health disparities among sexual minorities. Lesbian, bisexual and queer (LBQ) women experience sexual violence at similar or higher rates than heterosexual women. Most research with LBQ women, however, has focused on measuring prevalence of sexual violence rather than its association with health outcomes, individual, social and structural factors. A cross-sectional online survey with LBQ women was conducted in Toronto, Canada. Almost half (42%) of participants (n=415) reported experiences of lifetime sexual assault (LSA). Participants identifying as queer were more likely to have experienced LSA than those identifying as lesbian. When controlling for socio-demographic characteristics, experiencing LSA was associated with higher rates of depression, sexually transmitted infections (STIs), receiving a STI test, belief that healthcare providers were not comfortable with their LBQ sexual orientation, and sexual stigma (overall, perceived and enacted). A history of sexual violence was associated with lower: self-rated health, overall social support, family social support and self-esteem. This finding highlights the salience of a social ecological framework to inform interventions for health promotion among LBQ women and to challenge sexual stigma and sexual violence (11).

The point and cumulative prevalence of incapacitated rape (IR) and forcible rape (FR) among first-year college women were evaluated. Female students (n=483) completed a health questionnaire 1] on arrival on campus; 2] at the end of the fall semester; 3] at the end of the spring semester; and 4] at the end of the summer following their first year of college. Before entering college, 18% reported IR (attempted and/or completed), and 15% reported FR (attempted and/or completed). During the first year of college, 15% reported IR (attempted or completed) and 9% reported FR (attempted or completed). By the start of the second year (lifetime prevalence), 26% and 22% had experienced IR and FR (attempted or completed), respectively. The data indicate that both incapacitated and forcible sexual assaults and rape have reached epidemic levels among college women. Interventions to address sexual violence on campus are urgently needed (12).

Sexual violence survivors do not label their experiences as rape but instead use more benign labels, such as "bad sex" or "miscommunication." A meta-analysis was conducted to estimate the mean prevalence of unacknowledged rape and to inform the understanding of methodological factors that influence the detection of this phenomenon. Papers were identified using PsycINFO, PubMED, and PILOTS and were required to report the percentage of unacknowledged rape that had occurred since the age of 14 among female survivors. Moderator variables included mean participant age, recruitment source, rape definition, and unacknowledged rape definition. Twenty-eight studies (30 independent samples) containing 5,917 female rape survivors met the inclusion criteria. Based on a random effects model, the overall weighted mean percentage of unacknowledged rape was 60.4% (95% CI 55.0%-65.6%). There was a large amount of heterogeneity, $Q(29) = 445.11$, $p<0.001$, and inconsistency ($I(2) = 93.5\%$) among included studies. The prevalence was significantly higher among college student participants compared to non-college participants. The findings supported that over half of all female rape survivors do not acknowledge that they have been raped. Screening tools should use behaviorally descriptive items about sexual contact, rather than using terms such as "rape" (13).

Papers of college rape victims have found that many are unacknowledged; that is, they do not label their experience rape. The current study investigated factors associated with unacknowledged rape among low-income women. Out of a sample of 1,033 women, 167 reported having experienced rape. Unacknowledged victims, relative to acknowledged victims, reported less violent assaults and more alcohol use before the assault and were more likely to have been assaulted by a romantic partner. Unacknowledged victims also disclosed less often and reported fewer feelings of stigma. Implications of the work for future studies of unacknowledged rape are discussed (14).

Determinants of assaults using emergency department data were examined to inform development of programs delivered in acute Trusts for reducing assault-related injuries in the community. Data were collected from a large North London acute Trust on assault-related injuries reporting to Accident and Emergency Attendances by English Local Authority area over 18 months (July 2010-February

2012). Information was recorded on patient demographics and assaults (place of assault, type of assault, and relation to assailant) through questionnaires administered by emergency department reception staff. Of 1,210 assaults recorded between July 2010 and February 2012, 18% of assaults were severe (strangling, stabbings, and sexual assaults), 75% of assault victims were men, 37% were young adults (20-30 years) and 15% were teenagers. A higher proportion of victims lived in more deprived areas. Apart from public streets (48%), the main location of assaults was at home (20%). Female compared with male victims were significantly more likely to be assaulted at home (OR 6.13, 95% CI 4.41-8.54) and by a known assailant (family member, friend, or partner/ex-partner; OR 8.20, 95% CI 5.85-11.48). The results highlight the contribution of domestic violence to assaults presenting to hospital emergency department. Such findings can be used to plan interventions such as screening hospital patients for domestic violence. Emergency department data have the potential to inform hospital-based initiatives to address issues such as assaults in the local population (15).

Sexual behavior was examined in 17-year-old girls, Sweden. Data were collected by anonymous self-administered 2,583 questionnaires. Response rates from students were 92%, and for school non-attenders 44%. Sexually transmitted diseases (STDs) and pregnancy were reported by 15% of early starters and pregnancy by 14%, $p<0.001$ and $p<0.002$, respectively, when compared with later starters. Sexual abuse was reported by 20% of the early and 11% of later starters, $p=0.002$. A majority of 83% of the girls had experienced voluntary intercourse, and 49% were early starters. Five girls were mothers. STD was reported by 19% and induced abortion by 14% (16).

Information from 890 cases submitted to the forensic science laboratory, the Republic of Ireland, in the time January 2004 to December 2005 was evaluated. The most common age category of victims was 16-30 years, the most likely time of occurrence was Saturday or night/Sunday morning during the summer months of June, July or August. The victim most likely knew the assailant even if only recently met. Loss of memory, mainly associated with the consumption of alcohol, was a significant factor in many cases (17).

The prevalence of sexual aggression and victimization was examined in a large convenience sample (n=2,149) of first-year college students from different universities in Germany. Participants were asked about both victimization by, and perpetration of, sexual aggression since the age of 14. Both same-sex and heterosexual victim-perpetrator constellations were examined. Prevalence rates were established for different victim-perpetrator relationships (partners, acquaintances, and strangers) and for incidents involving alcohol consumption by one or both partners. The overall perpetration rate was 13.2%, for men and 7.6% for women. The overall victimization rate was 35.9% for women and 19.4% for men. A disparity between victimization and perpetration reports was found for both men and women. Perpetration and victimization rates were highest among participants who had sexual contacts with both opposite-sex and same-sex partners. Sexual aggression and victimization rates were higher between current or former partners and acquaintances than between strangers. Alcohol consumption by one or both partners was involved in almost 75% of all victimization and almost 70% of all perpetration incidents. The findings portray a comprehensive picture of the scale of sexual aggression and victimization in college students with different sexual lifestyles (18).

The rate of reporting, prosecuting and convicting for rape varies between jurisdictions. Internationally, the incidence of rapes recorded by the police during 2008 varied between 0.2 in Azerbaijan per 100,000 people and 92.9 per 100,000 people in Botswana with 6.3 per 100,000 people in Lithuania as the median (19). Rape by strangers is usually less common than rape by persons the victim knows, and male-on-male and female-on-female prison rapes are common and may be the least reported forms of rape (20-23).

Sexual abuse and sexual assaults against children and adolescents is one of the most significant threats to their health. Its prevalence and effects were investigated on Icelandic teenagers in the 10th grade. Data were used for the Icelandic part of the HBSC-project (Health and behavior of school- aged children). Standardized questionnaires were sent to all students in 10th grade in Iceland of which 3,618 participated. The students experience of sexual abuse or assaults was assessed by asking them how often they had been against their will 1] touched in a sexual way, 2] made to touch someone else in a sexual way, 3] the subject of an attempted rape or

4] subjected to rape. The results showed that 14.6% (527) participants had experienced sexual abuse or assault. Of these, 4.5% (162) had one such experience but 10.1% had either suffered certain type of abuse or assault more than once, or had experienced more than one kind. About 1% of participants (35) said that they had suffered many times from many forms of abuse and assaults. The prevalence of poor mental well-being and risk behavior was higher amongst those that had experienced sexual abuse or assault. Although the results show that the prevalence of sexual abuse and assault against Icelandic adolescents is similar to other Western countries, it is higher than a previous study a decade ago (24).

Several highly publicized rapes and murders of young women in India and South Africa have focused international attention on sexual violence. These cases are extremes of the wider phenomenon of sexual violence against women, but the true extent is poorly quantified. A systematic review was conducted to estimate prevalence. Papers published from Jan 1, 1998, to Dec 31, 2011, and manually search reference lists and contacted experts were searched to identify population-based data on the prevalence of women's reported experiences of sexual violence from age 15 years onwards, by anyone except intimate partners. Papers (n=7,231) from which 412 estimates covering 56 countries were obtained. In 2010 7.2% (95% CI 5.2-9.1) of women worldwide had ever experienced non-partner sexual violence. The highest estimates were in sub-Saharan Africa, central (21%, 95% CI 4.5-37.5) and sub-Saharan Africa, southern (17.4%, 11.4-23.3). The lowest prevalence was for Asia, south (3.3%, 0-8.3). Limited data were available from sub-Saharan Africa, central, North Africa/Middle East, Europe, eastern, and Asia Pacific, high income. Sexual violence against women is common worldwide, with endemic levels seen in some areas, although large variations between settings need to be interpreted with caution because of differences in data availability and levels of disclosure. Nevertheless, the findings indicate a pressing health and human rights concern (25).

The epidemiological and clinical aspects of the management of sexual violence in Black Africa were examined. A total of 373 cases of alleged female victims of sexual assault were registered in the Department of Obstetrics and Gynecology of the University Teaching Hospital, Tokoin, Lomé from 2007 to 2009. Sexual assault accounted

for 4.37% of reasons for consultation and vaginal penetration (62.2%) was the predominant mode. The victim was often a small girl of an average age of 12 years. The mean reporting delay, which was about 13 days, has considerably limited some aspects of the management. Signs of genital trauma were found in 14.5% of cases, nine cases showed human immunodeficiency virus (HIV) serological conversions (2.4%), and eight induced pregnancies. Sexual assault among female victims in Lomé affected the young and vulnerable population (26).

The epidemiological and clinical characteristics of supposed victims of sexual abuse were examined and case management was examined. A prospective study was conducted about cases of presumed sexual abuse received at the gynecological and obstetrical clinic department of Aristide-le-Dantec hospital, Sénégal from January 2003 to May 2005. Of 55 cases reported, 0.4% represented admissions in the clinic during the period of study. Of them, 20% were referred on judicial requisition. The mean time between sexual abuse and consultation was 15 days. Victims were 14 years old in average, nullipare in 96.5% of cases and living in the suburban area of Dakar. The presumed "violenter" was a man of 32 years, belonging to the environment of the victim in 70% of cases (spiritual guide, joint-tenant, or friend of the family). The type of sexual assault was an unprotected genito-genital intercourse in 67.3% of cases. On the clinical plan, 70.9% of patients suffered recent genital traumatism, 54.5% genital examination showed hymeneal lesions. The HIV test was positive in two cases. During the follow-up of the patients, three pregnancies occurred and for only 9.1%, a psychological assistance was proposed. The data indicate that sexual abuses represent a current sociocultural issue. Prevention requires large information campaign. Early management is necessary to prevent the STDs and psychological side effects (27).

The burden, periodicity, presentation and management of sexual assault were examined in Ile-Ife, Nigeria. Retrospective analysis of the hospital records of 76 sexual assault survivors was managed over a five-year period (2007-2011) in Obafemi Awolowo University Teaching Hospitals complex, Ile-Ife. Sexual assault accounted for 0.69% females and 5.2% of all gynecological emergencies. The survivors' ages ranged from four to 50 years (mean = 17.7 ± 8.8 years) and adolescents made up for 48%. The peak prevalence of sexual assault was in February and December and among adults and

under-16-year-old survivors, respectively. Daytime and weekday sexual assaults were significantly more common among the under-16-year-old survivors (p=0.008). Majority of the survivors (62%) knew their assailant(s). Neighbors were the commonest perpetrators identified (28.2%) and the assailants' house was the commonest location (39.4%). Weapons were involved in 29.6% of cases and various injuries were identified in 28.2% of the survivors. Hospital presentation was within 24 hours in majority (76.1%) of the survivors, but rape kit examinations were not performed as the kits were unavailable. Although appropriate medical management was routinely commenced, only 12.7% of survivors returned for follow-up. The data indicate that seasonal and diurnal patterns exist in the prevalence of sexual assault in Ile-Ife and most survivors reported in the hospital presented early. Rape kit examinations were, however, not executed, due to non-availability. Personnel training, protocol development, provision of rape kits and free treatment of sexual assault survivors are, therefore, recommended. Public enlightenment on preventive strategies based on the observed periodicity and age patterns is also suggested (28).

Sexual assault against women is common all over the world. The patterns of sexual violence against women treated at the hospital, in Nigeria, over a 7-year period were analyzed. Review of hospital records of victims of sexual assault who presented at the hospital from 1 January 2003 to 31 December 2009. Sexual assault cases constituted 2.1% of female consultation outside pregnancy during the period under study while proportion of cases increased over the years under review. Mean age of the victims was 15.8 (SD 8.1) years ranging from 5 to 48 years. Most (73.7%) were less than 18 years while 93.2% were single (never married). About 81% of the victims less than 18 years were sexually abused in the day time. Majority (79.6%) knew their assailant. About 40% of the victims presented within 24 hours of sexual abuse but none had postexposure prophylaxis. The data indicate that sexual assault among women is an important health problem in this environment (29).

The prevalence and pattern of rape were evaluated in Enugu, southeast Nigeria. Female survivors of rape who presented at the emergency gynecologic and/or forensic unit of Enugu State University Teaching Hospital were examined between February 2012 and July 2013. Data were collected via a pretested interviewer-administered

questionnaire. Among 1374 gynecologic emergencies, there were 121 (8.8%) rape cases. The mean age of the rape survivors was 13.1±8.1 years. Ninety (74.4%) survivors were younger than 18 years. At least 72 hours had passed since the rape for 74 (61.2%) cases. The perpetrator was known to 74 (82.2%) patients younger than 18 years and 18 (58.1%) aged at least 18 years (p=0.013). The location of the rape was the bush or an uncompleted building for 36 (29.8%) and the perpetrator's residence for another 36 (29.8%). Four (3.3%) individuals became pregnant after the rape. The data indicate that a considerable proportion of patients with gynecologic emergencies had been raped. Individuals should be encouraged to report to the hospital quickly to prevent unwanted pregnancy and sexually transmitted infections (30).

Prevalence of gender-based violence (GBV) was evaluated among female Somalis in Ethiopian refugee camps and host communities, compare prevalence in camps and communities, and compare prevalence in flight and in camp. Systematic random sampling was used to select households in Awbare camp (n=85), Awbare town (n=76), and Kebribeyah camp (n=83). GBV was common and overwhelmingly domestic. Prevalence was higher in Awbare town than Kebribeyah camp. Women were at increased risk of GBV in camp compared with in flight. The domestic nature of GBV in humanitarian settings requires attention. Assumptions about violence in humanitarian settings should be further tested (31).

Sexual assault affects one out of every five women, and it is a substantial public health and human rights problem in developing countries including Ethiopia. Pattern of sexual assault and related complications were assessed in cases treated at Jimma University Specialized Hospital from November 1, 2011 - October 31, 2012. A hospital based cross-sectional descriptive study was conducted with the aim of assessing sexual assault patterns and related complications on 99 sexual assault cases which were managed at the Gynecology Out-patient Department of the Hospital. Data on circumstances of sexual assault, survivor specific demographic characteristics and information on complications and interventions provided were collected by trained third year residents in obstetrics and gynecology using pretested questionnaire after respondent consent was taken. The mean (±SD) of the survivors' age was 14 (±5) years; 57.5% of the survivors were children and 68.7% were from

rural areas. Of the clients, 3% visited the Gynecology Outpatient Department for sexual assault where rape accounted for 78.8%. The majority (76.8%) of the assailants was known to the survivors, 91% were assaulted by one assailant and 5.1% of the rape cases were gang rape. The mean time of presentation after sexual assault to the hospital was 15 days. Survivors had pregnancy test, HIV test and screening for STIs in 76.8%, 99%, 93%, respectively of which 17.1%, 5.1%, 14.1% tested positive for pregnancy, HIV, and some STIs respectively. All HIV positive survivors were children under fifteen years of age. Of the survivors, 40% were provided with emergency contraception. Of them, 60.5%, 63%, and 91.9% were provided with post-exposure prophylaxis for HIV, STIs prophylaxis and were given counseling respectively. It has been revealed that sexual assault is a major problem of women and children of less than fifteen years. There were gaps in providing and receiving packages of care and justice system to protect survivors indicating the needs for community intervention and providing quality of care by health care staff (32).

Since the year 2000, the number of rapes in Costa Rica has increased at a rate of 42 cases per year. In 2011, 1,786 rape cases were reported to the prosecution offices throughout the country, but only 1,081 reports continued through the investigation process by the Judicial Investigation Agency. A randomly collected sample of 272 reports received by Judicial Investigation Agency, between July 2012 and June 2013, were prospectively studied. The analysis was limited to cases reported within 30 days following the rape. Results indicate that most of the provinces in the country show an incidence of about 38 cases/100,000 inhabitants. Ninety-six percent of the victims were women, 50% of which were between 10 and 19 years old. More than 99.5% of violators were men. The rape was perpetrated by a single aggressor in 85% of the cases. Of the victims, 48% were within the first 11 days of their menstrual cycle at the time of the attack. In 29%, rapes occurred in "high rape-risk" circumstances-e.g., victims attacked by strangers in public outdoors or indoors. In 25%, rapes occurred in "moderate rape-risk" circumstances - e.g., victims attacked indoors at public locations or at the home other than the victim's by relatives, sentimental partners or acquaintances. In 15%, rapes occurred in "low rape-risk" circumstances - e.g., victims attacked in their homes by relatives or

sentimental partners. In 67% of the cases, the perpetrator was an acquaintance of the victim. In 11%, the cases corresponded to rapes in which the perpetrator was a partner or ex-partner of the victim. Fourteen percent and 25% of rapes could be classified as "proactive drug-facilitated rapes" or "opportunistic drug-facilitated rapes", respectively. Semen in the vaginal fluid of victims and the genetic profile of the alleged perpetrator were detected in 55% and 33% of the cases, respectively (33).

Violence against women is a serious social problem and affects mainly young women. This study aimed to evaluate sexual violence against women in Campina Grande, Brazil. A retrospective study with analysis of 886 forensic medical reports of sexual violence from the Institute of Legal Medicine of Campina Grande, Brazil, was conducted between January 2005 and December 2009. Sociodemographic variables related to victims, offenders and aggressions were analyzed. Significance level of 5% was adopted. Two hundred and ninety-one cases of rape (32.8%) were confirmed, the majority of victims aged between 0 and 19 years (89.9%), were single (98.8%) and had low educational level (86.9%), with association with marital status (p=0.02). The sex offender was known to the victim in 84.2% of cases and in 93.8% of cases, he acted alone. There was an association between rape and the relationship with the offenders (p= 0.01) and the age of the offenders (p=0.03). The rape occurred in most cases at the home of victims (49.3%), with the use of violence in 72.3% of cases, but only 5.7% of the victims exhibited physical injuries. There was an association between rape and variables date of occurrence (p=0.001), previous virginity (p=0.001) and violence during practice (p=0.001). The data indicate that over one third of women were victims of rape, predominantly adolescents, unmarried and with low educational level. The offenders were known to the victims, and acted alone in most situations, making use of physical violence (34).

An anonymous survey with questions on gender-based violence, demographic and socioeconomic characteristics and childhood experiences with violence was administered to students at a major public university in Santiago. Of subjects, 90% reported that the most severe form of undesired sexual contact they had experienced since 14 years was rape; 6% indicated attempted rape and 16% another form of sexual victimization; 17% of subjects reported having

experienced some form of undesired sexual contacts in the past 12 months alone. Factors associated with increased odds of victimization included low parental education, childhood sexual abuse, and the association between witnessing domestic violence and victimization. A substantial proportion of young women experienced rape, attempted rape or other forms of forced sexual contact, indicating a need for further attention to this public health problem in Chile (35).

The prevalence and spectrum of sexual abuse among adolescents in Kerala, South India were evaluated. A self-report survey was conducted among adolescents in the 15-19 year age group, studying in the plus one and plus two classes in selected schools. Of the 1,614 respondents (688 boys and 926 girls), 36% of boys and 35% of girls had experienced sexual abuse at some point during their lifetime. Most instances were sexual advances while using public transport. Feelings of insecurity and isolation at home, of being disliked by parents and of being depressed were significantly more in adolescents, who had experienced sexual abuse, compared to those who had not. The findings indicate that sexual abuse is widely prevalent and both boys and girls are equally susceptible. There is a need to evolve strategies to protect children from sexual abuse and the programs should address both boys and girls (36).

The assault records and forensic examination findings of 153 consecutive women who attended a sexual assault service in Newcastle, Australia, between 1997 and 1999, were reviewed. All the women were examined within 72 hours of the assault. Of the women, 111 (73.4%) were aged under 30 years and only 4% were over 50 years. Penile-vaginal penetration was the most common type of sexual assault (86%). Non-genital injuries were found in 46% of the women (mostly minor) and genital injury in 22%. Genital injuries in the absence of non-genital injury were rare (3%). Independent risk factors for the detection of non-genital injury were reported threats of violence. Risk factors for genital injury were the presence of non-genital injury, threats of violence and being over the age of 40 years. If the woman knew the alleged assailant, this was protective for both non-genital and genital injury (37).

In New Zealand's 21-year-olds, 41% experienced physical or sexual assault in the previous 12 months (38).

ASSESSMENT: there are widespread prevalence rates and patterns of sexual assaults in different countries.

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WEAPON OF WAR

In 1998, Judge Navanethem Pillay of the International Criminal Tribunal for Rwanda said: "From time immemorial, rape has been regarded as spoils of war. Now it will be considered a war crime. A strong message is that rape is no longer a trophy of war" (1). Rape, in the course of war, dates back to antiquity, ancient enough to have been mentioned in the Bible (2). Persian, Greek and Roman armies reportedly engaged in war rape (3). The Mongols, who established the Mongol Empire across much of Eurasia, caused much destruction during their invasions (4). Contemporary documents say that after a conquest, the Mongol soldiers looted, pillaged and raped (5). According to Rogerius of Apulia, a monk who survived the Mongol invasion of Hungary, the Mongol warriors "found pleasure" in humiliating local women (6).

The systematic rape of as many as 80,000 women by the Japanese soldiers during the six weeks of the Nanking Massacre is an example of such atrocities (7). During World War II an estimated 200,000 Korean and Chinese women were forced into prostitution in Japanese military brothels, as so-called "Comfort women" (8). French Moroccan troops known as Goumiers committed rapes and other war crimes after the Battle of Monte Cassino (9). French women in Normandy complained about rapes during the liberation of Normandy (10,11). Raping women and girls by soldiers was common in many areas occupied by the Red Army. A female Soviet war

correspondent described what she had witnessed: "The Russian soldiers were raping every German female from eight to eighty. It was an army of rapists" (12).

According to researcher and author Krisztián Ungváry, some 38,000 civilians were killed during the Siege of Budapest: about 13,000 from military action and 25,000 from starvation, disease and other causes. Included in the latter figure are about 15,000 Jews, largely victims of executions by Hungarian Arrow Cross Party militia. When the Soviets finally claimed victory, they initiated an orgy of violence, including the wholesale theft of anything they could lay their hands on, random executions and mass rape. An estimated 50,000 women and girls were raped (13,14) although estimates vary from 5,000 to 200,000 (6). Hungarian girls were kidnapped and taken to Red Army quarters, where they were imprisoned, repeatedly raped and sometimes murdered (15).

Women and children are vulnerable to sexual violence in times of conflict, and the risk persists even after they have escaped the conflict area. The impact of rape goes far beyond the immediate effects of the physical attack and has long-lasting consequences. The humanitarian community's response to sexual violence and rape in times of war and civil unrest by drawing on the experiences of Médecins Sans Frontiers without Borders and other humanitarian agencies are evaluated. Health care workers must have a keen awareness of the problem and be prepared to respond appropriately. This requires a comprehensive intervention protocol, including antibiotic prophylaxis, emergency contraception, referral for psychological support, and proper documentation and reporting procedures. Preventing widespread sexual violence requires increasing the security in refugee camps. It also requires speaking out and holding states accountable when violations of international law occur. The challenge is to remain alert to these often hidden, but extremely destructive, crimes in the midst of a chaotic emergency relief setting (16).

Rape is recognized as a crime of war. During armed conflict in Bosnia, it was deliberate policy to rape young women to force them to bear the enemy's child. During conflicts in Rwanda, rape was systematically used as a weapon of ethnic cleansing aimed at destroying communities. The national population office in Rwanda estimates that 2.000-5.000 infants were born as a result of such rape.

The general decline in women's health and in their reproductive health in particular was consequences of the wars in Bosnia and Rwanda. Women and girls suffered most from the violence. Systematic rape has a terrible effect upon women's physical and mental health, including pregnancy-related complications, sexually transmitted diseases (STDs), and death as a result of induced abortion. Fear of social stigma associated with being raped discourages women from seeking help or treatment. Most women who have been raped have difficulty re-establishing intimate relations, while others desire to bear many more children in order to compensate for children lost during the war. Even women who were not raped during times of conflict may find it necessary to have sex with men in order to secure food, shelter, safe conduct, and/or refugee status for themselves and their children. Health services available to people with injuries or STDs need to be better equipped to provide medical care and counseling (17).

Sexual violence in armed conflict has traditionally received poor attention until recent years. It has been the "least condemned of war crimes" although, with the inception of the International Criminal Court and various other international courts and tribunals, convictions of high-profile aggressors are increasing. Only recently Charles Taylor, the President of Liberia, was convicted of war crimes and crimes against humanity which included rape and sexual slavery. He was sentenced to 50 years imprisonment. Is prosecution of these crimes sufficient to minimize sexual violence in war? That seems unlikely given the potential for such violence to be a cheap and effective strategy to terrorize a civilian population and "ethnically cleanse" the newly won territory. However, there is a remarkable variation in the levels of sexual violence in armed conflicts. Some, such as the Israeli-Palestinian conflict, have extremely low levels, whereas in Bosnia and many African states the prevalence of sexual violence is at epidemic levels. The reasons for such differences are many, however, some precipitating factors may be improved by strong military discipline, improved gender balance in armed forces, better political awareness by combatants of the aims of a campaign and pre-deployment ethical training (18).

Sexual violence in context with war-like conflicts in the former Yugoslavia and Rwanda is evaluated. The fundamental categories of sexual violence in war-like conflicts are described. The types of

sexual violence as defined in the report of the UN Commission of Experts on the war-like conflicts in the former Yugoslavia are explored. Four criminal trials were evaluated: three held before the International Criminal Tribunal for the Former Yugoslavia (ICTY) in The Hague/Netherlands and one before the International Criminal Tribunal for Rwanda (ICTR) in Arusha/Tansania. The defendants were found guilty of torture, crime against humanity and genocide. Potential procedures with respect to similar crimes in current or prospective conflicts are discussed. An alternative may be the assignment of medical personnel (for example of the German Federal Armed Forces). Finally, the post-war cooperation between the Institute of Legal Medicine at the University Medical Centre of Hamburg-Eppendorf as well as the medical and government institutions in Rwanda have been going on since 2005 (19).

In the years since the first reports of mass rapes in the Yugoslavian wars of secession and the genocidal massacres in Rwanda, feminist activists and scholars, human rights organizations, journalists, and social scientists have dedicated unprecedented efforts to document, explain, and seek solutions for the phenomenon of wartime rape. While contributors to this literature agree on much, there is no consensus on causal factors. A brief overview of the literature on wartime rape in historical and ethnographical societies is provided and the four leading explanations for its root causes: the feminist theory, the cultural pathology theory, the strategic rape theory, and the biosocial theory are analyzed. The findings indicate that the biosocial theory is the only one capable of bringing all the phenomena associated with wartime rape into a single explanatory context (20).

The Democratic Republic of Congo (DRC) has been appropriately acknowledged as "the rape capital of the world." While the country has been trapped in conflict, the use of rape as a weapon of war has been rampant and unyielding. The sexual violence inflicted upon women has been nothing less than brutal and destructive, physically, socially, and psychologically. The use of rape as a weapon of war in the Congo is analyzed, taking into context the ongoing war, cultural and social situations that facilitate its existence, and the many consequences the victims are forced to endure. Drawing information from various academic journals, articles, and field research from

international organizations, this paper paints a concise picture of the sexual atrocities occurring in the DRC (21).

A systematic review of the scientific literature between 1996 and 2013 on rape in war-ridden Eastern DRC was conducted in order to better understand the interest of the scientific community in describing the magnitude and characteristics of the problem. The literature search was conducted in French and English using several databases (Pubmed, PsycInfo, Sapphire, BDSP, Embase, Rero, and Web of Science) with the key words "rape and DRC" combined with several Medical Subject Headings concepts. The systematic review yielded 2,087 references, among which only 27 are original studies, that is 20 are based on population surveys and the remaining 7 are original data based on case studies and reviews. Ten studies provided prevalence rates of rape victims, 18 provided specific information on the profile of the victims, 10 reported that most of the perpetrators of rape were military personnel, 14 referred to the negligence of the government in protecting victims, and 10 reported a lack of competent health-care facilities. The awareness of rape in conflict-ridden DRC is still limited as reported in the scientific literature: Published scientific papers are scarce. Yet more research would probably help mobilize local authorities and the international community against this basic human rights violation (22).

The reasons for the brutal violence against women are analyzed. It focuses on three field sites providing insight into Mai-Mai motivations and their attitudes toward sexual violence. According to most sources, 5.5 million people have died since the beginning of the war in the DRC in 1994, and rape was used as a weapon of destruction. More than 15,000 rapes were reported in the DRC in the last year accounts, including descriptions of horrific acts, such as mutilation and the killing of unborn children. The sexual violence was so severe in the DRC that some have described rape in the country as the worst in the world. Sexual violence has long lasting consequences and far-reaching impacts on individual survivors, their families, and their communities in the DRC (23).

Rape has been used as a weapon in the conflict in eastern DRC in unprecedented ways. Perceptions of local leaders in eastern DRC concerning rape and raped women in the war context were explored. Local leaders were chosen for their ability to both reflect and influence their constituencies. Interviews were conducted with 10

local leaders and transcripts subjected to qualitative content analysis. The data suggest that mass raping and the methods of perpetration created a chaos effectively destroying communities and the entire society and humanitarian aid was often inappropriate. An exclusive focus on raped women missed the extent of dramatization entire communities suffered. More significantly, the lack of political will, corruption, greed and inappropriate aid creates a tangled web serving to intensify the war. This complexity has implications for humanitarian interventions including public health (24).

Eastern DRC has been the site of a protracted conflict in which sexual violence has been a defining feature. The method used was a retrospective registry-based study of sexual violence survivors presenting to Panzi Hospital between 2004 and 2008. The patterns of sexual violence described by survivors and perpetrator profiles are analyzed. As regards results, a total of 4,311 records were analyzed. Perpetrators in this data set were identified as follows: 1] 6% were civilians; 2] 52% were armed combatants; and 3] 42% were simply identified as "assailant(s)" with no further identifying information. Those identified simply as "assailants" perpetrated patterns of sexual violence that were similar to those of armed combatants, suggesting that this group included a large number of armed combatants. Civilian assailants perpetrated a pattern of sexual violence that was distinct from armed combatants. The data indicate that a high proportion of sexual assaults in South Kivu are perpetrated by armed combatants. Protection of women in South Kivu will require new strategies that take into account the unique nature of sexual violence in DRC. Engaging with local communities, the UN and other aid organizations is necessary to create new context-appropriate protection programs (25).

Papers investigating cortisol responses to trauma-related stressors in patients with posttraumatic stress disorder (PTSD) have yielded inconsistent results, demonstrating that cortisol responses were enhanced or unaffected when confronted with trauma reminders. The effect of the type of trauma experienced on both salivary and plasma cortisol responses were investigated during confrontation with trauma-related material. Participants were 30 survivors of war and torture, with and without rape among the traumatic events experienced. Participants of both groups (raped vs. non-raped) fulfilled DSM-IV criteria of PTSD. Plasma and salivary

cortisol levels were measured at three time points during a standardized clinical interview: once before and twice after assessing individual traumatic experiences. Results show that these groups did not differ in basal plasma and salivary cortisol levels. However, differential salivary cortisol responses were observed in PTSD patients who had been raped compared to those who had not been raped ($p<0.05$) but had experienced an equal number of traumatic events and showed equally high PTSD symptom severity. Whereas salivary cortisol levels decreased in the course of the interview for the group with no past experience of rape ($p<0.05$), those PTSD patients who had been raped showed a significant cortisol increase when reminded of their traumatic events ($p<0.001$). This effect was not found in plasma cortisol. The results indicate that the type of traumatic stress experienced contributes to cortisol responses during the confrontation with trauma-related material. The nearness of the perpetrator during the traumatic event might shape later psychophysiological responding to trauma reminders (26).

ASSESSMENT: sexual violence and rape in times of war and civil unrest are used as a weapon in the conflict area. Rape is recognized as a crime of war. During armed conflict deliberate policy is to rape young women to force them to bear the enemy's child.

During conflicts rape is systematically used as a weapon of ethnic cleansing aimed at destroying communities.

The use of rape as a weapon of war is rampant and unyielding. The sexual violence inflicted upon women is brutal and destructive, physically, socially, and psychologically.

Mass raping and the methods of perpetration created a chaos destroying communities and the entire society where humanitarian aid is inappropriate.

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MILITARY SEXUAL TRAUMA

Military sexual trauma (MST) is defined as sexual harassment and or sexual assault experienced by a military service member. It is much more widespread and common than reported. It is associated with pre-combat traumatic experiences and pathologic sequelae including mental and medical illness. An electronic search of the major behavioral science databases was conducted to retrieve studies detailing the social, epidemiological and clinical characteristics of MST and its relationship to psychiatric and medical illness. Papers indicate that MST is related to an increase in psychiatric pathology, including posttraumatic stress disorder (PTSD), substance abuse and dependence, depression, anxiety, eating disorders and suicidal behavior. MST is related to an increase in medical illness, primarily pain-related symptoms involving multiple organ systems, including gastrointestinal, neurological, genitourinary and musculoskeletal. MST is associated with an increased prevalence of mental and physical illness. Although there are some gender differences in the reported rates of MST and there are some variables, such as prior traumatic experiences, that may make an individual more vulnerable to the psychiatric and medical sequelae of MST. MST is a major healthcare issue that affects both sexes warranting attention and an increase in clinical resources devoted to it. Some preventive measures for decreasing the prevalence of MST include increasing education and legal prosecution of perpetrators in the military and increasing access to mental health services for individuals who have suffered from MST (1).

Military sexual assault (MSA) is a pervasive problem throughout the military services, despite numerous initiatives to end it. The military's lack of progress stems from the complexity of sexual assaults, yet in order to develop effective strategies and programs to end sexual assault, deep understanding and appreciation of these complexities are needed. The root causes and numerous myths

surrounding sexual assault, the military cultural factors that may unintentionally contribute to sexual assault, and the uncomfortable issues surrounding sexual assault that are often ignored (such as the prevalence of male sexual assault within the military) are evaluated. By offering a broad, yet comprehensive set of recommendations consider all of these factors for developing effective strategies and programs for ending sexual assault in the military (2).

Experiences of MSA and harassment can have a negative impact on veterans' health and functioning, even years or decades later, thus clearly identifying this as an important area of concern for social workers. In addition to understanding the scope and general impact of MSA and harassment, social workers also must thoroughly understand how different cultural factors may intersect with veterans' experiences. The current knowledge is based on how veterans' life experiences related to gender can affect their experience and recovery from MSA and harassment, and common gender-specific issues (3).

The theoretical antecedents and consequences of sexual assault by workplace personnel and other types of sexual harassment were compared among 22,372 women employed in the U.S. military. Path analysis revealed that low sociocultural and organizational power is associated with an increased likelihood of both types of victimization. Organizational climate and job gender context are directly associated with sexual harassment but are only indirectly associated with sexual assault by workplace personnel. Both types of victimization are associated with a variety of negative outcomes, but the pattern of negative consequences differs (4).

Sexual abuse among female veterans occurs in significant numbers in the U.S. military has been recognized to cause PTSD. PTSD, which stems from sexual abuse, called MST, has been recognized by the Department of Defense (5).

An age-old sexual assault problem was examined through the lens of its occurrence within the military culture. Specific cases as well as U.S. Department of Defense responses to better handle these issues are offered to educate psychiatric-mental health nurses of the potential differences in symptomatology and presentation of MST. This appears to be an increasing problem with the predicted cohort of returning veterans appearing both in the U.S. Department of Veterans Affairs system as well as in civilian locations, hospitals,

community centers, and especially the workplace. It will be critical to develop training materials and pursue further research to identify this silent syndrome of MST to better meet the needs of returning veterans (6).

Military environmental factors associated with rape occurring during military service, while controlling for pre-military trauma experiences, were assessed. A national cross-sectional survey of 558 women veterans serving in Vietnam or in subsequent eras was obtained through structured telephone interviews. Rape was reported by 30% (n=151) of participants, with consistent rates found across eras [corrected]. Military environmental factors were associated with increased likelihood of rape, including sexual harassment allowed by officers ($p<0.0001$), unwanted sexual advances on-duty ($p<0.0001$), and in sleeping quarters ($p<0.0001$). The findings show that violence towards military women has identifiable risk factors. Work and living environments where unwanted sexual behaviors occurred were associated with increased odds of rape. Officer leadership played an important role in the military environment and safety of women. Assailant alcohol and/or drug abuse at time of rape was notable (7).

The 1991, Gulf War was the first major military deployment where female troops were integrated into almost every military unit, except for combat ground units. The impact of reported sexual trauma during this deployment on the risk of PTSD after the war was evaluated. A nested case-control analysis was conducted using the data collected in a population-based health survey of 30,000 Gulf War era veterans. A total of 1,381 Gulf War veterans with current PTSD were compared with 10,060 Gulf veteran controls without PTSD for self-reported in-theater experiences of sexual harassment/assault and combat exposure. The adjusted odds ratio (AOR) for PTSD associated with a report of sexual assault was 5.41 (95% CI 3.19-9.17) in female veterans and 6.21 (95% CI 2.26-17.04) in male veterans. The AOR for PTSD associated with "high" combat exposure was statistically significant (AOR 4.03, 95% CI 1.97-8.23 for females; AOR 4.45, 95% CI 3.54-5.60 for males). The data indicate that notwithstanding a possibility of recall bias of combat and sexual trauma, for both men and women, sexual trauma and combat exposure appear to be strong risk factors for PTSD (8).

The relationship between MSA and PTSD and other symptoms associated with trauma, referred to as not otherwise specified (DESNOS) or complex PTSD was assessed within a Veterans Affairs Medical Center outpatient mental health treatment-seeking sample. The present results focus on female Veterans only because of the low rates of endorsement of MSA among male Veterans resulting in a sample too small to use in analyses. Compared with those who did not endorse MSA, those who did reported greater frequency of other potentially traumatic events; PTSD symptoms; and symptoms characteristic of DESNOS, such as difficulties with interpersonal relationships, emotion regulation, dissociation, somatization, and self-perception. When childhood and other adulthood interpersonal trauma were both taken into account, MSA continued to contribute unique variance in predicting PTSD and DESNOS symptoms. Veterans Affairs patients reporting MSA may represent notably heterogeneous groups that include more complex posttraumatic reactions. Treatment interventions focused on complex PTSD may be warranted for a subset of female veterans who endorse MSA (9).

Associations between childhood trauma, MST, combat exposure, and military-related posttraumatic stress symptomatology (PTSS) were examined in the Women Veterans Cohort Study, a community-based sample of veterans who served in the recent conflicts in Iraq and Afghanistan. From July 2008 to December 2011, 365 female veterans completed a survey that assessed combat exposure, MST, military-related PTSS, assessed using the PTSD Checklist-Military Version, demographic, life history, and other psychopathology variables. High rates of childhood trauma (59.7%) and MST (sexual assault = 14.7%; sexual harassment = 34.8%) were observed. Active duty status, childhood trauma, combat exposure, and MST were independently associated with increased severity of military-related PTSS ($p<0.05$). A significant interaction emerged between MST and combat exposure in predicting military-related PTSS ($p=0.03$), suggesting that the relationship between combat exposure and PTS was altered by MST status. Specifically, under conditions of high combat exposure, female veterans with MST had significantly higher PTSS compared to female veterans without MST. Results suggest that exposure to multiple traumas during military service may have synergistic effects on PTSS in female veterans. The findings highlight the importance of prevention efforts to protect female veterans from

the detrimental effects of MST, particularly those who are exposed to high levels of combat (10).

Awareness about MST and PTSD, and the physical and psychological comorbidities associated with MST were evaluated. Data sources included Health Science Data Sources-PubMed and authors' experiences. Women veterans are the fastest growing segment of the veteran population. Approximately 200,000 of the 2.6 million veterans who have deployed in support of Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn were women. Many were seeking care in both the Veteran Administration and the civilian sector. Upwards of 26,000 women have experienced some form of sexual assault in the military. MST can lead to multiple deleterious physical and psychological comorbidities. It is imperative that nurse practitioners ask women about military service and utilize the Military Health History Pocket Card for Clinicians to ascertain service-connected health risks, primarily MST and PTSD. Prompt identification and intervention is key to reducing physical and psychological comorbidities. There is the need for nurse practitioners to ask all women about military service and potential exposure to sexual trauma. It provides guidance on how to incorporate the Military Health History Pocket Card for Clinicians into practice (11).

The impact of various traumas across the life span on screening positive for current PTSD and depression is examined among heterosexual and sexual minority women veterans. Women veterans were recruited over the Internet (n=706, 37% lesbian or bisexual) to participate in an anonymous, online survey. Childhood trauma; adult sexual assault and adult physical victimization before, during, and after the military; combat exposure; perceived sexist discrimination during military service; sexual minority military stressors; past-year existing events; and whether participants screened positive for PTSD or depression. Lesbian and bisexual women reported higher rates of trauma across the life span, although in some instances (e.g., sexual assault during and after military service, and combat exposure), they did not differ from their heterosexual counterparts. Childhood trauma and traumas that occurred during military service added the most variance to both PTSD and depression models. Sexual assault during military service appeared to be especially harmful with respect to screening positive for PTSD for both sexual orientation

groups. Results revealed a number of other predictors of mental health status for women veterans, some of which differed by sexual orientation. Findings indicate a significant burden of interpersonal trauma for both heterosexual and lesbian/bisexual women veterans and provide information on the distinct association of various traumas with current PTSD and depression by sexual orientation (12).

The literature documenting the prevalence of MST and its associated mental and physical health consequences is analyzed. Prevalence rates of MST vary depending on method of assessment, definition of MST used, and type of sample. Risk factors for MST include age, enlisted rank, negative home life, and previous assault history. MST has been associated with increased screening rates of depression and alcohol abuse, in addition to significantly increased odds of meeting criteria for PTSD. In addition, MST has been associated with reporting increased number of current physical symptoms, impaired health status, and more chronic health problems in veterans (13).

The association of sexual trauma with health and occupational outcomes was investigated using longitudinal data from the Millennium Cohort Study. Of 13,001 U.S. service women, 1,364 (10.5%) reported recent sexual harassment and 374 (2.9%) recent sexual assault. Women reporting recent sexual harassment or assault were more likely to report poorer mental health: OR 1.96, 95% CI 1.71-2.25, and OR 3.45, 95% CI 2.67-4.44, respectively. They reported poorer physical health: OR 1.39, 95% CI 1.20-1.62, and OR 1.39, 95% CI 1.04-1.85, respectively. They reported difficulties in work/activities due to emotional health: OR 1.80, 95% CI 1.59-2.04, and OR 2.70, 95% CI 2.12-3.44, respectively. They also reported difficulties with physical health: OR 1.55, 95% CI 1.37-1.75, and OR 1.52, 95% CI 1.20-1.91, respectively, after adjustment for demographic, military, health, and prior sexual trauma characteristics. Recent sexual harassment was associated with demotion, OR 1.47, 95% CI 1.12-1.93. Findings demonstrate that sexual trauma represents a potential threat to military operational readiness and draws attention to the importance of prevention strategies and services to reduce the burden of sexual trauma on military victims (14).

Sexual trauma remains a pervasive problem in the military. The deleterious mental health outcomes related to incidents of sexual

assault have been well-documented in the literature, with particular attention given to the development of PTSD and utilization of mental health services. Much effort has focused on addressing issues of sexual trauma in the military. The incidence of sexual assault was examined in female veterans, the relationship to PTSD and mental health care utilization. The research explored differences in pre- and post-9/11 veterans. Data were collected using a 6-prong recruitment strategy to reach veterans living in Southern California. A total of 2,583 veterans completed online and in-person surveys, of which 325 female veterans were identified for inclusion in the analysis. Forty percent of the sample reported experiencing sexual assault during their military service. A history of MST was a substantial contributor to symptoms of PTSD. A majority of female veterans who indicated being sexually assaulted during their military service met the cutoff for a diagnosis of PTSD. Although only a minority of participants who indicated being a victim of sexual assault reported receiving immediate care after the incident, most had received mental health counseling within the past 12 months. Findings point to the need for additional prevention programs within the military and opportunities for care for victims of MSA (15).

ASSESSMENT: MST is defined as sexual harassment and or sexual assault experienced by a military service member. It is associated with pre-combat traumatic experiences and pathologic sequelae including mental and medical illness. Medical illness, primarily pain-related symptoms, involves multiple organ systems, including gastrointestinal, neurological, genitourinary and musculoskeletal.

Experiences of MSA and harassment can have a negative impact on veterans' health and functioning, even years or decades later.

Military environmental factors that are associated with increased likelihood of rape, including sexual harassment allowed by officers, unwanted sexual advances on-duty, and sleeping quarters.

A significant interaction emerged between MST and combat exposure in predicting military-related PTSS.

Risk factors for MST include age, enlisted rank, negative home life, and previous assault history. MST is associated with increased screening rates of depression and alcohol abuse, in addition to increased odds of meeting criteria for PTSD. Active duty status,

childhood trauma, combat exposure, and MST are associated with increased severity of military-related PTSS.

Under conditions of high combat exposure, female veterans with MST had significantly higher PTS compared to female veterans without MST.

Sexual trauma represents a potential threat to military operational readiness and draws attention to the importance of prevention strategies and services to reduce the burden of sexual trauma on military victims.

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SEXAUL ASSAULT/HARASSEMENT AT WORK

Women are sexually assaulted at an alarming rate, and the workplace is a frequent arena for assault. However, in recent decades, attention has been given to improving responses to sexual assault. Sexual assault is a frequent cause of injury and death for women in the U.S. One in five American women admits they have experienced a completed rape during their lifetime. These estimates are conservative because sexual assault and sexual violence are both underreported and underprosecuted. Fear of job loss and discrimination are frequent reasons women do not report sexual assault in the workplace. Women are entering the workplace in greater numbers due in part to more single parent families and the depressed economy. Women are entering work environments that have traditionally been the domain of male workers: corporate headquarters, semi trucks, health care providers' offices, rural farms, and rural factories. Employers must have a plan to protect female employees and effectively address incidents of sexual assault or violence. Occupational health nurses and nurse practitioners can assist both employees and employers to prevent sexual assault and resolve the aftermath of sexual assault. To accomplish this goal, occupational health nurses and nurse practitioners must be trained in sexual assault and violence response as well as preventive interventions (1).

The purpose was to determine if dental hygienists in the Commonwealth of Virginia experienced sexual harassment while employed in oral health care settings. Other interests were to determine if dental hygienists experienced sexual harassment, to what extent they felt professionally prepared to respond to unwanted sexual behaviors, and did they perceive sexual harassment as a problem in the oral health care environment; and was attrition from their employment associated with sexual harassment. A

questionnaire, Sexual Harassment in the Dental Hygiene Profession, designed by the author, was used. A list of currently licensed and registered dental hygienists was obtained from the Virginia Board of Dental Examiners and the questionnaire was sent to 540 randomly selected registered Virginia dental hygienists. Two weeks after the initial mailing, a second questionnaire was sent to non-respondents. The survey elicited data on experience, management, and personal opinions relative to sexual harassment, as well as demographic information. Of returned and useable 285 surveys (53%), 54% of dental hygienists experienced sexual harassment. The perpetrators of the harassment were either male dentists (73%) or male clients (45%). Less than 10% reported being harassed by women. While 70% of the sexually harassed respondents indicated that filing formal complaints was an effective strategy for managing sexual harassment, less than 1% actually did so. Of all dental hygienists (harassed or not), 90% did not receive training in their dental education to manage sexual harassment, and 85% would like the American Dental Hygienists' Association to develop model guidelines and policies. Demographic characteristics were typical of practicing dental hygienists in Virginia; 99% female, 96% Caucasian, and 86% married with a mean age of 40 years. The data indicate that information about managing sexual harassment needs to be incorporated into the dental hygiene curricula. This curriculum addition should include information on identifying sexual harassment incidents, strategies for controlling unacceptable behavior, the legal rights of employees, and the process of filing a formal complaint. Dental hygienists need to identify sexual harassment behaviors and receive prevention training though continuing education courses (2).

Nurses sexually harassed at work face frustration and emotional and economic consequences. Historically before the 1970s, nurses had little legal recourse and tolerated sexual harassment as a necessary "evil" associated with working. The Civil Rights Act of 1964 created the option for legal remedies for sexual harassment/discrimination cases. Successful court cases established the legal criteria for sexual harassment. Prevention requires coordinated activities of employers, individual employees, and the healthcare profession. Sexual harassment at work increases anxiety and undermines the nurse's ability to focus on the delivery of safe and competent care (3).

The prevalence and sources of sexual harassment against nurses, its consequences, and factors affecting harassment experiences were examined. Participants (n=622) were selected from nurses working in eight Ministry of Health hospitals, Turkey. Participants were surveyed with a Sexual Harassment Questionnaire, consisting of the sociodemographic characteristics, types of sexual harassment, sources, feelings, ramifications, and ways to cope with sexual harassment behaviors. Of participants 37.1% had been harassed sexually. Physicians were identified as the primary instigators of sexual harassment. The most common reactions against harassers were anger and fear; frequently reported negative effects of sexual harassment were disturbed mental health function, decline in job performance, and headache. "Did nothing" was the coping method used most commonly by the nurses. About 80% of sexually harassed nurses did not report the incident of sexual harassment. The data indicate that the lower working status and power of nurses in the workplace, poor working conditions in healthcare settings, and insufficient administrative mechanisms, including the present law and regulations against sexual harassers, were important factors in the work environment (4).

Students in a small, suburban high school for girls completed a paper and pencil survey during class (5). A modified version of the Sexual Experiences Questionnaire (6) was used to identify sexually harassed working teenagers. Work attitudes, assessments of physical health and mental health, and school-related outcomes were measured using standardized scales. The percentage of harassed girls was significantly higher than the figures reported in most studies of working women. Girls who were sexually harassed were less satisfied with their jobs and supervisors, had higher levels of academic withdrawal, and were more apt to miss school than their non-harassed peers. The findings show that sexual harassment significantly affects employed high school girls' connections to work and school. It not only taints their attitudes toward work but it also threatens to undermine their commitment to school. Educators, practitioners and community leaders should be aware of the negative impact this work experience may have on adolescents and explore these issues carefully with students who are employed outside of school. Practice implications: teenage students, stressed by sexual harassment experienced at work may find their career development

or career potential impeded or threatened due to school absence and poor academic performance. The physical safety of working students possibly is at risk, creating a need for teenagers to receive training to deal with sexual assault and other types of workplace violence. Educators, practitioners, and community leaders should be aware of the negative impact this work experience may have on adolescents and their overall school experience and explore the issue of sexual harassment carefully with students who are employed outside of school (5).

ASSESSMENT: sexual harassment is a prevalent human behavior. Women are sexually assaulted at an alarming rate, and the workplace is a frequent arena for sexual assault.

Dental hygienists in the Commonwealth of Virginia experience sexual harassment while employed in oral health care settings.

Physicians are the primary instigators of nurses' sexual harassment. The most common reactions against harassers are anger and fear; while negative effects of sexual harassment are disturbed mental health function, decline in job performance, and headache.

The lower working status and power of nurses in the workplace, poor working conditions in healthcare settings, and insufficient administrative mechanisms, including the present law and regulations against sexual harassers, are important factors in the work environment.

Fear of job loss and discrimination are frequent reasons women do not report sexual assault in the workplace.

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PEOPLE WITH DISABILITIES

The association between the level of disability impairment and physical and sexual assault was examined in a sample of U.S. women at least 18 years of age. Participants included 6.273 non-institutionalized U.S. women from 8,000 women participating in the 1995-1996 National Violence Against Women (NVAW) Survey. Main outcome measures included women's experiences of physical and sexual assault in the 12 months before the NVAW interview. Most women reported having no disability (n=5,008, 79.8%) and/or not experiencing an assault in the year before their interview (n=6,018, 95.9%). Less than 5% (n=280) reported having a disability that severely limited daily activities, and 15.7% (n=985) reported having a disability that moderately limited activities. Less than 4% (n=218) of the women reported a physical-only assault, and less than 1% (n=37) reported being sexually assaulted. Women with severe disability impairments were four times more likely to be sexually assaulted than women with no reported disabilities (RR 4.0, 95% CI 1.5-10.6). Little difference in the risk of sexual assault was found between women with moderate disability impairments and those reporting no disabilities (RR 1.0, 95% CI 0.3-2.8). Women with severe (RR 1.6, 95% CI 0.9-3.0) and moderate (RR 1.2, 95% CI 0.8-1.9) disability impairments were at greater risk, although not quite significantly so, of physical-only assault than were women without a disability. The findings suggest that women with disabilities that severely limit activities of daily living are at increased risk of sexual assault (1).

North Carolina women were surveyed to examine whether women's disability status was associated with their risk of being assaulted within the past year. Women's violence experiences were classified into three groups: no violence, physical assault only (without sexual assault), and sexual assault (with or without physical assault). Women with disabilities were not significantly more likely than women without disabilities to have experienced physical assault alone within the past year (OR 1.18, 95% CI 0.62-2.27); however, women with disabilities had more than 4 times the odds of experiencing sexual assault in the past year compared to women without disabilities (OR 4.89, 95% CI 2.21- 10.83) (2).

The primary research questions were how do sexual assault patterns differ for women with disabilities as compared with women

without disabilities and how do patterns differ among women with different disabilities? Data were derived from initial encounters of 16,672 women survivors of sexual assault who sought state-funded sexual assault survivor services in Massachusetts from 1987 through 1995. More than 10% of survivors reported ≥1 disability. If a woman had a history of a previous assault or was ≥30 at time of assault, she was significantly more likely to report a disability as compared to the referents (no history of assault or <30). Among women with a single disability, a survivor who delayed seeking services ≥6 months was more likely to have a mental health disability. In contrast, a survivor who had a cognitive disability was more likely to report sooner than 6 months compared with a survivor with other single disabilities. The data indicate that differences were found between disabled and nondisabled groups as well as among women with different single disabilities. Some findings, such as those suggesting differential access, may require disability group-specific interventions, whereas other variations can be addressed at the individual client level. State-funded sexual assault survivor service providers may use these findings to improve outreach and service provision strategies (3).

Sexual violence against people with disabilities is widespread and linked to negative public health and social outcomes. The current state of affairs concerning sexual assault among people with disabilities, including reported prevalence and trends, over the period from 2002 through 2007 in Taiwan was examined. The present study analyzed nationwide data from the 2002-2007 "Sexual assaults report system" derived primarily from the Council of Domestic Violence and Sexual Assaults Prevention, Ministry of the Interior, Taiwan. The data took into account the number of cases and disability type in persons reported to have been sexually assaulted, and to analyze the reported rate of sexual assaults among this section of the population. The rate of increase of sexual assault reported among people with disabilities was 2.7 times than that of the general population (469-173%) during the period of 2002-2007. Government statistics showed that intellectually disabled persons accounted for the largest proportion (>50%) of reported sexual assault cases among the disabled, followed by persons with chronic psychosis, who accounted for one-third of the reported sexual assault cases among the disabled population. The reported rate of sexual assault increased from 0.9 to 2.42 per ten-thousand people in

the general population and from 1.24 to 5.74 per ten-thousand disabled persons. Intellectual disability, chronic psychosis and voice and speech impairments were consistently associated with a higher prevalence of sexual assault than the general population. The line of best fit estimated from a linear model showed a significant change over the study period in the reported number of sexual assault cases among disabled people. The results highlight the requirement for further study to explore the needs of people with disabilities with regards to education and other strategies to prevent sexual assault, particularly in the most vulnerable group-those with intellectual disability (4).

Given that sexually offensive behavior on the part of people with intellectual disabilities has been identified as a significant problem, we developed a risk assessment questionnaire, that takes not only various static and dynamic factors into account but also environmental risk variables. Psychologists and staff members completed this Risk Inventarization Scale on Sexually Offensive Behavior of Clients with Intellectual Disabilities for 56 intellectually disabled clients with sexually offensive behavior problems. The scale contains static client variables (rated using two- or five-point likert scales and open questions) and both dynamic client and environmental variables (rated using a five-point Likert scale). Factor analyses of the dynamic client and environmental variables revealed three subscales: quality of supervision, offending behavior and emotional and social stability. Reliability analyses showed sufficient to good reliability for both the total scale (r=0.82) and the identified subscales (quality of guidance r=0.94; offending behavior r=0.75, and emotional and social stability r=0.58). Correlational analyses of the quality of guidance subscale showed high positive correlations with such static variables as values and norms, living conditions, and criminal offenses in early youth (5).

Individuals with and without disabilities who also were victims of sexual abuse and/or sexual assault were compared. Data were from all state-funded agencies in a Midwestern state providing services to victims. Matching the sample to control for demographic differences, the findings indicate that individuals with disabilities who sought services were significantly more likely to be victims of adult sexual abuse and/or assault compared to those without disabilities. They were significantly more likely to be referred by a social service

program and significantly less likely to be self-referred. Significant differences existed between the groups related to service receipt indicating that victims with disabilities received more services (6).

Although research has indicated that women with intellectual disabilities are significantly burdened with sexual violence, there is a dearth of sexual assault prevention research for them. To help address this serious knowledge gap, the findings of general sexual assault prevention research were summarized and its implications for women with intellectual disabilities were analyzed. Interventions published in both the peer-reviewed and non-peer-reviewed literature were evaluated from a comprehensive search of the scientific literature as well as from recommendations made by disability and sexual assault service providers in the U.S. The results of this comprehensive literature review found 4 sexual violence prevention programs that were designed for participants with intellectual disabilities and that had undergone some type of evaluation. Each program and its evaluation are critically and systematically reviewed. Based on the authors' review of these programs as well as the wider literature, they conclude with recommendations and discuss the work that remains to decrease the incidence of sexual violence against women with intellectual disabilities (7).

Sixty five mentally impaired men charged with different sexual crimes were submitted to judicial psychiatric examination. Of these men, 37% had previously stayed in institutions for the mentally impaired, two thirds had worked for a period. Half of the charged men were functionally retarded and the rest were assessed as functioning at an even lower level. Approximately every third man suffered from serious behavioral symptoms and personality disturbances. Most of the abuse was towards acquaintances or persons in the local environment. Almost half of the men used violence in connection with the abuse. Two thirds of the victims were under the age of 16 years. About half of the men were charged with sexual abuse of minors, and a few with rape. The majority was charged, and almost half were placed under preventive detention (8).

Over a 5-year period, of the 461 cases of sexual abuse of adults with mental retardation, 37% were confirmed by the Abuse Investigation Division of the Connecticut Office of Protection and Advocacy for Persons with Disabilities. As expected, most of the

victims were women (72%); their average age at the time of the incident was 30 years. Victims, for the most part, had no problems communicating verbally and had few, if any, secondary disabilities. As is the case in the general population, the majority of the perpetrators were men (88%) and included other adults with mental retardation, paid staff, family members, and others. Most sexual abuse occurred in the victim's residence, and in 92% of the cases the victim knew his or her abuser (9).

Cases of sexual abuse of adults with intellectual disabilities, reported across the South East of England, which were perpetrated by men with intellectual disabilities, were compared with those committed by other male perpetrators. The comparison provides some support for the findings of other studies, which have suggested that men with intellectual disabilities offend against more male victims than non-disabled sex offenders and that their offences are somewhat less serious, but otherwise indicates common patterns of abusive behavior across this divide but differential service responses and support for victims. So called 'peer abuse' is a widespread problem which service agencies have failed to address: repeated offences are frequent and lack of appropriate intervention is the norm (10).

The association between childhood maltreatment and adulthood domestic and sexual violence victimization was evaluated among people with severe mental illness (SMI), and this association in terms of gender differences and potential mediators is explored. A cross-sectional survey of 318 people living in the community who were receiving care from Community Mental Health Teams was conducted. Associations were assessed using logistic regression of multiply imputed data. Of men, 63% (95% CI 55-71%) and 71% (95% CI 63-79 %) of women reported childhood maltreatment, 46% (95% CI 37-54 %) of men and 67% (95% CI 59-76%) of women reported adulthood domestic violence victimization, and 22% (95% CI 15-28%) of men and 62% (95% CI 53-70%) of women reported adulthood sexual violence victimization. Men and women with SMI who reported experiences of childhood maltreatment were two to five times more likely to report domestic and sexual violence victimization in adulthood after adjusting for confounders. The associations held for each of emotional, physical and sexual childhood abuse. The data indicate that people with SMI have high prevalence of experiences of

childhood maltreatment and adulthood domestic and sexual violence victimization. Childhood maltreatment appears to be an independent risk factor for adulthood victimization among men and women with SMI (11).

ASSESSMENT: there is an association between the level of disability impairment and physical and sexual assault.

Women with disabilities that severely limit activities of daily living are at increased risk of sexual assault.

As is the case in the general population, the majority of the sex offender perpetrators are men including adults with mental retardation, paid staff, family members, and others.

Most sexual abuse occurred in the victim's residence, and in 92% of the cases the victim knew his or her abuser.

People with SMI have high prevalence of experiences of childhood maltreatment and adulthood domestic and sexual violence victimization. Childhood maltreatment appears to be an independent risk factor for adulthood victimization among men and women with SMI.

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ELDERLY SEXUAL ABUSE

Older adults are victims of sexual assault and rape. The scope of the problem, prevalence, and correlates of these sex crimes are relatively unknown. Such knowledge deficits are major barriers to detecting, prosecuting, and preventing sex crimes against older adults. Understanding how intentional sexual injuries are inflicted on older adults is a growing concern as the population over 65 years increases. Critical information is needed to guide the identification of physical and psychologic markers of elder sexual abuse to be integrated by clinicians and law enforcement as forensic medical evidence (1).

Sexual abuse in the older adult population is an understudied vector of violent crimes with significant physical and psychological consequences for victims and families. Research requires a theoretical framework that delineates core elements using a standardized instrument. To develop a conceptual framework and identify core data elements specific to the older adult population, clinical, administrative, and criminal experts were consulted using a nominal group method to revise an existing sexual assault instrument. The revised instrument could be used to establish a national database of elder sexual abuse. The database could become a standard reference to guide the detection, assessment, and prosecution of elder sexual abuse crimes as well as build a base from which policy makers could plan and evaluate interventions that targeted risk factors (2).

Physical abuse of older women, including reports of sexual assault, has risen rapidly for the last decade. A group of postmenopausal victims of sexual assault were compared with younger adult women (18-39 years old) by examining patient demographics, assault characteristics, and patterns of physical injury. A retrospective cohort analysis was conducted to assess

epidemiology and anogenital injuries in consecutive female victims presenting to sexual assault clinics and/or emergency departments within 3 counties of Western Michigan. All patients were examined by forensic nurses trained to perform medicolegal evaluations using colposcopy with nuclear staining. Patient demographics, assault characteristics, and injury patterns were recorded using a standardized classification system. Data from 2 patient groups (women aged 18-39 years vs. postmenopausal women 50 years and older) were compared. During the 5-year study period, 1917 adult sexual assault victims met the inclusion criteria and comprised the study population as follows: 84% of the victims were 18 to 39 years old, and 4% were postmenopausal women at least 50 years old. The 72 postmenopausal victims were more likely to be assaulted by a single assailant, typically a stranger (56% vs. 32%, p=0.008), in their own home (74% vs. 46%, p<0.001) and experienced more physical coercion (72% vs. 36%, p<0.001). By comparison, the younger control group was more likely to have used alcohol or illicit drugs before the assault (53% vs. 18%, p<0.001) and have a history of sexual assault (51% vs. 15%, p<0.001). Postmenopausal victims had a greater mean number of nongenital (2.3 vs. 1.2, p<0.001) as well as anogenital injuries (2.5 vs. 1.8, p<0.001). The localized pattern and type of physical injuries were similar in both groups, although postmenopausal women tended to have more anogenital lacerations and abrasions. The findings indicate that the postmenopausal woman is not immune from sexual assault. The epidemiology of sexual trauma in this age group is uniquely different when compared to younger women, which may be useful in planning intervention and prevention strategies (3).

A critical review of current literature is provided on the sexual assault of older women, including an exploration of the specific features and emotional and physical impacts of older women's experiences, and highlights current gaps and future directions for research, practice, and theory. Older women constitute only a small proportion of victim/survivors. However, existing research underestimates the extent of this issue. Older women face particular barriers to disclosure and accessing the justice system, resulting in their experiences remaining hidden. Many of these barriers contribute toward older women's experiences being ignored, dismissed, or downplayed by potential bystanders. These barriers

include cultural context, ageism, cognitive and health impairments, and living in a residential care setting. Responding to, and preventing, the sexual assault of older women requires a tailored approach and there is insufficient insight to develop appropriate responses (4).

Victim, offender, and offence characteristics associated with sexual assaults by strangers of older women compared to those against younger women are examined. Cases are obtained from the Serious Crime Analysis Section of the United Kingdom National Policing Improvement Agency (NPIA; formerly Centrex). All possible cases of rape, attempted rape, and lesser sexual assault involving a single female victim aged 60 or older are selected (n=53). These are matched with a sample of sexual assaults against women aged between 20 to 45 years (n=53). Findings reveal significant differences in relation to a number of variables, including ethnicity of the offender, number of previous convictions of the offender, and characteristics associated with the assault itself (5).

A total of 284 cases of alleged elder sexual abuse revealed fairly equal numbers of reports to the criminal justice system (CJS) and to Adult Protective Services (APS). Comparison of these two routes of reporting indicated the following: suspected victims reported to APS were more likely to reside in their own homes, not receive rape exams, and have cognitive disabilities. Their alleged offenders were typically spouse/partners or family members aged 40 years and older. Victims reported to CJS were more frequently abused in institutions, received rape exams, and were victimized by offenders aged less than 40 years who also committed nonsexual crimes. In cases reported to the CJS, alleged offenders were less likely than those in the APS cases to be identified, but once identified, were more likely to be arrested, referred for prosecution, and convicted, or to plea bargain their case (6).

ASSESSMENT: older adults can be victims of sexual assault and rape. Physical abuse of older women, including sexual assault, has risen rapidly for the last decade. The postmenopausal woman is not immune from sexual assault.

Older women face particular barriers to disclosure and accessing the justice system, resulting in their experiences remaining hidden.

Suspected victims are more likely to reside in their own homes, not receive rape exams, and have cognitive disabilities.

The alleged offenders are typically spouse/partners or family members aged 40 years and older.

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NURSING HOMES

Population trends suggest that the next 20 years will witness a dramatic increase in the adult population aged 65 and older. Projected increases in the elderly population are expected to significantly increase the stress on family and professional caretakers. Stress, in the context of care giving relationships, is a risk factor associated with increased prevalence of elder abuse in familial and institutional settings. As increasing numbers of older adults are moved from family care giving to nursing home care settings, it becomes important to identify the pattern of elder abuse risk factors in nursing home facilities. An ecological model is proposed for better understanding the risk factors associated with elder abuse in nursing homes and the complex interaction of individual/person characteristics and contextual factors in institutional elder abuse. An ecological perspective to institutional elder abuse provides a framework for guiding and informing future research on the risk factors of nursing home abuse and, in turn, for the development of effective interventions and relevant social policies (1).

Most sexual aggression against older adults occurs in long-term care facilities. Fellow residents are the most common perpetrators, often demonstrating inappropriate hypersexual behavior caused by dementing illness. This resident-to-resident sexual aggression (RRSA) is defined as sexual interactions between long-term care residents that, in a community setting, at least one of the recipients would be likely to construe as unwelcome and that have high potential to cause physical or psychological distress in one or both of the involved residents. Although RRSA possibly is common, and physical and psychological consequences for victims possibly are significant, this phenomenon has received little direct attention from researchers. This is a review of the existing literature and relevant related research examining elder sexual abuse and hypersexual behavior that describes the epidemiological features of the phenomenon, including risk factors for perpetrators and victims. The legitimate and recognized need for nursing home residents, even those with advanced dementing illness, to express themselves sexually makes preventing and managing sexual aggression in nursing homes more challenging. This situation creates the ethical dilemma and the need to evaluate the capacity to consent to sexual activity of residents with dementing illness and to re-evaluate capacity as the diseases progress (2).

Sexual abuse against older residents in nursing homes is analyzed. A qualitative approach was used. Through a focus group interview with staff in nursing homes, the aim was to reveal employees' thoughts, experiences, and attitudes. Findings from the focus group interview show that sexual abuse of older residents is a taboo topic among health professionals. Acts of sexual abuse are difficult to imagine; it is hard to believe that it occurs. The fact that staff are not aware that it could happen, or have a hard time believing that it actually happens, can amplify the residents' vulnerable position as potential victims of abuse, and it makes it even more challenging to report or uncover such acts. The findings highlight the need for education of all health care workers in Norway as well as more research on sexual abuse against older residents in nursing homes. There is a need for good policies and reporting systems, as an important step towards addressing sexual abuse of the aged in a more appropriate way (3).

Despite an increasing literature related to elder abuse, sexual abuse of older persons in general and of vulnerable adults living in nursing homes in particular is still sparsely described. The state of knowledge on the subject of sexual abuse against older nursing home residents through a literature review is evaluated. Systematic searches in reference databases, including Cinahl, Medline, OVID Nursing Database, ISI Web of Science, PsycINFO, Cochrane Library, and SveMed, were conducted. Through several phases of selection of the articles, using strict inclusion and exclusion criteria, six articles were chosen for a deeper examination. Findings from the review show that sexual abuse occurs in nursing homes and that both older women and men are victims of sexual abuse. Perpetrators appear mainly to be staff and other residents and mainly to be men, but also women abuse both older men and older women. Findings from the literature review show that there is a need for knowledge and further research on the topic of sexual abuse against older residents in nursing homes. There is a need for good policies and reporting systems, as an important step in seriously addressing sexual abuse against older persons (4).

A profile of sexual abuse cases among adults (n=82) aged 60 years and older and receiving attention from Adult Protective Services units in Virginia over a 5-year period were examined. Most victims of sexual abuse were women, 70-89 years old, residing in a nursing home. Typically, sexual abuse involved instances of sexualized kissing and fondling and unwelcome sexual interest in the person's body. The majority of perpetrators were nursing home residents who were 60 years and older. In most situations, witnesses to the sexual abuse were facility residents. Orientation affects the invasiveness of the sexual abuse experienced by older adults. The data reveal a small but persistent number of cases identifying individuals who are especially vulnerable to this form of abuse (5).

ASSESSMENT: sexual abuse occurs in nursing homes and both older women and men are victims of sexual abuse. Perpetrators are mainly to be staff and other residents and mainly men, but also women abuse both older men and older women.

Fellow residents are the most common perpetrators, often demonstrating inappropriate hypersexual behavior caused by dementing illness.

Sexual abuse of older residents is a taboo topic among health professionals.

Most victims of sexual abuse are women, 70-89 years old, residing in a nursing home. Sexual abuse involves sexualized kissing, fondling and unwelcome sexual interest in the person's body.

Older women face particular barriers to disclosure and accessing the justice system, resulting in their experiences remaining hidden.

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HEALTH EFFECTS

Sexual assault is a traumatic event with potentially devastating lifelong effects on physical and mental health. Individuals who experience sexual assault during childhood are more likely to engage in risky behaviors later in life, such as smoking, alcohol and drug use, and disordered eating habits, which may increase the risk of developing a chronic disease. Despite the high prevalence and economic burden of sexual assault, few studies have investigated the associations between sexual violence and chronic health conditions in the U.S. Associations between sexual violence and health risk behaviors, chronic health conditions and mental health conditions were evaluated utilizing population based data in Kansas. Secondary analysis was done using data from the 2011 Kansas Behavioral Risk Factor Surveillance System sexual violence module (n=4,886). Crude and adjusted prevalence rate ratios were computed to examine associations between sexual assault and health risk behaviors, chronic health conditions and mental health conditions, overall and

after adjusting for social demographic characteristics. Additional logistic regression models were implemented to examine the association between sexual assault and health risk behaviors with further adjustment for history of anxiety or depression. There was a significantly higher prevalence of health risk behaviors (heavy drinking, binge drinking and current smoking), chronic health conditions (disability, and current asthma) and mental health conditions (depression, anxiety, and suicidal ideation) among women who ever experienced sexual assault compared to women who did not, even after adjustment for potential confounders. Findings highlight the need for chronic disease prevention services for victims of sexual violence. There are important implications for policies and practices related to primary, secondary, and tertiary prevention, as well as collaborations between sexual violence, chronic disease, and health risk behavior programs (1).

An estimated 1 out of 6 women and 1 out of 33 men has been a victim of sexual assault at some point in their lifetime. The associations between sexual assault and negative health outcomes were quantified among males and females who reported being sexually assaulted in the past 12 months or at some point before the past 12 months. Data were obtained from the 2005 Behavioral Risk Factor Surveillance System core and sexual violence modules. Among women, victimization before the past 12 months was significantly associated with poor health status, poor mental health, lower life satisfaction, activity limitations, smoking, and binge drinking. Women who reported victimization in the past 12 months were also significantly more likely to report poor mental health, lower life satisfaction, activity limitations, and binge drinking. Among males, significant associations were found with smoking (past 12 months), poor life satisfaction (before the past 12 months) and activity limitations (before the past 12 months). The data suggest that poor mental and physical health associated with victimization are more prevalent in women and these relationships persist over time (2).

The understanding of the association between recent health-risk behaviors and a history of forced sexual intercourse was expanded, using a nationally representative sample of female and male high school students. Data were from the 2003 National Youth Risk Behavior Survey, a nationally representative biennial survey of U.S. high school students. Lifetime history of forced sex, recent physical

dating violence, and health-risk behaviors (substance use, diet-related behaviors, violence-related behaviors, and health promoting behaviors) were assessed. Analyses were stratified by gender and controlled for grade and race/ethnicity. Of students surveyed, 8.9% reported ever being forced to have sex. One in eight females and one in 16 males experienced forced sex in their lifetime. For females and males, a history of forced sex was associated with experiencing physical dating violence and suicidal ideation in the 12 months preceding the survey and with substance use in the previous 30 days. Female victims were not as likely as female nonvictims to have participated in team sports during the previous 12 months. Male victims were more likely than male nonvictims to have fasted for more than 24 hours to lose weight during the previous 30 days. The data indicate that a lifetime history of forced sex is associated with recent dating violence and participation in unhealthy behaviors. Services and intervention programs for victimized youth should address health concerns that have been linked to sexual assault. Such programs would provide opportunities for early intervention with lasting implications for improved health (3).

Mental and physical health outcomes and health behaviors of African American women and adolescents after sexual assault were analyzed. Data sources included searches of the Cumulative Index to Nursing and Allied Health Literature, Cochrane Library, PsycINFO, and PubMed from January 2001 through May 2012 using the terms Blacks, African Americans, sexual abuse, sexual offenses, and rape. Criteria for inclusion included 1] results of primary research conducted in the U.S. and published in English, 2] African American females age 13 and older, 3] sexual assault or sexual abuse reported as distinct from other types of abuse, and 4] health status as an outcome variable. Twenty-one publications met inclusion criteria. Articles were reviewed for the mental and physical health and health behavior outcomes associated with sexual assault of African American women and adolescents. Sexual assault was associated with increased risk of poor mental and physical health outcomes in the general population of women and adolescents. There was an increased risk of unhealthy behaviors (e.g., drinking, drug use, and risky sexual behaviors) for all women and adolescents, with the highest risk reported for African American women and adolescents. Help seeking from family and friends demonstrated conflicting

results. Cumulative effects of repeated assaults appear to worsen health outcomes. The data indicate that sexual assault has significant effects on the physical and mental health and health behaviors of women and adolescents in the general population. Less evidence is available for differences among African American women and adolescents (4).

Sexual assault affects one out of every five women, and it is a substantial public health and human rights problem in developing countries including Ethiopia. The pattern of sexual assault and related complications were examined in cases which were treated at Jimma University Specialized Hospital from November 1, 2011 - October 31, 2012. Sexual assault patterns and related complications were assessed on 99 sexual assault cases which were managed at the Gynecology Out-patient Department of the Hospital. Data on circumstances of sexual assault, survivor specific demographic characteristics and information on complications and interventions provided were collected by trained third year residents in obstetrics and gynecology using pretested questionnaire after respondent consent was taken. The mean (±SD) of the survivors' age was 14 (±5) years; 57.5% of the survivors were children and 68.7% were from rural areas. Three percent of the clients visited the Gynecology Outpatient Department for sexual assault where rape accounted for 78.8%. The majority (76.8%) of the assailants was known to the survivors, 91% were assaulted by one assailant and 5.1% of the rape cases were gang rape. The mean time of presentation after sexual assault to the hospital was 15 days. Survivors had pregnancy test, human immunodeficiency virus (HIV) test and screening for sexually transmitted infections (STIs) in 76.8%, 99%, 93%, respectively, of which 17.1%, 5.1%, 14.1% tested positive for pregnancy, HIV, and some STIs, respectively. All HIV positive survivors were children under fifteen years of age. Of the survivors, 40% were provided with emergency contraception. In addition, 60.5%, 63%, and 91.9% of them were provided with post-exposure prophylaxis for HIV, STIs prophylaxis and were given counseling, respectively. It has been revealed that sexual assault is a major problem of women and children of less than fifteen years. There were gaps in providing and receiving packages of care and justice system to protect survivors indicating the needs for community intervention and providing quality of care by health care staff (5).

ASSESSMENT: sexual assault is a traumatic event with potentially devastating lifelong effects on physical and mental health. Sexual assault is associated with increased risk of poor mental and physical health outcomes. There is an increased risk of unhealthy behaviors (e.g., drinking, drug use, risky sexual behaviors) for women and adolescents, with the highest risk reported for African American women and adolescents.

Individuals who experienced sexual assault during childhood are more likely to engage in risky behaviors later in life, such as smoking, alcohol and drug use, and disordered eating habits, which may increase the risk of developing a chronic disease.

Women who report victimization in the past 12 months are more likely to report poor mental health, lower life satisfaction, activity limitations, and binge drinking.

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UNWANTED PREGNANCY

The national rape-related pregnancy rate is determined and descriptive characteristics of pregnancies that result from rape are provided. A national probability sample of 4,008 adult American women took part in a 3-year longitudinal survey that assessed the prevalence and incidence of rape and related physical and mental health outcomes. The national rape-related pregnancy rate is 5.0%

per rape among victims of reproductive age (aged 12 to 45); among adult women an estimated 32,101 pregnancies result from rape each year. Among 34 cases of rape-related pregnancy, the majority occurred among adolescents and resulted from assault by a known, often related perpetrator. Only 11.7% of these victims received immediate medical attention after the assault, and 47.1% received no medical attention related to the rape. A total 32.4% of these victims did not discover they were pregnant until they had already entered the second trimester; 32.2% opted to keep the infant whereas 50% underwent abortion and 5.9% placed the infant for adoption; an additional 11.8% had spontaneous abortion. The findings show that rape-related pregnancy occurs with significant frequency. It is a cause of many unwanted pregnancies and is closely linked with family and domestic violence (1).

The prevalence of rape-related pregnancy as an indication for abortion at two public Chicago facilities was estimated and demographic and clinical correlates of women who terminated rape-related pregnancies were described. A cross-sectional study of women was performed obtaining abortion at the Center for Reproductive Health (CRH) at University of Illinois Health Sciences Center and Reproductive Health Services (RHS) at John H. Stroger, Jr. Hospital between August 2009-2013. Gestational age limits at CRH and RHS were 23+6 and 13+6 weeks, respectively. The prevalence of rape-related pregnancy based on billing code (CRH) or data from an administrative database (RHS) was estimated, and relationships between rape-related pregnancy and demographic and clinical variables were examined. Included were 19,465 visits for abortion. The majority of patients were Black (85.6%). Prevalence of abortion for rape-related pregnancy was 1.9%, and was higher at CRH (6.9%) than RHS (1.5%). Later gestational age was associated with abortion for rape-related pregnancy (median 12 days, $p<0.001$). Younger age and Black race were associated with abortion for rape-related pregnancy at CRH only ($p<0.001$ for both). Chlamydia and gonorrhea infections were no more prevalent among women terminating rape-related pregnancy than among those terminating for other indications. The data indicate that rape-related pregnancy as an indication for abortion had a low, but clinically significant prevalence at two urban Chicago family planning centers. Later gestational age was associated with abortion for rape-related pregnancy. Rape-

related pregnancy may occur with higher prevalence among some subgroups of women seeking abortion than others. Efforts to address rape-related pregnancy in the abortion care setting are needed (2).

In Brazil, abortion is permitted by law in cases of rape-related pregnancy. Various aspects in the experience of women that have been sexually assaulted: diagnosis of the pregnancy, seeking legal abortion, and hospitalization in a university hospital were examined. Ten women 18 to 38 years of age, with at least eight years of schooling, one to five years after legal abortion were interviewed. The women had been previously unaware of their right to a legal abortion, were ashamed about the sexual assault, kept it secret, and had not sought immediate care. The diagnosis of pregnancy provoked anxiety and the wish to undergo an abortion. Women treated through private health plans received either insufficient orientation or none at all. Respectful treatment by the healthcare staff proved relevant for the women to cope with the abortion. The findings highlight the need to publicize the right to abortion in cases of rape-related pregnancy and the healthcare services that perform legal abortion, in addition to training healthcare and law enforcement teams to handle such cases (3).

ASSESSMENT: rape-related pregnancy occurs with significant frequency. It is a cause of many unwanted pregnancies and is closely linked with family and domestic violence.

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CHILDREN BORN FROM SEXUAL VIOLENCE

Mental health outcomes among women raising children from sexual violence-related pregnancies (SVRPs) in eastern Democratic Republic of Congo (DRC) and stigma toward and acceptance of women and their children were assessed. Participants were recruited at Bukavu, DRC in 2012 using respondent-driven sampling. Adult women (n=757) raising children from SVRPs were interviewed. A woman aged 18 and older was eligible for the analysis if she self-identified as a sexual violence survivor since the start of the conflict (~1996), conceived an SVRP, delivered a liveborn child and was currently raising the child. A woman was ineligible if the SVRP ended with a spontaneous abortion or fetal demise or the child was not currently living or in the care of the biological mother. Trained female Congolese interviewers verbally administered a quantitative survey after obtaining verbal informed consent. Outcome measures included symptom criteria for major depressive disorder (MDD), post-traumatic stress disorder (PTSD), anxiety and suicidality, as well as stigma toward the woman and her child. Acceptance of the woman and child from the spouse, family and community were analyzed. Of women, 48.6% met symptom criteria for MDD, 57.9% for PTSD, 43.3% for anxiety and 34.2% reported suicidality. Women who reported stigma from the community (38.4%) or who reported stigma toward the child from the spouse (42.9%), family (31.8%) or community (38.1%) were significantly more likely to meet symptom criteria for most mental health disorders. Although statistically insignificant, participants who reported acceptance and acceptance of their children from the spouse, family and community were less likely to meet symptom criteria. The data indicate that women raising children from SVRPs experience symptoms of mental health disorders. Programming addressing stigma and acceptance following sexual violence may improve mental health outcomes in this population (1).

Since armed conflict began in 1996, widespread sexual violence in eastern DRC has resulted in many SVRPs. The nature and determinants of the relationships between mothers and their children from sexual violence were evaluated. Using respondent-driven sampling, 757 women raising children from SVRPs in South Kivu Province, DRC were interviewed. A parenting index was created from questions assessing the maternal-child relationship. The

majority of mothers reported positive attitudes toward their children from SVRPs. Prevalence of perceived family or community stigma toward the women or their children ranged from 31.8% to 42.9%, and prevalence of perceived family or community acceptance ranged from 45.2% to 73.5%. In multivariable analyses, stigma toward the child, as well as maternal anxiety and depression, were associated with lower parenting indexes, whereas acceptance of the mother or child and presence of a spouse were associated with higher parenting indexes (all $p \leq 0.01$). The findings show that with a large sample size, stigma and mental health disorders negatively influenced parenting attitudes, whereas family and community acceptance were associated with adaptive parenting attitudes. Interventions to reduce stigmatization, augment acceptance, and improve maternal mental health may improve the long-term well-being of mothers and children from SVRPs (2).

ASSESSMENT: women raising children from SVRPs experience symptoms of mental health disorders.

Stigma and mental health disorders negatively influenced parenting attitudes, whereas family and community acceptance are associated with adaptive parenting attitudes.

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TERMINATION OF PREGNANCY

Sexual violence is prevalent in eastern Democratic Republic of Congo (DRC), and has resulted in sexual violence-related pregnancies (SVRPs). Despite restrictive laws, women may seek to terminate SVRPs; however, there are limited data on termination of SVRPs. A mixed methods study was conducted in 2012 in Bukavu, DRC. Adult women who self-reported an SVRP and termination of that SVRP were recruited using respondent-driven sampling (RDS). Trained female interviewers verbally administered a quantitative survey to all

participants and a semi-structured qualitative survey to a subset. In total, 86 women completed quantitative surveys. Most SVRPs (93%) involved two or more assailants; 73% occurred while in captivity. Most women (82%) terminated the SVRPs at 3 months gestation or earlier; 79% reported one attempt at pregnancy termination and 21% more than one attempt. The most common methods of termination were an oral medicine (55%) or herb (35%); cimpokolo (31%) and quinine (18%) were most frequently reported. These methods were accessed through friends (37%), healthcare providers (18%), family (16%), or self-obtained (12%). Following the termination, 79% of women reported subsequent physical symptoms, including abdominal pain (74%), bleeding (47%), vaginal discharge (35%) and fever (18%); 44 % sought medical care for their symptoms. Varied emotional responses to the termination were reported and included relief (34%), anxiety (21%), anger (19%), guilt (19%), and regret (10%). Many women met symptom criteria for post-traumatic stress disorder (PTSD) (57%), depression (50%), and generalized anxiety disorder (33%). The data demonstrate that most women terminated SVRPs using medications or herbs not recognized as evidence-based methods of pregnancy termination and sought these methods outside of the formal healthcare sector. Access to safe abortion methods is needed for women with SVRPs in DRC. Physical symptoms and emotional reactions related to the termination varied. While it is impossible to differentiate the impacts of sexual violence, SVRP, and pregnancy termination on mental health outcomes, the findings highlight the complex needs of women with SVRPs and opportunities for integrative health services (1).

The Hyde Amendment bans Federal Medicaid funding for abortion in the U.S. except if a pregnancy resulted from rape or incest or endangers the life of the woman. Some evidence suggests that providers do not always receive Medicaid reimbursement for abortions that should qualify for funding. From October 2007 to February 2008, semistructured in-depth interviews about experiences with Medicaid reimbursement for qualifying abortions were conducted with 25 respondents representing abortion providers in six states. A thematic analysis approach was used to explore respondents' knowledge of and experiences seeking Medicaid reimbursement for qualifying abortions, as well as individual, clinical and structural influences on reimbursement. The

numbers of qualifying cases that were and were not reimbursed were assessed. More than half of Medicaid-eligible cases reported by respondents in the past year were not reimbursed. Filing for reimbursement took excessive staff time and is hampered by bureaucratic claims procedures and ill-informed Medicaid staff, and reimbursements are small. Many had stopped seeking Medicaid reimbursement and relied on nonprofit abortion funds to cover procedure costs. Respondents reporting receiving reimbursement said that streamlined forms, a statewide education intervention and a legal intervention to ensure that Medicaid reimbursed claims facilitated the process. The policy governing federal funding of abortion is inconsistently implemented. Elimination of administrative burdens, educating providers about women's rights to obtain Medicaid reimbursement for abortion in certain circumstances and holding Medicaid accountable for reimbursing qualifying cases are among the steps that may facilitate Medicaid reimbursement for qualifying abortions (2).

The sexual violence's committed in the DRC are from their scales and consequences on women, real public health, politico-legal, and socio-economical challenges. More than a million of women have been victims of sexual violence on a period of less than fifteen years. Systematic rapes of women were used as war weapon by different groups involved in the Congolese war. Sexual violence against women has impacted public health by spreading sexually transmissible diseases (STDs) including human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS), causing unwanted pregnancies, leading to the gynecological complications of rape-related injuries, and inflicting psychological trauma on the victims. Despite high level of unwanted pregnancies observed, the Congolese law is very restrictive and interdicts induced abortion. Three arguments plead in favor of legalizing abortion in DRC: 1] a restrictive law on abortion forces women to use unsafe abortion and increase incidence of injuries and maternal mortality; 2] DRC has ratified the universal Declaration of human rights, the African union charter, and has than to promote equality between sexes, in this is included women reproductive rights; 3] an unwanted birth is an additional financial charge for a woman, a factor increasing poverty and psychologically unacceptable in case of rape. From the politico-legal point of view, ending rape impunity and decriminalizing

abortion are recommended. Decriminalizing abortion give women choice and save victims and pregnant women from risks related to the pregnancy, childbirth, or an eventual unsafe abortion. These risks increase the maternal mortality already high in DRC (between 950 and 3,000 for 100,000 live births) (3).

A number of countries adopt abortion laws recognizing rape as a legal ground for access to safe abortion service. As rape is a crime, these abortion laws carry with them criminal and health care elements that in turn result in the involvement of legal and medical expertise. The most common objective of the laws should be providing safe abortion services to women survivors of rape. Depending on purposes of a given abortion law, the laws usually require women to undergo a medical examination to qualify for a legal abortion. Some abortion laws are so vague as to result in uncertainties regarding the steps health personnel must follow in conducting medical examination. Another group of abortion laws do not leave room for regulation and remain too rigid to respond to changing socio-economic circumstances. Still others require medical examination as a prerequisite for abortion. As a result, a number of abortion laws remain on the books (4).

In Mexico, abortion is not penalized when a woman gets pregnant as a result of rape, yet access to abortion services is limited. Understanding physicians' opinions about abortion is critical to creating strategies that will broaden women's access to services. Multivariate logistic regression was performed using data collected from a sample of 1206 physicians in Mexico. The influence of independent variables on two outcomes was analyzed: physicians' agreement with abortion being legal in the case of pregnancy caused by rape and willingness to provide abortion services in such cases. Physicians who had performed legal abortions, knew about existing abortion legislation and practiced general or family medicine were significantly more likely to agree that abortion should be legal when pregnancy is caused by rape and were more likely to be willing to provide abortion in the case of rape. Physicians who held a negative attitude towards women who seek abortion and those with greater church attendance were less likely to agree with the legality of abortion. The data indicate that physicians are among the most important gatekeepers to women's access to safe abortion services. A majority of Mexican physicians agree that abortion should not be

legally penalized under certain circumstances. Yet, many also hold negative attitudes towards women who seek abortion. Physicians' support for women's access to safe abortion services is key to ensuring that such services will exist in Mexico (5).

Current practices regarding screening for rape and response to disclosure of rape-related pregnancy in the abortion care setting were explored. A cross-sectional, nonprobability survey of U.S. abortion providers was performed. Individuals were recruited in person and via emailed invitations to professional organization member lists. Questions in this web-based survey pertained to providers' practice setting, how they identify rape-related pregnancy, the availability of support services, and their experiences with law enforcement. Providers were asked their perceptions of barriers to care for women who report rape-related pregnancy. Surveys were completed by 279 providers (21% response rate). Most respondents were female (93.1%), and the majority were physicians in a clinical role (69.4%). One-half (49.8%) reported their practice screens for pregnancy resulting from rape, although fewer (34.8%) reported that screening is the method through which most patients with this history are identified. Most (80.6%) refer women with rape-related pregnancy to support services such as rape crisis centers. Relatively few (19.7%) have a specific protocol for care of women who report rape-related pregnancy. Clinics that screen were 79% more likely to have a protocol for care than centers that do not screen. Although the majority (67.4%) reported barriers to identification of women with rape-related pregnancy, fewer (33.3%) reported barriers to connecting them to support services. The data show that practices for identifying and providing care to women with rape-related pregnancy in the abortion care setting are variable (6).

Rape of women by men has occurred throughout recorded history and across cultures and religions. It is a crime against basic human right and a most common crime against women in India. In India, 'rape laws' began with enactment of Indian Penal Code in 1860. There have been subsequent amendments and the main issue of focus remained the definition of 'rape and inclusion of 'marital rape' in the ambit of rape (7).

ASSSESSMENT: a number of countries adopt abortion laws recognizing rape as a legal ground for access to safe abortion service.

As rape is a crime, these abortion laws carry with them criminal and health care elements that in turn result in the involvement of legal and medical expertise.

Physicians who had performed legal abortions, knew about existing abortion legislation and practiced general or family medicine were significantly more likely to agree that abortion should be legal when pregnancy is caused by rape and were more likely to be willing to provide abortion in the case of rape. Physicians are among the most important gatekeepers to women's access to safe abortion services.

Most women (82%) terminate the SVRPs at 3 months gestation or earlier; 79% report one attempt at pregnancy termination and 21% more than one attempt. The most common methods of termination are an oral medicine or herb; cimpokolo and quinine.

Emotional responses to the termination include relief, anxiety, anger, guilt, and regret.

From the politico-legal point of view, ending rape impunity and decriminalizing abortion are recommended. Elimination of administrative burdens, educating providers about women's rights to obtain Medicaid reimbursement for abortion and holding Medicaid accountable for reimbursing qualifying cases are among the steps that may facilitate Medicaid reimbursement for qualifying abortions.

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GENITAL INJURIES

Sexual assault continues to represent the most rapidly growing violent crime in the U.S. Statistics prove a persistent rise in rape incidence with poor conviction rates. This knowledge, along with the vast multitude of emotional sequelae of rape and self-perceived inferior legal status of the involved females results in a high percentage of unreported cases. Ano-genital trauma in case of sexual assault is evaluated. Fewer than 2,970 victims of sexual assault, examined and treated between 1967-1985 in the Department of Gynecology and Obstetrics Charlottenburg (Free University of Berlin), a percentage of almost 40% was represented by children in the age of 0-14 years. Therefore, only 1,696 patients with complete gynecological examination with correct case history examination for injuries and traces of sperm, infections could be presented. The total rate of injuries was: perineum 8.4%, vulva 5.4%, vagina 1.8%, pelvis/thighs 14.2%. The highest risk to be injured in case of sexual assault had the age group of victims over 55 years (nearly 50%). The lowest rate of injury has been encountered in the age groups 0-5 years, 6-10 years, 26-35 years: Under 10%. A solitary anal-injury has not been found. Specific training in emergent and chronic care for the victims, both physical and mental, in conjunction with preventive measures to genital infections and pregnancy, is necessary when the gynecologist is involved (1).

The prevalence, type and pattern of macroscopically detected female genital injury after consensual and non-consensual vaginal penetration were examined to further an understanding of the forensic significance of genital injury in women reporting sexual assault. A secondary aim was to identify any effect of a range of possible variables upon the likelihood of genital injury resulting from vaginal penetrative sexual intercourse. Two groups of reproductive age women (aged 18-45 years) were prospectively recruited within 72 hours of a single episode of vaginal penetrative sex, and macroscopically examined for the presence of bruises, abrasions and lacerations at twelve external and internal genital sites. Forty one women who presented for forensic examination after reporting a sexual assault to police were recruited to the non-consensual group and 81 women who presented for routine cervical screening or with sexual health concerns to a primary health care service to the consensual group. Each group was examined by a different group of

doctors, all of whom were experienced in both forensic genital examination and gynecological examination of healthy and diseased sexually active women. Data collection and examination protocols were the same for both groups. The key finding was a statistically significant difference in genital injury prevalence between women who were vaginally penetrated non-consensually and consensually; 53.7% of the non-consensual group (22/41) and 9.9% of the consensual group (8/81) had at least one genital injury [OR 10.57, CI 4.07-27.42), p<0.00001]. Penetration with finger/s and possible pre-existing genital 'infection' were significantly associated with the presence of injury in the univariate analysis after adjusting for consent. Logistic regression demonstrated that women penetrated without consent were 19.5 times more likely to sustain at least one genital injury, than those penetrated consensually [OR 19.53, CI 6.03-63.24] and that a penetration scenario that included finger/s was 4.2 times more likely to result in at least one genital injury than penetration without finger involvement [OR 4.25, CI 1.42-12.78], when controlling for other variables in the model. Whilst comparatively low injury prevalence in the consensual group limited interpretation, results revealed possible differences in genital injury typology and pattern resulting from non-consensual and consensual vaginal penetration. Lacerations were seen after both consensual and non-consensual vaginal penetration, while abrasions and bruises were seen exclusively in the non-consensual group. The findings demonstrate a significant consent group difference in genital injury prevalence and the highest macroscopically detected genital injury prevalence rate resulting from non-consensual vaginal penetration identified to date. Vaginal penetration with finger/s increases the likelihood of sex-related injury. The difference in type of injury sustained as a result of non-consensual and consensual vaginal penetration was an unexpected finding, and warrants further investigation. The results highlight the importance of a standardized means of detecting genital injury based on consistent injury definitions, examination protocols, and examiner experience and suggest that macroscopic genital examination possibly is uniquely placed to detect consent group differences in injury typology and pattern if they exist (2).

Genital injury related to sexual assault is often an issue in court proceedings, with the expectation that injuries will be found in

'genuine' cases. Conviction rates are higher when the complainant has genital injuries. The type, frequency and severity of genital and non-genital injuries of women following alleged sexual assault and, in addition, to determine factors associated with the presence of injuries were determined. The assault records and forensic examination findings of 153 consecutive women who attended a sexual assault service in Newcastle, Australia, 1997-1999 were reviewed. All the women were examined within 72 hours of the assault. Of the women, 111 (73%) were aged under 30 years and only 4% were over 50 years. Penile-vaginal penetration was the most common type of sexual assault (86%). Non-genital injuries were found in 46% of the women examined (mostly minor) and genital injury in only 22%. Genital injury in the absence of non-genital injury was rare (3%). Independent risk factors for the detection of non-genital injuries were reported threats of violence (OR 5.7, 95% CI 2.2-14.6). Risk factors for genital injury were the presence of non-genital injury (OR 19, 95% CI 6.0-63.0), threats of violence (OR 3.7, 95% CI 1.5-8.9) and being over the age of 40 years (OR 5.6, 95% CI 1.6-20.3). If the alleged assailant was known to the woman this was protective for both non-genital (OR 0.3, 95% CI 0.1-0.5) and genital (OR 0.4, 95% CI 0.2-0.9) injury. The findings indicate that the presence of genital injury should not be required to validate an allegation of sexual assault, particularly in the absence of non-genital injuries (3).

The associations between age and genital injuries in adolescent and young adult women following rape were examined. A retrospective review of 234 medical records from an emergency department sexual assault program was analyzed. Sample included women aged 14 to 29 years. Fifty percent of the sample was African American, 48% was White, and 2% was either Asian or an "other" race. Genital injury was described by injury prevalence, frequency, and anatomical locations of injuries. Overall genital injury prevalence was 62.8%. Younger age was insignificantly associated with the presence or absence of genital injury. However, younger age was significantly associated with an increased number of genital injuries overall and to the thighs, labia minora, periurethral area, fossa navicularis, and vagina. The findings support the need for further research to determine if the current care provided to rape survivors is age appropriate (4).

The forensic examination following rape has two primary purposes: to provide health care and to collect evidence. Physical injuries need treatment so that they heal without adverse consequences. The pattern of injuries also has a forensic significance in that injuries are linked to the outcome of legal proceedings. This literature review investigates the variables related to genital injury prevalence and location that are reported in a series of retrospective reviews of medical records. The prevalence and location of genital injury provide only a partial description of the nature of genital trauma associated with sexual assault and suggests a multidimensional definition of genital injury pattern. Several of the cited studies indicate new avenues of investigation, such as refined measurement strategies for injury (5).

Forty-five girls less than 21 years of age, at Arkansas Children's Hospital, who required surgical repair of genital injuries between June 1986 and April 2007, were identified. Although most injuries were due to straddle and impalement mechanisms, sexual abuse or assault was identified in 25% of the girls. Straddle/impalement injuries involved only the external genitalia, vestibule, perineum, or posterior fourchette in 21 of the 28 girls (76%). The injuries in nine of the 11 (82%) sexually abused/assaulted girls involved the hymen, vagina, anus, or rectum (6).

The frequency of cervical injuries, the types of injuries, the mechanisms related to the injuries, and the types of injuries related to each mechanism were examined in women following sexual assault. A total of 538 charts were examined, with a final sample size of 114. Within this sample, 87.8% (n=100) presented with no injury to the cervix, and 12.3% (n=14) had documented injury (7).

Understanding differences in genital injuries after non-consensual and consensual intercourse is an important element of prosecuting sexual assault cases. In order to determine if the injury patterns and total surface area of genital injuries can differentiate between the types of intercourse (consensual or non-consensual), 80 women were examined after non-consensual (retrospective chart review, n=40) and consensual (recruited, n=40) intercourse within 48 hours using colposcopy, toluidine blue dye, and digital photography to document genital injuries. Differences between types of injuries found in the non-consensual and consensual groups, based on the univariate analysis, were in the number of sites with ecchymosis ($p<0.01$) and

number of sites with redness ($p<0.01$). Based on the logistic hierarchical regression model, 85% of the nonconsensual group and 90% of the consensual group were classified correctly by using the number of sites with tears, ecchymosis, abrasions, redness and sexual assault of injury when controlling for time from intercourse to examination. The number of sites with redness ($p=0.017$), number of sites with ecchymosis, and sexual assault of injury ($p=0.039$) were individually predictive. The number of sites with ecchymosis was a significant finding when addressed as an individual block ($p<0.001$). While controlling for time, the injury patterns and total sexual assault of genital injuries were able to correctly classify the non-consensual group 85% of the time (8).

The prevalence of genito-anal injuries in rape survivors varies significantly and the factors associated with the absence of injuries are not well understood. This plays a major role in the conviction of cases as the absence of injury is equated with a lack of assault. In such cases, health care providers face major challenges in presenting and defending their findings. The absence of genito-anal injuries by site is evaluated in a group of rape survivors and factors associated with the absence of these injuries are identified. Rape cases reported to the police in one province in South Africa were randomly sampled using a two stage sampling procedure. Data were obtained on the survivor, the circumstances of the rape and the findings of the medicolegal examination. In the sample of 1,472 women, injuries ranged from 1% to 36%. Insignificant injuries were reported for 749 (51%) survivors. In the multivariable model there was a significantly lower odds of having no injuries in survivors who were virgins, those raped by multiple perpetrators and those examined by a doctor with additional qualifications. In the model for survivors who were virgins, those with disabilities had a greater odds of having no injuries while those between the ages of 8 and 17 years had a lower odds of having no injuries compared to survivors below four years of age. The findings indicate that being a virgin, multiple perpetration rape and the examiner's qualifications were significantly associated with the absence of genito-anal injuries. Health providers should thus be aware that in all other respects there was no difference in survivors who had injuries and those who did not. It is important to reiterate the message that the presence of injuries does not necessarily prove the rape nor does the absence disprove the fact (9).

Whether postmenopausal (aged 50 years and older) women would sustain significantly more injury after rape than women less than 50 years and the role of skin pigmentation in the observance of genital injury to determine were examined. Registry data from a sexual assault forensic nurse examiners program were used. Based on date of examination, records from women of age 50 years or older (n=40) were matched to two other participants: a premenopausal group younger than 40 years and a perimenopausal group of 40 to 49 years. The final sample consisted of 120 subjects. Main outcome measures included number, type, and location of injuries. A series of exact conditional logistic regression analyses indicated insignificant association between age and genital, no genital, or head injury. A significant association between race (Black versus White) and genital injury (AOR 4.30, 95% CI 1.09-25.98, p=0.03) indicated that Whites were more than four times as likely as Blacks to have genital injury. Although the primary hypothesis was not supported, the role of racial/ethnic differences and their association with the observance of injury need further exploration to determine whether the standard forensic examination is appropriate for all women. Health disparities may exist if women of color are less likely than others to have genital injuries identified and treated. Alternatively, skin properties may explain racial/ethnic differences in injury prevalence (10).

Physiological and anatomical changes that occur as a result of menopause alter sexual response and sexual function. These changes can result in genital injuries from both consensual sexual intercourse and sexual assault. The literature examining what is known about postmenopausal women and genital injuries is reviewed. Only seven research studies examined genital injuries in postmenopausal women after sexual assault. Of the comparative studies, a majority determined that postmenopausal women are more likely to sustain genital injuries after sexual assault than younger women. No literature specifically investigated genital injuries incurred as a result of consensual sexual intercourse vs. sexual assault in the postmenopausal population (11).

ASSESSMENT: in sexual assault, genital injury prevalence is 62.8%. Penile-vaginal penetration is the most common type of sexual assault. Genital injury related to sexual assault is often an issue in

court proceedings, with the expectation that injuries will be found in 'genuine' cases.

Women penetrated without consent are 19.5 times more likely to sustain at least one genital injury, than those penetrated consensually and a penetration scenario that included finger/s is 4.2 times more likely to result in at least one genital injury than penetration without finger involvement.

Risk factors for genital injury are the presence of non-genital injury, threats of violence and being over the age of 40 years.

Younger age is significantly associated with an increased number of genital injuries overall and to the thighs, labia minora, periurethral area, fossa navicularis, and vagina.

Although most injuries are due to straddle and impalement mechanisms, sexual abuse or assault can be identified in 25% of the girls.

Of the consensual group, 85-90% can be classified correctly by using the number of sites with tears, ecchymosis, abrasions, redness and sexual assault of injury when controlling for time from intercourse to examination.

Being a virgin, multiple perpetration rape and the examiner's qualifications are significantly associated with the absence of genito-anal injuries.

A majority determined that postmenopausal women are more likely to sustain genital injuries after sexual assault than younger women.

Did any genital or other physical injuries occur in two Biblical women, Tamar and Dinah?

Assessment

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SEXUALLY TRANSMITTED DISEASES

The epidemiologic aspects of sexually transmitted diseases (STDs) were investigated in victims of sexual assault and the methodological issues in determining risk of STDs acquisition were analyzed. A comprehensive review of the medical literature was performed to determine the prevalence of STDs in victims of sexual assault. A MEDLINE search and a search of bibliographies of published manuscripts were performed to discover relevant articles published in the English language. Studies were included in the review if they provided estimates of the prevalence of infection with Neisseria (N.) gonorrhea, Chlamydia (C.) trachomatis, Treponema pallidum, Trichomonas (T.) vaginalis, or human papillomavirus (HPV). The main outcome measure was prevalence rates of STDs in victims of sexual assault. It is difficult to determine the rate of newly acquired STDs from sexual assault. In the populations studied the prevalence of STDs can be summarized as follows: N. gonorrhea 0.0- 26.3%, C. trachomatis 3.9-17%, Treponema pallidum 0.0-5.6%, T. vaginalis 0.0-19.0%, and HPV 0.6-2.3%. The data indicate that prevalence estimates vary widely depending on the population studied and known risk factors for STDs. Given the limited follow-up rates in this population, preventive treatment for STDs in addition to emergency contraception should be offered in most instances (1).

Epidemiological data and rates of STDs are presented from a group of 90 women screened following rape. Forty-eight (53%) women knew their assailant. In 6 cases multiple assailants were involved. In 21 (23%) rapes, weapons were used. Of 47 women examined within 48 hours of rape, 17 (36%) had evidence of genital trauma. Anal injury was common (8 of 11, 73%) in those reporting

anal intercourse. Anal assault (17 of 90, 19%) and oral assault (16 of 90, 18%) commonly accompanied rape. STDs were diagnosed in 13 (14.4%) women, 3 having mixed infections. N. gonorrhea was isolated in 2 women, C. trachomatis in 7, T. vaginalis in 6, genital warts in 2, and Pediculosis pubis in 2 women. Five of 16 cervical cytology results showed abnormalities. Eleven of 13 women with an STD (84.6%) had been sexually active within the 3 months prior to the rape. Previous sexual activity perhaps is the most relevant factor determining those most at risk of harboring an STD (2).

Sexually transmitted infections (STIs) are among the most common infections in the U.S. and are particularly prevalent in survivors of sexual violence. Co-occurring risk factors for sexual violence and STIs including mental health, alcohol use, drug use, and multiple partners as intersecting pathways to STIs were examined for women who experienced sexual abuse in the past year. Secondary analyses were conducted on cross-sectional data from women originally recruited as respondents for an epidemiologic survey funded by the Centers for Disease Control and Prevention (CDC). The survey was administered to 2,672 women in six settings: A large, urban jail and residential alcohol and drug treatment facilities (Texas); a gynecology clinic (Virginia); two primary care clinics (Virginia and Florida); and media solicitation (Florida). Women were included in the current study if they were fertile, sexually active, and not pregnant or trying to get pregnant (n=1,183). Structural equation modeling (SEM) was used to test the conceptual path model between sexual violence and STI occurrence. In the SEM, there were insignificant paths from mental health, alcohol severity, or drug use to STI occurrence contrary to the results of the initial bivariate analyses. Multiple sexual partners significantly mediated the relationship between sexual violence and STIs and between mental health and drug use and STIs. The findings highlight the importance of providing effective treatment to survivors of sexual violence, which includes addressing risky sexual behaviors to reduce STI occurrence (3).

The prevalence of STIs and blood-borne viruses (BBV) was examined, and prophylactic treatment offered to female post pubertal patients attending a Norwegian Sexual Assault Centre (SAC) was evaluated. Whether STIs diagnosed at the initial visit could have been assault-transmitted, and whether background and assault

characteristics were associated with diagnosed STIs/BBV were examined. Post pubertal females 12 years of age and older attending the SAC within 1 week of the assault were included. Data were collected from records. Among 412 patients with a median age of 21 years, 35 patients had an STI (8.5%), two of which probably were assault-transmitted. C. trachomatis was the dominating agent, detected in 25 patients (6.4%). At serology screening, 3.7% tested positive for hepatitis C and/or hepatitis B core antibody. Patient age 16-19 years was associated with STIs, while BBV positives were older. Non-Western assailant was associated with STIs, while substance abuse was associated with STIs and BBV. In order to prevent potential transmission of STIs not identified at the initial visit, 91% accepted prophylaxis against bacterial STIs, while antiviral prophylaxis was offered to less than one-fifth of the patients. The data indicate that the C. trachomatis prevalence among the sexual assault patients was lower than in a comparable clinical population. The STI was suspected to be assault-transmitted in only two cases (4).

From 1 January 1986 to 1 September 1989 124 women presented to the Ambrose King Centre (the department of genitourinary medicine of the London Hospital) alleging rape. STDs were found in 36 (29%) women (excluding candidosis and bacterial vaginosis). The commonest organisms detected were N. gonorrhea and T. vaginalis, each being present in 15 patients. Eleven women had genital warts. C. trachomatis was isolated in six patients, two had herpes simplex virus infection and one patient had pediculosis pubis. Serological evidence of past hepatitis B infection was detected in five women and one patient had antibodies to human immunodeficiency virus (HIV). Eighteen of the 36 women (50%) had multiple infections. Six women had abnormal cervical cytology smears, three being suggestive of cervical intraepithelial neoplasia grades II-III. Although it is rarely possible to attribute infection to an assailant, these patients require further counseling, treatment and review. Rape victims are thus a population at risk of having STDs and screening should be offered (5).

The risk of acquiring a STD as a result of rape is not known, in part because it is difficult to ascertain whether infections were present before the assault or acquired during it. To investigate this question, female victims of rape within 72 hours of the assault and again at least one week after the assault were examined. Of the 204 girls and

women initially examined within 72 hours of the rape, 88 (43%) had at least one STD. These diseases included infections caused by N. gonorrhea (6% of those tested), cytomegalovirus (8%), C. trachomatis (10%), T. vaginalis (15%), herpes simplex virus (2%), Treponema pallidum (1%), and the HIV type 1 (HIV-1; 1%) and bacterial vaginosis (34%). Among the 109 patients (53%) who returned for at least one follow-up visit (excluding those who were found to be infected at the first visit or who were treated prophylactically), the incidence of new disease was as follows: gonorrhea, 4% (3 of 71); chlamydial infection, 2% (1 of 65); trichomoniasis, 12% (10 of 81); and bacterial vaginosis, 19% (15 of 77). There were no new infections with herpes simplex virus, cytomegalovirus, Treponema pallidum, or HIV-1, but follow-up serologic testing was performed in only 26% of the patients. On the basis of the assumptions that most venereal infections present within 72 hours of a rape were preexisting and new infections identified 1 to 20 weeks later were acquired during the assault, the prevalence of preexisting STDs is high in victims of rape and they have a lower but substantial additional risk of acquiring such diseases as a result of the assault (6).

Emergency department visits for adult female sexual assault in all Rhode Island emergency department, 1995-2001 were analyzed. Of the 780 patients, 78.2% sustained anal/vaginal penetration, 5.0% genital touching only, and 3.7% oral sex only, and 13.1% did not know what happened to them. Of those women who were assaulted anal/vaginally, 83.8% were offered C./gonorrhea testing, 69.4% syphilis testing, 82.9% pregnancy testing, 77.0% C./gonorrhea prophylaxis, 47.6% emergency contraception, and 19.2% HIV prophylaxis (7).

ASSESSMENT: the prevalence of STDs estimates varies widely depending on the population studied.

Previous sexual activity possibly is the most relevant factor determining those most at risk of harboring STDS.

STIs are among the most common infections in the U.S. and are prevalent in survivors of sexual violence. Co-occurring risk factors for sexual violence and STIs include mental health, alcohol use, drug use, and multiple partners.

In general, in sexual abuse the commonest organisms among various venereal infections are N. gonorrhea and T. vaginalis.

Most venereal infections present within 72 hours of a rape are preexisting and new infections identified 1 to 20 weeks later are acquired during the assault.

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HIV. Sexual assault and human immunodeficiency virus (HIV) are coexisting public health problems. Sexual assault may increase HIV transmission risk through diverse mechanisms, such as infliction of anal, oral, and genital injuries by penile, digital, or object penetration, extragenital trauma, concurrent sexually transmitted infections (STIs), condom use, and whether the perpetrator was circumcised (1).

The risk of male to female transmission of HIV is affected by baseline inflammation in the female genital tract, semen viral load and seminal plasma's ability to induce specific patterns of cervical cytokine signaling and influx of immune cell populations. Disruption of the epithelial barrier during non-consensual intercourse may trigger further inflammation and initiation of cell-signaling pathways, thus facilitating transmission of HIV and expansion of local infection. Adolescent and pregnant women are at high risk for sexual violence and may exhibit alterations of genital mucosal immunity that promote immune activation, making them uniquely vulnerable to HIV acquisition (2).

Prior research has shown a strong correlation between HIV infection and a history of intimate partner violence (IPV), particularly among young women. Locally trained interviewers conducted semi-structured interviews with 40 young men and 20 young women aged 16-24 who were recruited from public venues in Dar es Salaam, Tanzania, Sub-Saharan Africa. The participants described complex interactions among violence, forced sex and infidelity in their sexual relationships. Men who were violent toward female partners described forced sex and sexual infidelity in these partnerships. Men with multiple concurrent sexual partners reported becoming violent when their female partners questioned their fidelity, and reported forcing regular partners to have sex when these partners resisted their sexual advances. Youth who felt that violence and forced sex could not be justified under any circumstances were often those who had not yet initiated sexual relationships or who were in monogamous partnerships. The data indicate that the association between HIV and violence among young people in prior research possibly is partially explained by their experiences with infidelity and forced sex in their intimate partnerships. HIV prevention interventions that fail to take into account the infidelity, violence and forced sex frequently involved in youth's sexual relationships will have a limited impact (3).

Coerced or forced sexual initiation and sexual IPV contribute significantly to a woman's risk for HIV infection. Global research (n=21 studies) published since 2000 on the role of coerced/forced sexual initiation and sexual IPV on HIV risk in women was systematically examined. In predominantly low- and middle-income countries, coerced/forced sexual initiation was associated with HIV/STIs, multiple and high-risk sex partners, and no condom use. Most papers using behaviorally specific terms for sexual IPV found strong associations between sexual IPV and HIV risk behaviors. By contrast, papers using less specific definitions often failed to find these significant associations. To develop more comprehensive HIV prevention programs, future efforts should integrate behaviorally specific terms into assessing prevalence of sexual IPV and its association with HIV risk, consider cultural differences, and identify causal pathways between coerced or forced sexual initiation, HIV risk behaviors and HIV/STIs infection (4).

Despite reductions in prevalence of HIV infection among the general population of India, women account for a rising percentage of all HIV cases with husbands' risk behavior described as the major source of women's infection. IPV is associated with heterosexual transmission of HIV to women in India and elsewhere. The relationship between experiencing IPV and the occurrence of HIV infection in a nationally representative sample of married Indian women tested for HIV was assessed. The Indian National Family Health Survey 3 was conducted across all Indian states in 2005 through 2006. The nationally representative sample included 124,385 married women; analyses conducted in 2007 and 2008 were limited to 28,139 married women who provided IPV data and HIV test results via systematic selection into respective subsamples. Prevalence estimates of lifetime IPV and HIV infection were calculated and demographic differences assessed. IPV was conceptualized as physical violence with or without sexual violence and then was further categorized as physical violence only vs. physical and sexual violence. One-third of married Indian women (35.49%) reported experiencing physical IPV with or without sexual violence from their husbands; 7.68% reported both physical and sexual IPV, and 27.80% reported experiencing physical IPV in the absence of sexual violence. Approximately 1 in 450 women (0.22%) tested positive for HIV. In adjusted models, married Indian women experiencing both physical and sexual violence from husbands demonstrated elevated HIV infection prevalence vs. those not experiencing IPV (0.73% vs. 0.19%, adjusted OR 3.92, 95% CI 1.41-10.94, p=0.01). Physical IPV alone was not associated with risk of HIV infection. Women's personal sexual risk behaviors were not associated with HIV infection. The data indicate that among married Indian women, physical violence combined with sexual violence from husbands was associated with an increased prevalence of HIV infection. Prevention of IPV may augment efforts to reduce the spread of HIV/acquired immune deficiency syndrome (AIDS) (5).

There is limited empirical research on the underlying gender inequity norms shaping gender-based violence, power, and HIV risks in sub-Saharan Africa, or how risk pathways may differ for men and women. The adherence to gender inequity norms and epidemiological relationships with violence and sexual risks for HIV infection were evaluated. Data were derived from population-based

cross-sectional samples recruited through two-stage probability sampling from the 5 highest HIV prevalence districts in Botswana and all districts in Swaziland (2004-5). Based on evidence of established risk factors for HIV infection, the aim was 1] to estimate the mean adherence to gender inequity norms for both men and women; and 2] to model the independent effects of higher adherence to gender inequity norms on male sexual dominance (male-controlled sexual decision making and rape (forced sex)); sexual risk practices (multiple/concurrent sex partners, transactional sex, unprotected sex with non-primary partner, intergenerational sex). A total of 2,049 individuals were included, n = 1,255 from Botswana and n = 796 from Swaziland. In separate multivariate logistic regression analyses, higher gender inequity norms scores remained independently associated with increased male-controlled sexual decision making power [adjusted odd ratios (AOR) men 1.90, 95% CI 1.09-2.35; AOR women 2.05, 95% CI 1.32-2.49], perpetration of rape [AOR men 2.19, 95% CI 1.22-3.51], unprotected sex with a non-primary partner [AOR men 1.90, 95% CI 1.14-2.31], intergenerational sex [AOR women 1.36, 95% CI 1.08-1.79], and multiple/concurrent sex partners [AOR men 1.42, 95% CI 1.10-1.93]. The findings support the critical evidence-based need for gender-transformative HIV prevention efforts including legislation of women's rights in two of the most HIV affected countries in the world (6).

An association between IPV and HIV infection among women was assessed. Medline/PubMed, Embase, Web of Science, EBSCO, Ovid, Cochrane HIV/AIDS Group's Specialized Register and Cochrane Central Register of Controlled Trials were searched up to 20 May 2013 to identify studies that examined the association between IPV and HIV infection in women. Studies on women aged 15 years and older, in any form of sexually intimate relationship with a male partner were included. Twenty-eight papers [(19 cross-sectional, 5 cohorts and 4 case-control) involving 331,468 individuals in 16 countries - the U.S. (8), South Africa (4), East Africa (10), India (3), Brazil (1) and multiple low-income countries (2)] were included. Pooled results of cohort studies indicated that physical IPV [pooled RR, 95% CI 1.22, 1.01-1.46] and any type of IPV [pooled RR, 95% CI 1.28, 1.00-1.64] were significantly associated with HIV infection among women. Results demonstrated significant associations of physical IPV with HIV infection among women [pooled OR, 95% CI

1.44, 1.10-1.87]. Similarly, results of cross-sectional studies indicated that combination of physical and sexual IPV [pooled OR, 95% CI 2.00, 1.24-3.22] and any type of IPV [pooled OR, 95% CI 1.41, 1.16-1.73] were significantly associated with HIV infection among women. The data indicate a moderate statistically significant association between IPV and HIV infection among women (7).

The relationship between IPV and women's risk of HIV infection has attracted much recent attention, with varying results in terms of whether there is an association and what the magnitude of association is. Understanding this relationship is important for HIV surveillance and intervention programs. Data were analyzed from the 2008-2009 Demographic and Health Survey (DHS) in Kenya, on 1,904 women aged 15-49. A generalized linear mixed model was adapted to explore the relationship between IPV and HIV prevalence, controlling for sociodemographic variables, and treating DHS survey clusters, province and ethnicity as random effects. Principal components analysis (PCA) was used to calculate a single IPV score for each woman. The effect of HIV risk behaviors on the association between IPV and HIV was also assessed. Controlling for relevant sociodemographic factors, HIV risk was significantly associated with IPV ($p<0.01$). After adjustment for risk factors as well as sociodemographic variables, the positive association between IPV and HIV remained significant ($p=0.035$). The estimated effect size of this model corresponds to an OR of 1.55 for HIV infection comparing a woman who experienced no IPV and a woman at the 95th percentile for our IPV index. The data provide evidence that IPV and HIV are associated. This association remains even when controlled for several HIV risk factors. This implies that IPV can be used as a marker of potential HIV risk, and possibly is causally associated with HIV risk. The results suggest that IPV monitoring and prevention may have a useful role in HIV prevention in Kenya (8).

The third Rwanda demographic and health survey data were used to examine the relationship between violence toward women, men sexual risk factors, and HIV prevalence among women. The Rwanda demographic and health survey was conducted in 10,272 households in 2005. Analyses were restricted to 2715 women and 2461 men who were legally married or cohabiting. Couple-specific analyses were carried out for assessing the relationship between men sexual risk factors and IPV reported by their wives. Respectively, 29.2%,

22.2%, and 12.4% of women reported having experienced physical, psychological, and sexual IPV, whereas 52.1% reported control practices by their partners. There was a positive link between IPV reported by women and attitudes justifying wife beating endorsed by their husband. After controlling for sociodemographic variables and women sexual risk factors, the odds of HIV prevalence was 3.23 (95% CI 1.30-8.03) among women with a score from 3 to 4 on the psychological IPV scale compared with those with a score from 0 to 2. Women who reported having experienced interparental violence (father who beat mother) were more likely to test HIV positive as follows: AOR 1.95, 95% CI 1.11-3.43. There was also a statistically significant relationship between men risky sexual factors and experience of IPV and HIV prevalence among women. The data indicate that violence toward women is associated with HIV in Rwanda. Intervention to reduce gender-based violence should be integrated into HIV/AIDS policy (9).

A substantial proportion of newly diagnosed HIV infections in sub-Saharan Africa occur within serodiscordant cohabiting heterosexual couples. IPV is a major concern for couple-oriented HIV preventive approaches. The prevalence and associated factors of intimate partner physical and sexual violence among HIV-infected and uninfected women in Togo were estimated. The severity and consequences of this violence as well as care-seeking behaviors of women exposed to IPV were also described. A cross-sectional survey was conducted between May and July 2011 within Sylvanus Olympio University Hospital in Lomé. HIV-infected women attending HIV care and uninfected women attending postnatal care and/or children immunization visits were interviewed. Intimate partner physical and sexual violence and controlling behaviors were assessed using an adapted version of the WHO Multi-country study on Women's Health and Life Events questionnaire. Overall, 150 HIV-uninfected and 304 HIV-infected women accepted to be interviewed. The prevalence rates of lifetime physical and sexual violence among HIV-infected women were significantly higher than among uninfected women (63.1 vs. 39.3%, $p<0.01$ and 69.7 vs. 35.3%, $p<0.01$, respectively). Forty-two percent of the women reported having ever had physical injuries as a consequence of IPV. Among injured women, only one-third had ever disclosed real causes of injuries to medical staff and none of them had been referred to local organizations to receive

appropriate psychological support. Regardless of HIV status and after adjustment on potential confounders, the risk of intimate partner physical and sexual violence was strongly and significantly associated with male partner multi-partnership and early start of sexual life. Among uninfected women, physical violence was significantly associated with gender submissive attitudes. The prevalence rates of both lifetime physical and sexual violence were very high among HIV-uninfected women and even higher among HIV-infected women recruited in health facilities in this West African country. Screening for IPV should be systematic in health-care settings, and specifically within HIV care services (10).

ASSESSMENT: sexual assault and HIV are coexisting public health problems. Sexual assault may increase HIV transmission risk through infliction of anal, oral, and genital injuries by penile, digital, or object penetration, extragenital trauma, concurrent STIs, condom use, and lack of circumcision of the perpetrator.

HIV risk is significantly associated with IPV. The association between HIV and violence among young people is partially explained by their experiences with infidelity and forced sex in their intimate partnerships. Coerced or forced sexual initiation and sexual IPV contribute significantly to a woman's risk for HIV infection.

Coerced/forced sexual initiation is associated with HIV/STIs, multiple and high-risk sex partners, and no condom use.

IPV can be used as a marker of potential HIV risk, and possibly is causally associated with HIV risk.

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MENTAL HEALTH

In England, people who have been raped can attend a national network of Sexual Assault Referral Centers (SARCs) for physical examination, the collection of evidence and sign-posting onto other appropriate services. The impact of rape on mental health is not always assessed comprehensively in SARCs despite national policy guidance. The relationship between mental health and rape were evaluated; thereby increasing SARCs staff and National Health Service (NHS) commissioners' awareness of the issue and the potential for longer-term risks to mental health. A secondary analysis was carried out using the Adult Psychiatric Morbidity Survey (APMS) 2007 in England. Sexual abuse was categorized as 'rape', 'touched in a sexual way' or 'talked to in a sexual way' versus 'none'. There was a consistent increase in the prevalence of mental health problems and in the use of mental health services as the severity of sexual abuse increased. For individuals who had been raped, the prevalence of need was highest in those raped both before and after the age of 16 years. Sex and age were the only demographic risk factors remaining significant. After controlling for these, individuals who had been raped were over 2.5 times more likely to have a history of a neurotic disorder than individuals experiencing no sexual abuse. Rape victims were more likely to be dependent on drugs and alcohol, admitted to a mental health ward and at risk of suicide. Rape is likely to have a

considerable impact on the use of mental health services, self-harm and alcohol/drug dependency. Full mental health assessments should be undertaken in SARCs and commissioners should ensure accessible pathways into mental health services where appropriate (1).

The reach of violence against women (VAW) has been profoundly felt by women across the U.S. and around the globe. VAW has been documented for decades as a legal and social justice problem it is also a substantial mental health concern. A full understanding of the phenomenon must include discussion of how often it occurs, in what forms, and to whom. Violence against women in its variant forms is defined and the literature on the mental health effects associated with these abuse experiences is examined. The effectiveness of the mental health system's response to the complex needs of women suffering battering, rape, stalking, and psychological aggression is also examined (2).

There is a link between mental health status both before and after rape. Approximately 40% of attendees to a SARC are already known to mental health services. Sexual Violence can also lead to the development of a mental illness. SARCs have been established, inter alia, to provide healthcare to the victims of rape where a mental health risk assessment should be undertaken. All 37 SARCs in England were asked to complete a short survey and a response rate was 68%. A high proportion (40%) of SACRs clients is already known to mental health services, however, only just under half of SARCs routinely assess mental health and when such an assessment is completed this is by an Forensic Medical Examiner (FME) and substance misuse issues are not always included. Almost two-thirds of SARC services report problems in referring on to mental health services for a variety of reasons. More research is needed in this important area and NHS England should fully define the skills required to undertake a mental health risk assessment when someone has been the victim of rape (3).

The underreporting of rape is well known; however, there is less information on women who fail to disclose to anyone. The online study suggests that 24% of 242 women who were non-disclosing compared with those who had disclosed were significantly less likely to seek treatment for emotional injuries. Almost two thirds of non-disclosing women believed the abuse was their fault vs. 39.1% of

women with prior disclosure. Regardless of disclosure pattern, there was insignificant difference in reports of depression, anxiety, or posttraumatic stress disorder (PTSD), and the majority of respondents endorsed support for online counseling over telephone or individual contact (4).

The effects of intimate partner and non-partner sexual assault on women's mental health was contrasted among a sample (n=835) of low-income, ethnically diverse community women. Compared to sexual assault by a previous partner or by a non-intimate partner, sexual assault by a current partner was the strongest predictor of PTSD, stress, and dissociation. Non-intimate partner sexual assault was only a significant predictor of PTSD only for African American women. The findings suggest that the victim-offender relationship is important when considering the impact of sexual assault. Specifically, sexual assault perpetrated by an intimate partner may be especially traumatic (5).

Rape victims' experiences seeking postassault assistance from the legal, medical, and mental health systems and how those interactions affect their psychological well-being were evaluated. The literature suggests that although some rape victims have positive, helpful experiences with social system personnel, for many victims, postassault help seeking becomes a "second rape," a secondary victimization to the initial trauma. Most reported rapes are not prosecuted, victims treated in hospital emergency departments do not receive comprehensive medical care, and many victims do not have access to quality mental health services. In response to growing concerns about the community response to rape, new interventions and programs have emerged that seek to improve services and prevent secondary victimization. Rape crisis centers, restorative justice programs, and sexual assault nurse examiner programs can help to cope with rape. Strategies for creating more visible and impactful roles for psychologists and allied professionals should be implemented (6).

Sexual assault increases the risk for psychopathology. Despite the availability of effective interventions, relatively few victims who need treatment receive care in the months following an assault. Prior work identified several factors associated with utilizing care, including ethnicity, insurance, and PTSD symptoms. Few studies, however, have examined predictors of treatment utilization

prospectively from the time of assault. It has been hypothesized that white racial status, younger age, being partnered, having health insurance, having previously received mental health treatment, and having more PTSD and depression symptoms would predict utilization of care in the 6 months postassault. A sample of 266 female sexual assault victims was examined with an average age of 26.2 years, of whom 62.0% were White and 38.0% were African American assessed at 1.5 and 6 months postassault. Available information on utilizing care varied across assessments (1.5 months, n=214; 3 months, n=126; 6 months, n=204). Significant predictors included having previously received mental health treatment (OR 4.09), 1 day depressive symptoms (OR 1.06), and having private insurance (OR 2.24) or Medicaid (OR 2.19). Alcohol abuse and prior mental health care were associated with a substantial increase in treatment utilization (OR 4.07). The findings highlight the need to help victims at risk obtain treatment after sexual assault (7).

How mental health Crisis Assessment and Treatment Service (CATS) workers respond to women who disclose sexual assault in crisis service settings were explored. Fifteen CATS workers were surveyed and the predominantly qualitative data were then analyzed using thematic analysis. Two key findings show that: 1] the majority of participants had not experienced adequate sexual assault training, and 7 of the 15 did not feel well equipped to respond to a disclosure of sexual assault; and 2] they rarely consulted or referred women to specialist sexual assault services, despite recognizing the significant impact of sexual assault on mental health functioning. Recommendations are made for training and increased communication between mental health and sexual assault service systems to ensure better outcomes for women (8).

Sexual aggression and VAM are not only social problems; they are mental health problems. Women who experience sexual trauma often express disruptions in emotional and cognitive processes, some of which lead to depression and PTSD. Animal models of neurogenesis and learning suggest that social yet aggressive interactions between a pubescent female and an adult male can disrupt processes of learning related to maternal care, which in turn reduce survival of new neurons in the female hippocampus. Mental and Physical Training is a novel clinical intervention that was translated from neurogenesis research. The intervention, which

combines meditation and aerobic exercise, is currently being used to help women learn to recover from traumatic life experiences, especially those related to sexual violence and abuse (9).

ASSESSMENT: rape has a considerable impact on the use of mental health services, self-harm, alcohol/drug dependency, and risk of suicide. There is a consistent increase in the prevalence of mental health problems and in the use of mental health services as the severity of sexual abuse increased. Sexual assault increases the risk for psychopathology, and the development of a mental illness.

Regardless of disclosure pattern, there is insignificant difference in depression, anxiety, or PTSD, and the majority endorse support for online counseling over telephone or individual contact. Sexual assault by a current partner is the strongest predictor of PTSD, stress, and dissociation.

The victim-offender relationship is important when considering the impact of sexual assault. Sexual assault perpetrated by an intimate partner possibly is especially traumatic.

Most reported rapes are not prosecuted, victims treated in hospital emergency departments do not receive comprehensive medical care, and many victims do not have access to quality mental health services. Despite the availability of effective interventions, relatively few victims who need treatment receive care in the months following an assault.

In this research, humiliated Tamar suffered from various psychological outcomes of the assault, including PTSD, and/or low self-esteem, and/or anxiety, depression, anger, isolation, fear of reporting the sexual abuse because of the stigma attached to being victim, fear of being blamed, and fear of negative outcomes following disclosure. Tamar in spite of suffering from a disgraceful sexual abuse was advised to keep silent.

Contemporary assault victims similarly to ancient victims suffer from various psychological problems and these victims need urgent psychiatric treatment.

There is no information about Dinah's mental status following the rape by Shechem.

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POSTTRAUMATIC STRESS DISORDER

Rape is the trauma most commonly associated with Posttraumatic Stress Disorder (PTSD) among women. The PTSD prevalence six months after sexual assaults was analyzed and the major risk factors for developing PTSD were identified. Participants included 317 female victims of rape who sought help at the Emergency Clinic for Raped Women at Stockholm South Hospital, Sweden. Baseline assessments of mental health were carried out and followed up after six months. Thirty-nine percent of the women had developed PTSD at the six month assessment, and 47% suffered from moderate or severe depression. The major risk factors for PTSD were having been sexually assaulted by more than one person, suffering from acute stress disorder (ASD) shortly after the assault, having been exposed to several acts during the assault, having been injured, having co-morbid depression, and having a history of more than two earlier traumas. ASD on its own was a poor predictor of PTSD because of the substantial ceiling effect after sexual assaults. The data indicate that development of PTSD is common in the aftermath of sexual

assaults. Increased risk of developing PTSD is caused by a combination of victim vulnerability and the extent of the dramatic nature of the current assault. By identifying those women at greatest risk of developing PTSD appropriate therapeutic resources can be directed (1).

Using cluster analysis, the effects of assault characteristics (i.e., level of violence, subjective distress, alcohol consumption, perpetrator identity) on PTSD symptoms were investigated, and whether these effects were mediated by postassault social and psychological reactions were assessed. A large community sample of women sexual assault survivors completed 2 mail surveys at a 1-year interval. In line with prior research, cluster analyses revealed the existence of 3 general categories of sexual assault, described as "high violence," "alcohol-related," and "moderate sexual severity." Alcohol-related assaults resulted in fewer PTSD symptoms than high-violence assaults at Time 1, but not at Time 2. Alcohol-related and violent assaults resulted in more PTSD symptoms than moderate-severity assaults at both times. The effect of assault-characteristics clusters on Time 2 PTSD was mediated by Time 1 self-blame and turning against social reactions. It is important to consider effects of violence and alcohol consumption during the assault to better understand postassault PTSD, including implications for theory and practice (2).

Sexual assault occurs with alarming frequency in Canada. The prevalence of PTSD in assault survivors is drastically higher than the national prevalence of the disorder, which is a strong indication that the current therapies for sexual-assault-related PTSD are in need of improvement. Increasing knowledge and understanding of the pathologies associated with rape trauma in biological, psychological and sociological domains will help to develop more effective treatments for survivors. A dysregulation of the Hypothalamic-Pituitary-Adrenal (HPA) axis is observed in survivors of sexual assault and this may be a fundamental cause of the structural and functional abnormalities contributing to PTSD symptoms. Pharmacotherapies are available to treat PTSD; however, they are often inadequate or unwanted by the survivor. Psychological health is compromised following interpersonal trauma and many psychological therapies are available, but with varying efficacy. A person's cognitions have a dramatic effect on the onset, severity, and progress of PTSD following

sexual assault. Sociological impacts of assault influence the development of PTSD through victim-blaming attitudes and the perpetuation of rape myths. Perceived positive regard and early social support is important to successful recovery. Education is vital in rape prevention and to foster a supportive environment for survivors. The biological, psychological and sociological impacts and treatments should not remain mutually exclusive. A better appreciation of the biopsychosocial repercussions of sexual assault will aid in developing a more holistic and individualized therapy to help alleviate the physical and emotional pain following the trauma of rape (3).

The effects of preassault, assault, and postassault psychosocial factors on current PTSD symptoms of sexual assault survivors were assessed. An ethnically diverse sample of over 600 female sexual assault survivors was recruited from college, community, and mental health agency sources (response rate = 90%). Regression analyses tested the hypothesis that postassault psychosocial variables, including survivors' responses to rape and social reactions from support providers, would be stronger correlates of PTSD symptom severity than preassault or assault characteristics. Few demographic or assault characteristics predicted symptoms, whereas trauma histories, perceived life threat during the assault, postassault characterological self-blame, avoidance coping, and negative social reactions from others were all related to greater PTSD symptom severity. The only protective factor was survivors' perception that they had greater control over their recovery process in the present, which predicted fewer symptoms (4).

PTSD is common in the aftermath of rape and other sexual assault, but the risk factors leading to PTSD following rape differ from those related to PTSD following nonsexual assault. Risk factors for PTSD severity were examined in 148 female help-seeking victims of sexual assault. Approximately 70% of the victims experienced significant levels of traumatization, with 45% reporting symptoms consistent with a probable PTSD diagnosis. Regression analyses showed that relationship with the assailant, number of assailants, the nature of the assault, perceived positive social support, support satisfaction, feeling let down by others, and prior exposure to sexual trauma did not significantly predict PTSD severity at the final level of analysis (5). In accordance with suggestions by Dancu et al. (6), this is

partly caused by a very high degree of traumatization in the sample. Instead, previous nonsexual traumatic experiences and negative affectivity accounted for 30% of the variance in PTSD severity. Although sexual assault is associated with a high degree of PTSD severity, prior nonsexual victimization and high levels of negative affectivity appear to further increase the vulnerability toward developing symptoms of assault-related PTSD (5).

Many rape survivors exhibit symptoms of PTSD, and recent literature suggests survivors' beliefs about sex and control may affect PTSD symptoms. Beliefs about sex and power as potential mediators of the relationship between rape and PTSD symptoms for men vs. women were examined. Participants (n=782) reported lifetime history of rape, current PTSD symptoms, and beliefs about sex and power. Women reported higher levels of lifetime history of rape than men (19.7% for women; 9.7% for men). While rape history predicted PTSD symptoms for both genders, beliefs about sex and power were a significant partial mediator of this relationship for men, but not for women. Results extend the literature on rape and PTSD by suggesting that survivors' beliefs about sex and power are connected and can affect their PTSD symptoms. Additionally, results illustrate how sexual violence against men may reaffirm male gender roles that entail power and aggression, and ultimately affect trauma recovery (7).

Rape victims with PTSD (n=45) were randomly assigned to one of four conditions: stress inoculation training (SIT), prolonged exposure (PE), supportive counseling (SC), or wait-list control (WL). Treatments consisted of nine biweekly 90-min individual sessions conducted by a female therapist. Measures of PTSD symptoms, rape-related distress, general anxiety, and depression were administered at pretreatment, posttreatment, and follow-up (M = 3.5 months posttreatment). All conditions produced improvement on all measures immediately post-treatment and at follow-up. However, SIT produced significantly more improvement on PTSD symptoms than did SC and WL immediately following treatment. At follow-up, PE produced superior outcome on PTSD symptoms (8).

Women are overrepresented within mental health service-use statistics, and a disproportionate number of them have experienced sexual assault. While mental health workers are often the first point of contact between these women and the mental health system,

within the research to date, women have often reported a negative experience of disclosing sexual assault to these workers. We move beyond PTSD in the conceptualization of traumatic stress responses of victimized women exposed to serial forms of unrelenting violence, such as intimate partner violence and stalking. It is argued that the traditional PTSD framework is ill fitting in the context of some forms of violence against women (VAW), and these limits have consequences for developing appropriate interventions for some victimized women. Going beyond PTSD by developing a more nuanced understanding of the ways in which PTSD and other mental health symptoms contribute to the vast array of deleterious personal, societal, and economic costs of VAW (9).

ASSESSMENT: development of PTSD is common in the aftermath of sexual assaults. Increased risk of developing PTSD is caused by a combination of victim vulnerability and the extent of the dramatic nature of the current assault

Few demographic or assault characteristics predict PTSD symptoms, whereas trauma histories, perceived life threat during the assault, postassault characterological self-blame, avoidance coping, and negative social reactions from others were all related to greater PTSD symptom severity.

Prior nonsexual victimization and high levels of negative affectivity increase the vulnerability toward developing symptoms of assault-related PTSD.

The traditional PTSD framework is ill fitting in the context of some forms of VAW, and these limits have consequences for developing appropriate interventions for some victimized women.

Just like Tamar and Dinah, the adolescent victim from antiquity, any contemporary adolescent victim of traumatic sexual aggression deserves appropriate assessment and treatment at the sexual assault center.

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SEX OFFENDERS

Notwithstanding significant progress in the areas of risk appraisal and treatment of sex offenders, the contention is that further advancements could be realized through attention to research on non-sex offenders. It is proposed that sex offenders share many characteristics of non-sex offenders and research with these populations should be integrated, not discrete. In particular, work in the area of multi-method offender assessment regarding criminogenic need is highlighted to suggest common treatment targets for sex offenders and non-sex offenders. As well, recent research in terms of treatment readiness is described and contrasted with the constructs of denial and minimization. Measurement strategies for cognitive schemas in use with violent offenders are also presented in order to expand the repertoire of approaches clinicians might consider as part of an assessment protocol. Performance-based measures of empathy and relapse prevention are described and compared with self-reports in terms of program participation and social desirability (1).

Psychiatric disorders are purported to play a role in the aetiology of violent crime, but evidence for their role in sexual offending is less clear. The prevalence of psychiatric morbidity and personality disorders in elderly incarcerated sex offenders compared with elderly non-sex offenders. One hundred and one sex offenders and 102 non-sex offenders aged over 59 years were interviewed using standardized semi-structured interviews for psychiatric illness (the Geriatric Mental State) and the personality disorder (Structured Clinical Interview for DSM-IV personality disorders). Data on demographic, offence and victim characteristics were collected. Of the elderly sex offenders, 6% had a psychotic illness, 7% a DSM-IV major depressive episode and 33% a personality disorder; and 1% had dementia. These prevalence figures were not different from the elderly non-sex offenders. Differences emerged at the level of personality traits with sex offenders having more schizoid, obsessive-compulsive, and avoidant traits, and fewer antisocial traits compared with non-sex offenders. The data indicate that elderly sex offenders and non-sex-offenders have similar prevalence rates of mental illness. However, elderly sex offenders have increased schizoid, obsessive-compulsive, and avoidant personality traits, supporting the view that sex offending in the elderly is associated more with personality factors than mental illness or organic brain disease (2).

An unresolved but clinically important issue in the literature on juvenile delinquency is to what extent juvenile sex offenders resemble non-sex offenders with respect to individual, familial, and environmental characteristics. Published papers (1995-2005) were reviewed comparing sex offenders with non-sex offenders. The 17 papers meeting the inclusion criteria suggest that differences exist between sex offenders and non-sex offenders on personality characteristics, behavioral problems, history of sexual abuse, nonsexual offending, and peer functioning. Inconsistent results were found for demographic factors, family functioning and background, antisocial attitudes, and intellectual and neurological functioning. Although it is likely that sex offenders can be differentiated from nonsex offenders on a number of characteristics, caution is warranted because of methodological differences between papersand small samples size. Also, papers show that sex offenders are a heterogeneous group (3).

Sexual abuse by juveniles is widely recognized as a significant problem. As communities have become more aware of juvenile sex offending they have responded with increasingly severe responses. This is despite recidivism data suggesting that a relatively small group of juveniles commit repeat sexual offenses after there has been an official response to their sexual offending. Juveniles who commit sexual offenses are a heterogeneous mix, varying according to a wide range of variables. Factors include types of offending behaviors, family environment, histories of child maltreatment, social skills and interpersonal relationships, sexual knowledge and experiences, academic and cognitive functioning, and mental health (4).

The legal and psychiatric features of 113 men convicted of sexual offenses were evaluated to increase understanding of the relationships among sexual violence, paraphilias, and mental illness. One hundred and thirteen consecutive male sex offenders referred from prison, jail, or probation to a residential treatment facility received structured clinical interviews for DSM-IV Axis I and II disorders, including sexual disorders. Participants' legal, sexual and physical abuse, and family psychiatric histories were also evaluated. Offenders were compared with and without paraphilias. Participants displayed high rates of lifetime Axis I and Axis II disorders: 96 (85%) had a substance use disorder; 84 (74%), a paraphilia; 66 (58%), a mood disorder (40 [35%], a bipolar disorder and 27 [24%], a depressive disorder); 43 (38%), an impulse control disorder; 26 (23%), an anxiety disorder; 10 (9%), an eating disorder; and 63 (56%), antisocial personality disorder. Presence of a paraphilia correlated positively with the presence of any mood disorder ($p<0.001$), major depression ($p=0.007$), bipolar I disorder ($p=0.034$), any anxiety disorder ($p=0.034$), any impulse control disorder ($p=0.006$), and avoidant personality disorder ($p=0.013$). Although offenders without paraphilias spent more time in prison than those with paraphilias ($p=0.019$), paraphilic offenders reported more victims ($p=0.014$), started offending at a younger age ($p=0.015$), and were more likely to perpetrate incest ($p=0.005$). Paraphilic offenders were also more likely to be convicted of ($p=0.001$) or admit to ($p<0.001$) gross sexual imposition of a minor. Nonparaphilic offenders were more likely to have adult victims exclusively ($p=0.002$), a prior conviction for theft ($p <0.001$), and a history of juvenile offenses ($p=0.058$). The data indicate that sex offenders displayed high rates of mental illness,

substance abuse, paraphilias, personality disorders, and comorbidity among these conditions. Sex offenders with paraphilias had significantly higher rates of certain types of mental illness and avoidant personality disorder. Paraphilic offenders spent less time in prison but started offending at a younger age and reported more victims and more non-rape sexual offenses against minors than offenders without paraphilias. Sex offenders should be carefully evaluated for the presence of mental illness and sex offender management programs should have a capacity for psychiatric treatment (5).

The prevalence and distribution of psychiatric morbidity was examined among convicted male sex offenders and factors associated with sexual offending were established. A Cross-sectional descriptive survey was carried out in Kamiti Maximum Security Prison, Nairobi, Kenya. Subjects were 26 male convicts. Forty seven (61.8%) had defilement-related convictions, 23 (30.3%) had rape-related, while 6 (7.9%) had other convictions. Twenty seven (35.5%) out of 76 had a DSM-IV Axis I disorder, majority of whom (71.1%) were dependent on or abused substances, and 26 (34.2%) had an Axis II disorder, most of whom had antisocial and impulsive personality disorders (46.2%). Of these 12 (15.8%) had an Axis I diagnosis alone, 11 (14.5%) had an Axis II diagnosis alone while 15 (19.7%) had both Axis I and II diagnoses, that is, co-morbidity. Exposure to erotica was statistically associated with both Axis I and II ($p=0.02$ and $p=0.0003$ respectively) and pre-occupation with thoughts about sex was associated with Axis II disorders ($p=0.01$). The data show that most of those with psychiatric morbidity targeted children and had antisocial or impulsive personality disorder. Awareness campaigns to enlighten the public of the fact that children are the most common victims and research to determine ways of treating and rehabilitating sexual offenders could reduce the vice (6).

ASSESSMENT: juveniles who commit sexual offenses are a heterogeneous mix, varying according to a wide range of variables. Factors include types of offending behaviors, family environment, histories of child maltreatment, social skills and interpersonal relationships, sexual knowledge and experiences, academic and cognitive functioning, and mental health.

Sex offenders have more schizoid, obsessive-compulsive, and avoidant traits, and fewer antisocial traits compared with non-sex offenders. Elderly sex offenders and non-sex-offenders have similar prevalence rates of mental illness. However, elderly sex offenders have increased schizoid, obsessive-compulsive, and avoidant personality traits, supporting the view that sex offending in the elderly is associated more with personality factors than mental illness or organic brain disease.

Sex offenders displayed high rates of mental illness, substance abuse, paraphilias, personality disorders, and comorbidity among these conditions. Sex offenders with paraphilias had significantly higher rates of certain types of mental illness and avoidant personality disorder.

Most of those with psychiatric morbidity targeted children and had antisocial or impulsive personality disorder.

What were mental characteristics of two Biblical characters, Amnon and Shechem?

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SOCIAL PROBLEM

The French legal definition of rape was somewhat vague until the 1970s. In December 1980, the increased awareness created by the feminist movement led to a precise legal definition and to the possibility for self-help groups to participate in legal actions. In 1985,

a telephone helpline was created after several rapes were following several rapes committed in public. Since 1986, more than 39,000 women have called this hotline. Other recent papers confirm the frequency of rape. Major advances have been made in recent years, in terms of justice for minors who are victims of rape (lengthening of the statutory limitation on sexual crimes) and healthcare provision (opening of refuges, medical-legal consultations, victim management centers, greater awareness among healthcare professionals, etc.). Women need to be better informed of the frequency of rape, its legal implications, rapists' strategies, mental disorders, and the physical (especially gynecological) repercussions of rape. Women must also be aware that the rapist is the only guilty party. Finally, a multidisciplinary strategy is needed, notably involving self-help associations and hospital units that deal with rape victims (1).

An overview of emerging directions is provided in the measurement of rape, the most extreme form of sexual victimization. The context is how operational definitions of rape have evolved, where consensus has emerged, and where it eludes the field. Two approaches to the detection of rape victimization in survey methods, namely behaviorally specific questions and a new, two-stage approach, and how each can be evaluated in terms of validity are presented. Promises and pitfalls of the two-stage approach are analyzed and its implementation and evaluation are suggested. The data show that all empirical research to date supports the use of behaviorally specific compared to broad questions, that a standard definition of rape and its components of act, tactics, and non-consent is imperative to move the field forward, while research to systematically validate methods of detecting rape victimization is needed (2).

Victims of sexual assault are often advised to have a medical forensic examination and sexual assault kit (SAK; also termed a "rape kit") to preserve physical evidence (e.g., semen, blood, and/or saliva samples) to aid in the investigation and prosecution of the crime. Law enforcement are tasked with submitting the rape kit to a forensic laboratory for DNA (deoxyribonucleic acid) analysis, which can be instrumental in identifying offenders in previously unsolved crimes, confirming identify in known-offender assaults, discovering serial rapists, and exonerating individuals wrongly accused. However, a growing number of media stories, investigative advocacy projects,

and social science studies indicate that police are not routinely submitting SAKs for forensic testing, and instead rape kits are placed in evidence storage, sometimes for decades. The growing national problem of untested rape kits by summarizing current research on the number of untested SAKs in the U.S. is examined and the underlying reasons why police do not submit this evidence for DNA testing is explored (3).

A model of the relations of social reactions to sexual assault disclosure, self-blame and problem drinking is tested. Whether type of self-blame has different relationships with social reactions and problem drinking in a large, diverse sample of sexually assaulted women was investigated. The relationships are important to investigate in order to identify specific targets for treatment and intervention with sexual assault victims and their social networks. Community-residing female sexual assault survivors (n=1,863) in a large metropolitan area completed a mail survey about sexual assault, social reactions to disclosure, self-blame attributions, and problem drinking symptoms. Structural equation modeling showed that characterological self-blame mediated the effect of negative social reactions on drinking, but behavioral self-blame did not function as a mediator. A second model showed unique relationships of specific positive and negative social reactions to drinking through characterological and behavioral self-blame. The data indicate that characterological self-blame needs to be targeted in treatment and intervention with survivors, as it appears to be a key mechanism through which social reactions may influence recovery. Secondary prevention with informal social networks should educate people about social reactions to avoid negative reactions and promote those that are helpful, so people can better respond to survivors' sexual assault disclosures and improve recovery (4).

ASSESSMENT: rape is a social problem and a public health issue. In adult sexual assault survivors, characterological self-blame is a key mechanism through which social reactions may influence recovery. Characterological self-blame needs to be targeted in treatment and intervention with survivors. Secondary prevention with informal social networks should educate people to avoid negative reactions and promote those that are helpful.

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MANAGEMENT

Sexual assault is a major public health and pervasive social problem that transcends socio-cultural bounds; with myriad bio-psychosocial effects on victims/survivors and the wider community. Indeed, survivors of sexual assault suffer the effects of assault for a lifetime. A key aspect for practitioners working with individuals, families and communities affected by sexual assault is to understand the background, nature and extent of the problem; as well as important medicolegal considerations and support services (1).

During the past 20 years, researchers have documented the widespread problem of rape in American society. Approximately one in four women is raped in their adult lifetime, which causes severe psychological distress and long-term physical health problems. The impact of sexual assault extends far beyond rape survivors as their family, friends, and significant others are also negatively affected. Moreover, those who help rape victims, such as rape victim advocates, therapists, as well as sexual assault researchers, can experience vicarious trauma. Future research and advocacy should focus on improving the community response to rape and the prevention of sexual assault (2).

It is important for rape victims to receive medical care to prevent and treat rape-related diseases and injuries, access forensic exams, and connect to needed resources. Few victims seek care, and factors associated with post-rape medical care-seeking are poorly understood. Prevalence and factors associated with post-rape medical care-seeking were examined in a national sample of women who reported a most-recent or only incident of forcible rape, and

drug- or alcohol-facilitated/incapacitated rape when they were aged 14 years and older. A national sample of U.S. adult women (n=3,001) completed structured telephone interviews in 2006, and data for this study were analyzed in 2011. Logistic regression analyses examined demographic variables, health, rape characteristics, and post-rape concerns in relation to post-rape medical care-seeking among 445 female rape victims. A minority of rape victims (21%) sought post-rape medical attention following the incident. In the final multivariate model, correlates of medical care included black race, rape-related injury, concerns about sexually transmitted diseases (STDs) pregnancy concerns, and reporting the incident to police. The data indicate that women, who experience rapes consistent with stereotypic scenarios, acknowledge the rape, report the rape, and harbor health concerns appear to be more likely to seek post-rape medical services. Education is needed to increase rape acknowledgment, awareness of post-rape services that do not require formal reporting, and recognition of the need to treat rape-related health problems (3).

Prior evaluations of Elemental, a sexual assault protection program that combines primary prevention and risk reduction strategies within a single program was extended. During 2012 and 2013, program group and control group students completed pretest, posttest, and 6-week and 6-month follow-up surveys assessing sexual attitudes and knowledge as well as experiences with assault. The results reinforce previous findings that Elemental is effective in reducing sexual assault risk. Program effects were both direct, in that participation was associated with lower risk of assault, and mediated, in that participation impacted attitudes and beliefs that are empirically linked to risk of later assault. The findings indicate by combining both primary prevention and risk reduction approaches, Elemental is not only effective at reducing incidences of assault, it is also consistent with a number of recent recommendations for directions in sexual assault prevention programming (4).

Rape has a negative impact on physical and mental health, health-related behaviors, and health service utilization. Timely medical care is important for preventive services. Cross-sectional data were obtained from a larger 2-year longitudinal study, the National Women's Study (NWS). A total of 3.006 adult women participated in the final data collection wave of the NWS. During a structured

telephone interview, women who reported a most-recent or only rape incident during adulthood were asked about rape characteristics, reporting to authorities, medical care, and rape-related concerns. The main outcome measures were receipt and timing of medical care received after an adult rape, and factors influencing whether or not medical care was received. Of the sample, 214 (7.1%) had experienced a most-recent or only rape as an adult (aged 18 years and older), and 56 (26.2%) received rape-related medical care following that incident. The final model multivariable logistic regression indicated that reporting the crime to police or other authorities (OR 9.45, 95% CI 34-26.70) and fear of STDs (OR 8.61, 95% CI 3.12-23.72) were significant predictors of receipt of post-rape medical care. The data indicate one in five victims reported an adult rape to police or other authorities; these women were nine times more likely to receive medical care than those who did not. Public health efforts are needed to increase the proportion of rape victims who receive immediate post-rape medical care (5).

Despite global recognition that sexual violence is a violation of human rights, evidence still shows it is a pervasive problem across all societies. Promising community intervention studies in the low- and middle-income countries are limited. The impact of a community-based intervention was assessed, focusing on improving the community's knowledge and reducing social acceptability of violence against women norms with the goal to prevent and respond to sexual violence. The strategies used to create awareness included radio programs, information, education communication materials, and advocacy meetings with local leaders. The intervention took place in Morogoro region in Tanzania. The evaluation used a quasi-experimental design including cross-sectional surveys at baseline (2012) and endline (2014) with men and women aged 18-49 years. Main outcome measures were number of reported rape cases at health facilities and the community's knowledge and attitudes toward sexual violence. The number of reported rape events increased by more than 50% at health facilities during the intervention. Knowledge on sexual violence increased significantly in both areas (57.3-80.6% in the intervention area and 55.5-71.9% in the comparison area; $p<0.001$), and the net effect of the intervention between the two areas was statistically significant (6.9, 95% CI 0.2-13.5, $p=0.03$). There was significant improvement in most of the

attitude indicators in the intervention area, but not in the comparison area. However, the intervention had insignificant effect on the overall scores of acceptance attitudes in the final assessment when comparing the two areas (-2.4, 95% CI -8.4-3.6, p=0.42). The findings indicate the intervention had an effect on some indicators on knowledge and attitudes toward sexual violence even after a short period of intervention. This finding informs the public health practitioners of the importance of combined strategies in achieving changes (6).

Sexual assault occurs commonly worldwide and is particularly pervasive in the developing world. The background to sexual violence is important in the understanding of the ramifications of the problem. Some elements that offer the means to the prevention of sexual assault in the community are important highlights especially where the means - expertise and facilities - for managing cases of sexual assault is grossly inadequate. These concepts, though are applicable universally, are however discussed in the context of the developing world and with particular emphasis on the Nigerian situation. Their applicability in sexual assault prevention is derived from previous papers in different parts of the world that highlight the viability of these interventions. Therefore if one posits that sexual assault can be prevented, certain responsibilities are imperative; some challenges must be anticipated; and special needs/circumstances should be catered for (7).

The effect of a standardized 6-week self-defense program was determined on the incidence of sexual assault in adolescent high school girls in an urban slum in Nairobi, Kenya. Population-based survey of 522 high school girls in the Korogocho-Kariobangi locations in Nairobi, Kenya, at baseline and 10 months later. Subjects were assigned by school attended to either a "No Means No Worldwide" self-defense course (eight schools, n=402) or to a life-skills class (two schools, n=120). Both the intervention and the life-skills classes were taught in the schools by trained instructors. Participants were administered the same survey at baseline and follow-up. A total of 522 girls (mean age, 16.7 ± 1.5 years; range, 14-21 years) completed surveys at baseline, and 489 at 10-month follow-up. At baseline, 24.5% reported sexual assault in the prior year, with the majority (90%) reporting assault by someone known to them (boy friend, 52%; relative, 17%; neighbor, 15%; teacher or pastor, 6%). In the self-

defense intervention group, the incidence of sexual assault decreased from 24.6% at baseline to 9.2% at follow-up ($p<0.001$), in contrast to the control group, in which the incidence remained unchanged (24.2% at baseline and 23.1% at follow-up, $p=0.10$). Over half the girls in the intervention group reported having used the self-defense skills to avert sexual assault in the year after the training. Rates of disclosure increased in the intervention group, but not in controls. The data indicate that a standardized 6-week self-defense program is effective in reducing the incidence of sexual assault in slum-dwelling high school girls in Nairobi, Kenya (8).

Sexual assault is a major cause of injury, unplanned pregnancy, human immunodeficiency virus (HIV) infection, and mental health problems worldwide. In parts of sub-Saharan Africa, sexual assault has reached epidemic proportions. This study evaluated the efficacy of an empowerment and self-defense intervention for adolescent girls to decrease the incidence of sexual assault and harassment in Nairobi's large informal settlements. A prospective cohort of 1978 adolescents from 4 neighborhoods near Nairobi was taught empowerment, deescalation, and self-defense skills in six 2-hour sessions. The standard-of-care (SOC) group (n=428) received a life skills class. Self-reported, anonymous survey data were collected at baseline and 10.5 months after intervention. Annual sexual assault rates decreased from 17.9/100 person-years at baseline to 11.1 at follow-up (rate ratio 1.61, 95% CI 1.26-1.86, $p<0.001$); there was no significant change in the SOC group (14.3-14.0, rate ratio 1.02, 95% CI 0.67-1.57, $p=0.92$). Sexual assault disclosure in the intervention group increased from 56% to 75% ($p=0.006$), compared with a constant incidence of disclosure (53%) in the SOC group. The majority (52.3%) of adolescents in the intervention group reported using skills learned to stop an assault. The findings indicate that this intervention decreased sexual assault rates among adolescent girls in Kenya. The intervention was also associated with an increase in the disclosure of assaults, thereby enabling survivors to seek care and support and possibly leading to the identification and prosecution of perpetrators. This model should be adaptable to other settings both in Africa and globally (9).

The effect of a 10-week cognitive behavior treatment program in 30 mentally ill sex offenders was assessed. The effect of the program was evaluated using the Interpersonal Responsiveness Index (IRI),

UCLA Loneliness Scale (UCLALS), Coping Using Sex Inventory (CUSI), and Rape Myth Acceptance Scale (RMAS). The ability of sex offenders to cope with sexual acts when they faced stressful situations and to accept the rape myth was significantly improved on CUSI ($p=0.04$) and RMAS ($p<0.001$). Feelings of isolation and the ability to empathize based on IRI ($p=0.54$) and UCLALS ($p=0.38$) were insignificantly improved. To prevent recidivism, treatment for mentally ill sex offenders should focus on changes in their cognitive and emotional characteristics in addition to their main psychiatric illness (10).

Of the various forms of treatment available to sexual offenders, cognitive-behavioral methods are likely to have the greatest impact in reducing rates of sexual re-offending. Cognitive-behavioral treatment typically targets attitudes that support sexual offending, anger management, victim empathy, deviant sexual arousal, and relapse prevention. More recently, treatment has targeted cognitive processes more generally, management of other emotional states in addition to anger, intimacy deficits, and risk self-management. The components of cognitive-behavioral treatment with sexual offenders, including recent developments, assessment, treatment methods, and the importance of therapist characteristics on the therapeutic process and on treatment outcome are shown (11).

In this paper, the authors draw on literatures outside sexual offending and make suggestions for working more positively and constructively with these offenders. Although the management of risk is a necessary feature of treatment, it needs to occur in conjunction with a strength-based approach. An exclusive focus on risk can lead to overly confrontational therapeutic encounters, a lack of rapport between offenders and clinicians, and fragmented and mechanistic treatment delivery. It is suggested that the goals of sexual offender treatment should be the attainment of good lives, which is achieved by enhancing hope, increasing self-esteem, developing approach goals, and working collaboratively with the offenders. Examples are provided of how these targets may be met. When this is done within a therapeutic context where the treatment providers display empathy and warmth and are rewarding and directive, the authors suggest that treatment effects will be maximized (12).

The use of an integrated (holistic) approach to treating juvenile sexual offenders is evaluated. An integrated model takes into account the fact that: 1] youth are resilient, 2] youth progress through various stages of development, 3] these stages are often arrested as a result of trauma, child abuse and neglect, and attachment disorders, 4] humanistic approaches and the therapeutic relationship are essential to the healing and recovery process, 5] youth learn and work with a variety of learning styles and multiple intelligences, 6] many traditional assessment and treatment approaches can be modified and blended with an integrated approach, and 7] the use of experiential treatments can have a positive and profound impact in treating youth with sexual behavior problems (13).

An outpatient treatment program for adolescent sexual abusers was established by a mental health agency in collaboration with a specialized probation program in the juvenile court. Individualized treatment is based on a comprehensive clinical assessment with the youth and guardian, for which examples are provided. Given the heterogeneity of this population, several treatment strategies directed to various individual or family clinical targets are described, including psychiatric disorders, sexual deviance and sexuality, normal adolescent development and adaptive skills, and parent and family relationships. Ongoing collaborative and coordination issues are also reviewed. The integration of mental health and probationary services provides a balanced approach to the community management and treatment of the low-risk, primarily first-time, adolescent sexual offender (14).

Juvenile sexual offending (JSO) is increasingly being recognized as a serious crime among youth. The prevalence of sexual offending and sexual reoffending suggests that many juvenile JSOs may repeat their offending behaviors if not treated. However, clinical trials evaluating specific interventions are virtually nonexistent. Instead, the literature on the treatment of JSOs is marked by discussions of strategies that are hypothesized to be beneficial, as well as descriptions of treatment programs that exist across the country. While existing literature suggests that treatment for JSOs may deter future sexual offending behaviors, it is unclear which, if any, aspects of these treatments promote the development of positive behaviors.

A discussion of existing treatment approaches, effectiveness, and treatment considerations follows (15).

Thirty publications that evaluated health care-based interventions for women who experienced sexual violence were reviewed. The findings highlight that clinicians often need training in the provision sexual assault care, and that not all emergency departments have sexual assault care protocols. Studies examining effectiveness found that Sexual Assault Nurse Examiner programs are very helpful, that health care-based sexual assault treatment settings attract more women than do forensic-based settings, that sexual assault survivors often prefer a combination of medication and counseling treatment, and that preexam administration of a video explaining the collection of forensic evidence may reduce women's stress during the procedure. Papers on postexposure HIV prophylaxis found that many women did not complete the treatment regimen, often because of side effects. Emergency contraception to prevent postrape pregnancy is not consistently offered to women. Only one paper reported on abortion as part of the range of sexual assault services (16).

Bystander intervention is receiving increased attention as a potential sexual violence prevention strategy, especially to address campus sexual assault. Rather than focusing on potential perpetrators or victims, the bystander approach engages all members of a community to take action. A growing body of evaluative work demonstrates that bystander intervention education programs yield increased positive attitudes and behaviors related to sexual violence and greater willingness to intervene in pro-social ways. Future program outcome studies, however, would benefit from more refined measures of bystander action as it is a key variable that prevention education programs attempt to influence (17).

Because of its high prevalence and serious consequences for victims, sexual violence is a significant problem on college campuses. Sexual assault prevention programs based on the bystander intervention model have been shown to be effective; however, current programs are limited in terms of ease of distribution. To address this issue, we developed and evaluated "Take Care," an online bystander intervention program. This is the first empirical evaluation of an online bystander intervention program designed to prevent sexual violence. Ninety-three participants (80.6% female,

19.4% male) recruited from social psychology classes at a mid-size university were randomly assigned to view one of two online programs: Take Care or a control program on study skills. Before viewing the programs, participants completed measures of bystander behaviors and feelings of efficacy for performing such behaviors. Measures were administered again post-intervention and at a two-month follow-up assessment. Participants who viewed Take Care reported greater efficacy for engaging in bystander behaviors at post-treatment and two months following treatment, compared to those who viewed the control program. Participants who viewed Take Care reported performing relatively more bystander behaviors for friends at the two-month follow-up assessment, compared to participants who viewed the control program. The results suggest that sexual violence prevention programs perhaps are effectively adapted to an online format (18).

A peer-facilitated, bystander sexual violence prevention program is evaluated to determine its effectiveness at changing attitudes and behaviors related to sexual violence with university males who are at low- and high-risk of using sexually coercive behavior. Bystander interventions focus on men and women as bystanders to change social norms in a peer culture that supports abusive behaviors. Few studies have examined the effectiveness of these interventions with high-risk populations, which is the focus of this study. A bystander sexual violence prevention program was presented to 142 fraternity members. A quasi-experimental design utilizing pre-, post-, and follow-up surveys was used to compare the effectiveness of this prevention program with university males who are at low- and high-risk of using sexually coercive behavior in intervention and comparison groups. Participants' risk status was measured prior to the intervention using the Modified-Sexual Experiences Survey. The measures evaluated changes in attitudes (rape myth acceptance and bystander attitudes) and behaviors (sexually coercive behaviors, sexually coercive behavioral intentions, and bystander behaviors). Data analyses included Repeated-Measures Analysis of Covariances. A bystander sexual violence prevention program has a positive impact on attitudes and behaviors related to sexual violence among fraternity members, however, the program had less impact on high-risk males. The results will expand the ability to design programs that can have an impact on reducing sexual violence on campus by

ensuring the programs are having the desired impact on the target audience (19).

The management of recent sexual and physical assault in women has two aims: to provide medical and psychological care for the victim and to prevent possible health consequences of the trauma on one hand, and to facilitate the forensic assessment with regard to the perpetrator's prosecution on the other. The victim should always be encouraged to report an offence to the police and forensic medicine should be called in to assist in the victim's examination, whenever possible. In addition, emergency contraception and prophylactic measures against STIs, especially HIV, must be offered. The profound emotional impact of sexual and physical assault requires knowledgeable and sensitive crisis intervention on the part of the counselor and referral for ongoing counseling and support must be made available. A well trained and competent sexual assault care team with a sympathetic and non-judgmental attitude can contribute profoundly to the assaulted woman's regaining control over her life and being able to overcome the experienced trauma (20).

Sexual violence affects up to one third of women during their lifetime. Sexual assault is underreported, and more than one half of assaults are committed by someone known to the survivor. Although both men and women can be sexually assaulted, women are at greatest risk. Some groups are more vulnerable, including adolescents; survivors of childhood sexual or physical abuse; persons who are disabled; persons with substance abuse problems; sex workers; persons who are poor or homeless; and persons living in prisons, institutions, or areas of military conflict. Family physicians care for sexual assault survivors immediately and years after the assault. Immediate care includes the treatment of injuries, prophylaxis for STIs, administration of emergency contraception to prevent pregnancy, and the sensitive management of psychological issues. Family physicians should collect evidence for a "rape kit" only if they are experienced in treating persons who have been sexually assaulted because of the legal ramifications of improper collection and storage of evidence. Sexual assault may result in long-term mental and physical health problems. Presentations to the family physician may include self-destructive behaviors, chronic pelvic pain, and difficulty with pelvic examinations. Prevention of sexual assault

is societal and should focus on public health education. Safety and support programs have been shown to reduce sexual assaults (21).

Sexual assault is a broad-based term that encompasses a wide range of sexual victimizations including rape. Since the American Academy of Pediatrics published its last policy statement on sexual assault in 2001, additional information and data have emerged about sexual assault and rape in adolescents and the treatment and management of the adolescent who has been a victim of sexual assault. The findings provide new information to update physicians and focuses on assessment and care of sexual assault victims in the adolescent population (22).

ASSESSMENT: contemporary assault victims similarly to ancient victims suffer from various psychological problems and these victims need urgent treatment.

There are several strategies that can be used for sexual assault victims as well as for adolescents who sexually offend and their families.

If Biblical Tamar and Dinah had received appropriate and timely treatment their quality of life could be better.

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SUMMARY

Sexual violence occurs in all societies, and across all social classes. Sexual assault permeates all socioeconomic classes and affects millions worldwide. Most victims do not report the assault; those that do often present to an emergency department.

Comprehensive understanding of rape and sexual assault can give health care providers the tools for more effective handling of these issues. The Biblical texts were examined and verses that describe the rape of women were studied closely from the contemporary viewpoint.

Throughout the long history of human existence women have been raped. The Biblical verses: Amnon "*...being stronger than she* (Tamar)*, forced her, and lay with her*" (13:14) and " *he* (Shechem) *took her* (Dinah)*, and lay with her, and raped her*" indicate that sexual relations were performed against Tamar and Dinah's will. These sexual relations can be defined as rape with these two women as the victims. These are the Biblical cases of sexual abuse and rape.

These two women can be added to the long list of women who were raped.

There are widespread prevalence rates and patterns of sexual assaults in different countries.

Sexual violence and rape in times of war and civil unrest are used as a weapon in the conflict area. Rape is recognized as a crime of war. In spite of this, during armed conflict deliberate policy often is to rape young women and to force them to bear the enemy's child. The use of rape as a weapon of war is rampant and unyielding. The sexual violence inflicted upon women is brutal and destructive, physically, socially, and psychologically. Mass raping and the methods of perpetration create a chaos destroying communities and the entire society where humanitarian aid is often inappropriate.

Military sexual trauma (MST) is defined as sexual harassment and or sexual assault experienced by a military service member. It is associated with pre-combat traumatic experiences and pathologic sequelae including mental and medical illness. Medical illness, primarily pain-related symptoms, involves multiple organ systems, including gastrointestinal, neurological, genitourinary and musculoskeletal.

Experiences of military sexual assault and harassment have a negative effect on veterans' health and functioning, even years or decades later.

Military environmental factors associated with increased likelihood of rape, such as sexual harassment allowed by officers, include sexual advances on-duty, and sleeping quarters. Risk factors for MST include age, enlisted rank, negative home life, and previous assault history. MST is associated with increased screening rates of depression and alcohol abuse, in addition to increased odds for posttraumatic stress disorder (PTSD). Active duty status, childhood trauma, combat exposure, and MST are associated with increased severity of military-related posttraumatic stress. Sexual trauma represents a potential threat to military operational readiness and draws attention to the importance of prevention strategies and services to reduce the burden of sexual trauma on military victims.

The workplace is a frequent arena for sexual assault.

Dental hygienists in the Commonwealth of Virginia experience sexual harassment while employed in oral health care settings.

Physicians are the primary instigators of nurses' sexual harassment. The most common reactions against harassers are anger and fear; while negative effects of sexual harassment are disturbed mental health function, decline in job performance, and headache.

The lower working status and power of nurses in the workplace, poor working conditions in healthcare settings, and insufficient administrative mechanisms, including the present law and regulations against sexual harassers, are important factors in the work environment. Fear of job loss and discrimination are frequent reasons women do not report sexual assault in the workplace.

There is an association between the level of disability impairment and physical and sexual assault. Women with disabilities that severely limit activities of daily living are at increased risk of sexual assault.

People with severe mental illness (SMI) have high prevalence of experiences of childhood maltreatment and adulthood domestic and sexual violence victimization. Childhood maltreatment appears to be an independent risk factor for adulthood victimization among men and women with SMI.

The majority of the sex offender perpetrators are men including adults with mental retardation, paid staff, family members, and others.

Most sexual abuse occurs in the victim's residence, and in 92% of the cases the victim knew his or her abuser.

Similarly, Tamar perfectly knew her half-brother Amnon very well, as both lived in the King David's home.

Older adults can also be victims of sexual assault and rape. Physical abuse of older women, including sexual assault, has risen rapidly for the last decade. Older women face particular barriers to disclosure and accessing the justice system, resulting in their experiences remaining hidden. Suspected victims are more likely to reside in their own homes, not receive rape examinations, and have cognitive disabilities. The alleged offenders are typically spouse/partners or family members aged 40 years and older.

Sexual abuse occurs in nursing homes and both older women and men are the victims of such abuse. Most victims of sexual abuse are women, aged 70-89 years, residing in a nursing home. Sexual abuse involves sexualized kissing, fondling and unwelcome sexual interest in the person's body.

Fellow residents are the most common perpetrators, often demonstrating inappropriate hypersexual behavior caused by dementing illness. Perpetrators are staff and other residents and mainly men, but also women abuse both older men and older women. Older women face particular barriers to disclosure and accessing the justice system, resulting in their experiences remaining hidden. Sexual abuse of older residents is a taboo topic among health professionals.

Sexual assault is a traumatic event with potentially devastating lifelong effects on physical and mental health. Sexual assault is associated with increased risk of poor mental and physical health outcomes. Individuals who experience sexual assault during childhood are more likely to engage in risky behaviors later in life, such as smoking, alcohol and drug use, and disordered eating habits, which may increase the risk of developing a chronic disease.

There is an increased risk of unhealthy behaviors (e.g., drinking, drug use, risky sexual behaviors) for women and adolescents, with the highest risk reported for African American women and adolescents.

Rape-related pregnancy occurs with significant frequency. It is a cause of many unwanted pregnancies and is closely linked with family and domestic violence. Women raising children from sexual violence-related pregnancies experience symptoms of mental health disorders. Stigma and mental health disorders negatively influence parenting attitudes, whereas family and community acceptance are associated with adaptive parenting attitudes.

A number of countries adopt abortion laws recognizing rape as a legal ground for access to safe abortion service. As rape is a crime, these abortion laws carry with them criminal and health care elements that in turn result in the involvement of legal and medical expertise.

From the politico-legal point of view, ending rape impunity and decriminalizing abortion are recommended. Eliminating administrative burdens, educating providers about women's rights to obtain Medicaid reimbursement for abortion and holding Medicaid accountable for reimbursing qualifying cases may facilitate Medicaid reimbursement for qualifying abortions.

In sexual assault, genital injury prevalence is 62.8%. Penile-vaginal penetration is the most common type of sexual assault. Genital injury related to sexual assault is often an issue in court proceedings, with the expectation that injuries will be found in 'genuine' cases.

Women penetrated without consent are 19.5 times more likely to sustain at least one genital injury than those penetrated consensually and a penetration scenario with finger/s is 4.2 times to result in at least one genital injury than penetration without finger involvement.

Risk factors for genital injury are the presence of non-genital injury, threats of violence and being over the age of 40 years. Younger age is also associated with an increased number of genital injuries overall involving the thighs, labia minora, periurethral area, fossa navicularis, and vagina.

The prevalence of sexually transmitted diseases (STDs) estimates varies widely depending on the population studied.

Sexually transmitted infections (STIs) are prevalent in survivors of sexual violence. Co-occurring risk factors for sexual violence and STIs include previous sexual activity, mental health, alcohol use, drug use, and multiple partners. In general, in sexual abuse the commonest organisms among various venereal infections are Neisseria gonorrhea and Trichomonas vaginalis.

Most venereal infections presenting within 72 hours of a rape are preexisting while new infections identified 1 to 20 weeks later are acquired during the assault.

Sexual assault and human immunodeficiency virus (HIV) are coexisting public health problems. Sexual assault may increase HIV transmission risk through infliction of anal, oral, and genital injuries by penile, digital, or object penetration, extragenital trauma, concurrent STIs, condom use, and lack of circumcision of the perpetrator. HIV risk is significantly associated with intimate partner violence (IPV). The association between HIV and violence among young people is partially explained by their experiences with infidelity and forced sex in their intimate partnerships. Coerced or forced sexual initiation and sexual IPV contribute significantly to a woman's risk for HIV infection.

Coerced/forced sexual initiation is associated with HIV/STIs, multiple and high-risk sex partners, and no condom use. IPV can be used as a marker of potential HIV risk, and possibly is causally associated with HIV risk.

Sexual assault increases the risk for psychopathology, and the development of a mental illness. Rape has a considerable impact on the use of mental health services, self-harm, alcohol/drug dependency, and risk of suicide. There is a consistent increase in the prevalence of mental health problems and in the use of mental health services as the severity of sexual abuse increased.

Regardless of disclosure pattern, there is insignificant difference in depression, anxiety, or PTSD, and the majority endorses support for online counseling over telephone or individual contact. Sexual assault by a current partner is the strongest predictor of PTSD, stress, and dissociation.

Most reported rapes are not prosecuted, victims treated in hospital emergency departments do not receive comprehensive medical care, and many victims do not have access to quality mental health services. Despite the availability of effective interventions, relatively few victims who need treatment receive care in the months following an assault.

Development of PTSD is common in the aftermath of sexual assaults. Increased risk of developing PTSD is caused by a combination of victim vulnerability and the extent of the dramatic nature of the current assault.

Few demographic or assault characteristics predict PTSD symptoms, whereas trauma histories, perceived life threat during the assault, postassault characterological self-blame, avoidance coping, and negative social reactions from others were all related to greater PTSD symptom severity.

Prior nonsexual victimization and high levels of negative affectivity increase the vulnerability toward developing symptoms of assault-related PTSD.

In this research, humiliated Tamar suffered from various psychological outcomes of the assault, including PTSD, and/or low self-esteem, and/or anxiety, depression, anger, isolation, fear of reporting the sexual abuse because of the stigma attached to being victim, fear of being blamed, and fear of negative outcomes following disclosure. Tamar in spite of suffering from a disgraceful sexual abuse was advised to keep silent.

There is no information about Dinah's mental status following the rape by Shechem.

Contemporary assault victims similarly to ancient victims suffer from various psychological problems and these victims need urgent psychiatric treatment.

The traditional PTSD framework is ill fitting in the context of some forms of violence against women, and these limits have consequences for developing appropriate interventions for some victimized women.

Juveniles who commit sexual offenses are a heterogeneous mix, varying according to a wide range of variables. Factors include types of offending behaviors, family environment, histories of child maltreatment, social skills and interpersonal relationships, sexual knowledge and experiences, academic and cognitive functioning, and mental health.

Sex offenders have more schizoid, obsessive-compulsive, and avoidant traits, and fewer antisocial traits compared with non-sex offenders. Elderly sex offenders and non-sex-offenders have similar prevalence rates of mental illness. However, elderly sex offenders have increased schizoid, obsessive-compulsive, and avoidant personality traits, supporting the view that sex offending in the elderly is associated more with personality factors than mental illness or organic brain disease.

Sex offenders displayed high rates of mental illness, substance abuse, paraphilias, personality disorders, and comorbidity among these conditions. Sex offenders with paraphilias had significantly higher rates of certain types of mental illness and avoidant personality disorder. Most of those with psychiatric morbidity targeted children and had antisocial or impulsive personality disorder.

The Bible tells us nothing about Amnon and Shechem mental characteristics.

There are several treatment strategies for sexual assault victims as well as for sexual offenders.

The response to Amnon' sexual assault was simple: his half-brother Absalom commanded his men to kill Amnon and the mission was performed "..*Smite Amnon; then kill him, fear nor.. be courageous, and be valiant*.. … *the servants of Absalom did to Amnon as Absalom had commanded. Then all the King's sons arose, and every man rode on his mule, and fled*" (II Samuel 13:28,29). Similarly, Shehem and all men in his community were assassinated "...*Simeon and Levi, Dinah's brethren took each man his sword, and came upon the city boldly, and slew all the males. And they slew Hamor and Shehem his son....*" (34:25,26).

Thus, in ancient times rapists were apparently often killed.

If Biblical Tamar and Dinah had received an appropriate and timely treatment their quality of life could be better.

Just like Tamar and Dinah, the adolescent victims from antiquity, any contemporary adolescent victim of traumatic sexual aggression deserves appropriate assessment and treatment. Moreover, sexual offenders are also candidates for an appropriate treatment.