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Demographic Study on 4,038 Sexual Assault Victims: Identifying Vulnerabilities and Vulnerable Populations with Extralegal Variables

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ABSTRACT

Demographic Study on 4,038 Sexual Assault Victims: Identifying
Vulnerabilities and Vulnerable Populations
with Extralegal Variables

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Sexual assault (SA) is an ongoing concern in the United States (US). With a rate above the national average, SA is especially a concern in the Western state in which this study was conducted. Identifying victim vulnerabilities related to SA is an area of research that is currently limited. In this retrospective study, data on victim vulnerabilities were collected from 4,038 standardized SA forensic medical examination forms. Descriptive statistical analyses were conducted to identify vulnerabilities and Pearson's chi-square tests of association were conducted to explore the relationships between extralegal variables. The extralegal variables represent data not contained within the scope of the law, rather data which pertain to the victim or relationship between victim and suspect. Study findings indicate young women are at highest risk for SA. White women are the largest racial group in the state and, accordingly, had the highest rate of SA. However, some racial minorities, including Native American and African American, were found to potentially be at higher risk per capita. A substantial number of SA victims reported having medical problems, and the number of SA victims who reported having a mental illness was double the per capita rate. Victims are most commonly assaulted by an acquaintance. Consumption of drugs or alcohol by the victim or suspect was found in a significant number of cases. A potential trend was noted with victims reporting being asleep and awakened to assault. These results identify various aspects of vulnerability to SA and support the argument that sexual predators attack vulnerable individuals. More research is needed to further evaluate the various associations found in this study. Increasing our understanding of SA and associated vulnerabilities will improve the effectiveness of outreach to vulnerable populations by means of education, screening, and preventative programs.

Keywords: rape, sexual assault, vulnerabilities, extralegal variables

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Victimization from violent crimes is an ongoing concern in the United States (US) (Morgan & Kena, 2017). Sexual assault (SA) is among these violent crimes. Current statistics indicate that 321,500 people over the age of 12 are sexually assaulted in the US each year, and one out of every six American women has been the victim of an attempted or completed rape in her lifetime (Morgan & Kena, 2017). However, the incidence of SA may be much higher, as it is estimated that only 11 - 51% of SA's are actually reported (Conley et al., 2017; Larsen, Hilden, & Lidegaard, 2014; Morgan & Kena, 2017; Wolitzky-Taylor et al., 2012). In the Western state where this study was conducted, SA occurrence is higher than the national average, with 28.9% of women disclosing some type of SA during their lifetime, yet only 11.8% reported the assault to authorities (Mitchell & Peterson, 2008).

Despite the overwhelming incidence of SA, few large research studies have explored the extralegal variables of victims[1] and assault factors. Extralegal variables are victim and assault characteristics which are not under the scope of the law at the time of the assault, and include age, race, location of assault, or consumption of drugs or alcohol. By aggregating a large pool of extralegal data on victim and assault characteristics, specific factors associated with increased vulnerabilities for SA can be determined, resulting in greater understanding of the social phenomena of SA. Additionally, identifying vulnerable individuals aids in the development of SA prevention programs. The purpose of this study was to use extralegal data obtained from the forensic medical examination of 4,038 SA victims to identify vulnerable populations for SA.

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[1] As the information from this retrospective study was obtained from sexual assault examination forms, the terms of "victim" and "patient" are used interchangeably.

Background

Process of Medical Examination for SA Victims

Forensic medical examinations for SA victims are available in most areas of the US if assaults are reported within five to seven days of the assault. The primary goal of forensic medical examinations is to provide compassionate care to victims while addressing their health care needs. In addition, forensic examiners identify, treat and document injuries; administer medications to prevent sexually transmitted infections and pregnancy; collect forensic evidence; and preserve DNA evidence within a sexual assault kit (SAK). Also, victims are given the option to have forensic evidence collected in a SAK to develop suspect profiles through deoxyribonucleic acid (DNA) analysis.

Trained forensic medical examiners, generally a sexual assault nurse examiner (SANE), collects the evidence and document patient's conditions and circumstances surrounding the event. Physical evidence is packaged in a standardized SAK, which is then entrusted to law enforcement to be transported to state or private crime laboratories for analysis. The SA examination form includes the patient's health history, narrative of assault, suspect description and relationship, categorization of assaultive acts, description of physical and anogenital injuries, and provided treatment.

Previous Studies on Extralegal Data

Although limited, several large studies have evaluated extralegal data to identify vulnerable individuals for SA. The most inclusive study was conducted in Denmark and examined 2,541 female cases over a ten-year period (Larsen et al., 2014). Larsen and colleagues found young age to be a risk factor for SA, with two-thirds of the studied victims between the ages of 15 and 24 years. They also found that the majority of the female victims had known their

suspects intimately or had met them previously within 24 hours of the assault (Larsen et al., 2014).

Another study evaluating extralegal data was conducted in Louisiana. A review of emergency department records of 1,172 victims between 2000 – 2004 with a chief complaint of SA revealed that 92.6% were female (Avegno, Mills, & Mills, 2009). Another extralegal finding from this study was that 54% of victims reported involvement of drugs or alcohol in the SA (Avegno, Mills, & Mills, 2009). In addition, Avegno and colleagues found the mean age of victims to be 27, with 52% reported knowing the assailant.

Past studies (Avegno, Mills, & Mills, 2009; Larsen et al., 2014) provided valuable insights on the extralegal variables to identify victim vulnerabilities. However, more information using extralegal data to identify populations at risk for SA is needed.

Methodology

Design

The study was a descriptive, retrospective chart review in which extralegal data were collected and analyzed from the hard copy charts of SA examination forms, and are standardized throughout the state.

Sample

The following criteria yielded a sample size of 4,038. The sample consisted of SA cases that occurred from January 1, 2010 through December 31, 2016. The inclusion criteria consisted of the following: (a) the victim was 14 years or older at the time of the SA, (b) the victim completed a full forensic examination with both a written history and SAK evidence collection, (c) the assault occurred within one of the examined sites, and (d) the victim wanted to interview with law enforcement with intent of case prosecution. The age of 14 was selected as the

minimum age for this study based on the national sexual assault examination protocol. The

protocol groups adolescents (over the age of 14 years) with adults regarding their health rights to

obtain a forensic medical examination following sexual assault (United States Department of

Justice Office on Violence Against Women, 2013). Data were collected from SA examination

forms from eight counties, representing 78% of this Western state's population.

Setting

The study was conducted in a Western state including urban, suburban, and rural areas.

The general population of the state increased from 2,763,889 in 2010 to 3,051,217 in 2016

(United States Census Bureau, 2016). The jurisdiction of the various sites included in the study

covered 78% of the state's total population. The state is primarily white (78.3%) and is 49.7%

female (United States Census Bureau, 2017). The SA rate for this Western state has been found

to be 10% higher than the national average with all other forms of violent crime falling below the

national average (Mitchell & Peterson, 2008). The Federal Bureau of Investigations (FBI)

Uniform Crime Reports indicate that the state has had SA rates higher than the national average

since 1991. For example, in 2015 the state had a SA rate of 54.9 compared to 38.6 (rate per

100,000 individuals) in the United States in 2015 (Federal Bureau of Investigations, 2015).

Procedures

Prior to beginning the study, institutional review board (IRB) approval was obtained from

two Human Subject committees, a university committee and a healthcare corporation committee.

All data for this study were obtained directly from the hard copy charts of the SA examination

forms which had been completed by the health care professionals who performed the SA

examinations. Each SA case was assigned a unique identification number to enable de-

identification of the data. A small group comprised of the principal investigator, three additional

researchers, and three trained research assistants coded the SA data together to promote

consistency. Cohen's kappa was calculated at >.955 indicating high reliability of the data. Study

data were coded into Statistical Package for the Social Sciences (SPSS 22.0) software for

statistical analysis.

Variables

Each of the following variables were obtained retrospectively from the hard copy charts

completed at the time of the sexual assault examination: gender, age, race, current medical

problems, self-disclosure of use of medications, relationship between the victim and suspect,

location of the assault, and victim and/or suspect use of drugs or alcohol prior to the assault. On

each chart, the examiner marked "male" or "female" for gender. Variations of these two

genders, such as transgender, were noted here accordingly. Gender information was derived

from the physical examination documentation when the patient's gender was not marked. The

age of the victim was derived from the victim's listed date of birth. However, the charts also

included a separate space exclusively for listing age. If a discrepancy was noted, the date of

birth overruled the listed age. For the victim's race, the examiner would solicit and then record

the victim's response. On the SA examination forms, race categories included the following:

White, Black, Hispanic, Asian/Pacific Islander, American Indian, or other.

Medical problems were identified by the examiner asking patients if they had any current

medical problems. The examiner then listed on the form medical problems identified by the

patient. The recorded responses were later separated by the coding team into various categories

including current medical problem, chronic illness, and mental illness (MI). Current medical

problems were further separated into categories based upon health systems and chronic

conditions. Patients were asked if they were presently taking any medications and responses

were recorded. Psychotropic medications listed in the SA examination forms were later coded into their respective drug classifications.

For documenting the relationship between the victim and suspect, the options included stranger, acquaintance, spouse/partner, and other. In January 2016, ex-boyfriend was added to the state standardized SA examination form due to the high volume of this response under "other" and was added as a category in this study. For the location of the assault, the options included house/apartment, car, outside, and other.

The examiner would ask the victim if he or she had used drugs or alcohol before the assault. The examiner would then follow this question by asking if he or she was aware of the suspect using drugs or alcohol before the assault. Either question would be noted as yes, no, or unknown, and would include a description of affirmative responses. The volume of drugs or alcohol consumed by the suspect and/or victim was not quantified in the SA examination form.

The variable for the victim being asleep and awakening to assault was obtained solely from the narrative portion of the SA examination form (Appendix A). This required documentation by the examiner of the victim specifically recounting being asleep, and then being awakened by the SA act. Otherwise, this variable was recorded as negative.

Data Analysis

Data from the SA examination forms were coded and entered directly into the SPSS database. Once the data entries were completed, the data were cleaned and computed into descriptive statistics utilizing the SPSS software. Descriptive statistics for categorical variables were reported in the form of percentages, while descriptive statistics for continuous variables included mean, median, mode, range, and percentiles. Pearson's chi-square test of association was used to analyze the relationships between variables of interest.

Results

The extralegal variables explored in this study included the following: gender, age, race, current medical problems, chronic physical illness, self-disclosure of mental illness (MI), self-disclosure of psychotropic medications use, relationship between the victim and suspect, location of assault, victim and/or suspect use of drugs or alcohol prior to the assault, and victim asleep and awakened to assault.

Victim demographic information indicated that victims were predominately female (95.3%) with only 4.6% being male. The age of the victims ranged from 14 to 93, with the mean age being 27, the median age was 24, and the mode age was 18. Three-fourths of the victims fell between the ages of 14 and 33.   The majority of the victims were white (78.8%), which is reflective of the demographic layout of the study's overall population (Table 1).

Victims' physical and mental health variables included the following: 45.6% of victims reported current medical problems with 41% categorize as chronic medical problems, and 46% self-disclosed MI or use of psychotropic medications. Measuring self-disclosure of MI and/or the use of psychotropic medications was the most reliable method to determine the presence and frequency of MI amongst patients, as some patients self-disclosed mental illness while others reported use of psychotropic medications. As separate categories, 39.4% of victims reported MI and 40.6% reported currently taking psychotropic medication(s).

The victim's relationship with the suspect was determined as well as the location wherein the assault occurred. Victims were most frequently assaulted by acquaintances (58.6%), followed by strangers (19.4%), spouses or partners (7.1%), ex-boyfriends (5.5%), other (5%), and unknown (4%). Within the category of "other" for relationship between suspect and victim, the suspects were either family members or individuals with authority over patients (i.e. teachers,

work supervisors). Victims often reported "unknown" for suspect relationship if they were

unconscious during the assault. Most victims (62.6%) were assaulted in a house or apartment.

Other locations reported included outside (10.2%), car (8.1%), other (14.6%), and unknown

(4.3%).

Use of alcohol or drugs by the patient or suspect was found to be common, including

54% of the cases (Table 2). Of note, patients often did not know if the suspect had used drugs or

alcohol, with a high proportion of "unknown" responses listed (26.5% for alcohol use and 39.5%

for drug use).

Regarding victim asleep and awakened to assault, 13.2% of victims specifically

mentioned being asleep and awakened to assault in the narrative portion of the SA examination

form. Pearson's chi-square tests of independence were performed to examine the association

between the victim being asleep and awakening to assault and the following variables: self-

disclosure of MI or use of psychotropic medications; suspected drug facilitated assault; patient

use of drugs before assault; patient use of alcohol before assault; and having multiple suspects.

Victims being asleep and awakened to assaults was highly associated with each of these

variables ($p < .000$) (Table 3).

Discussion

Results show there is a high percentage of females compared to males victimized by SA

(Table 1). The low percentage of males in the study population may reflect the low reporting

rates of male victims (Kimmerling, Rellini, Kelly, Judson, & Learman, 2002). Yet, multiple

studies have consistently shown the prevalence of female victims, accounting for over 90% of

SA occurrences (Avegno et al., 2009; Janisch et al., 2010; Zilkens et al., 2017). Women,

therefore, are more vulnerable to being sexually assaulted than men, generally by male perpetrators.

Results of the study indicated that 75% of victims were under the age of 33, with the most common age being 18. This finding parallels the results of Avegno and colleagues (2007) who found the average age of assault to be 27, and the most common age to be 24. Likewise, Larsen et al. (2014) found that out of the 2,541 victim cases reviewed in the Denmark study, two-thirds of victims were between the ages 15 and 24 years. These patterns of SA occurring at younger ages would suggest that there is likely to be a decreased risk for SA as females enter into their 30's. However, in this study the maximum age at the time of assault was 93 years, indicating that females have higher rates of sexual assault across their lifespan.

The finding of the most prevalent victim race being white (78.8%) parallels with the demographic profile of the study site (United States Census Bureau, 2017) as well as with similar studies performed in the US (Grossman & Lundy, 2008). However, there was an increased proportion of SA victims within the Native American and Black American racial groups. The state wherein this study was conducted is comprised of 1.6% Native American and 1.4% Black American (United States Census Bureau, 2017). The presence of these minority groups experiencing sexual assault is proportionally higher, with 2.7% being Native American and 3.4% being African American. This difference suggests that these minority groups have approximately double the risk of SA to that of other racial groups. For Native Americans, this finding is consistent with national findings, which indicate that Native American women are at higher risk for SA than white women, and that 56% of Native American women have experienced sexual violence (National Institute of Justice, 2016; Perry, 2004; Rosay, 2016). Studies evaluating SA risk with a more inclusive range of minority groups have shown mixed

results. One study found that being in a minority group doubled the risk for physical assault, but

did not increase risk for sexual assault (Acierno, Resnick, Kilpatrick, Saunders, & Best, 1999).

A study conducted in a more culturally diverse setting found SA frequencies among various

racial groups were similar to the demographic findings of the study's location (Avegno et al.,

2009; United States Census Bureau, 2017). Another study conducted in Virginia in 2005

surveyed 1,769 residents and found occurrence rates to be similar among different racial groups

(Masho, Odor, & Adera, 2005). This study did not evaluate the impact of race on the frequency

of reporting SA. Overall, studies on the risk factor of race are limited and more studies are

needed.

Regarding medical problems reported by patients at the time of the examination, 45.6%

of victims reported a current medical problem with 41% categorized as a chronic medical

problem. With 75% of SA victims being between ages 14 and 33 years, the previously

mentioned findings display a notable association between both acute and chronic medical

problems and SA occurrence. A similar connection was identified in one study, which found

that women with a perceived poor health status had a lifetime risk of SA 2.7 times greater than

that of healthy women (Masho et al., 2005). SA amongst those with chronic physical illness has

been studied but has been limited to individuals with physical disabilities (Grossman & Lundy,

2008). Because of the strength of the association between acute physical illness and SA, this

finding is of significant interest. Unfortunately, this SA risk factor has not been explored in

other studies at this current time.

As with physical illness, there is an apparent relationship between SA and having some

form of mental illness (MI). The finding of 46% of SA victims disclosing MI or use of

psychotropic medications is more than double the MI prevalence rate per capita (22%) in the

state (Substance Abuse and Mental Health Services Administration, 2014). On the SA

examination form, there is no specific solicitation prompt or space designated solely for

recording MI. Thus, it is possible that some victims or examiners may have omitted this

information, and the presence of MI within the SA victim population is higher than 46%. The

relationship between MI and SA has been noted in other studies, including one study that

discovered MI was present at the time of assault in 40% of the victims (Zilkens et al., 2017).

Another study involving sexually assaulted homeless women also concluded that poor mental

health and low self-esteem are risk factors for future sexual victimization among adult women

(Hudson et al., 2010). Varying severity levels of MI amongst SA victims were not able to be

determined in our study.

The results regarding the relationship between the victim and suspect demonstrate that

the victim usually knows the suspect, most commonly as a friend or acquaintance. A similar

study found that almost half of victims had an intimate knowledge of the suspect; either current

or former boyfriend, family member or someone they considered a friend (Larsen et al., 2014).

Another study's findings supported the results of this study with over half of the SA victims

knowing the suspect (Avegno et al., 2009). The percentage of SA by current partners was

similar to that of former partners, primarily ex-boyfriends, indicating that women may be as

vulnerable to SA from ex-partners as current partners. Interaction with former partners is a

potential source of vulnerability that has not been distinguished previously in other studies.

The results of our study, as shown in other studies, suggest that the most common

location of assault is within a home or apartment (Grossman & Lundy, 2008; Janisch et al.,

2010). It is unknown in this study whether the occurrence is more often in the victim's home,

the suspects home, or in a house in general. Larsen et al., (2014) found that victims who know

the suspect are more likely to be assaulted in his or her own home or in the home of the suspect. This finding is paralleled in our own study, with the majority of assaults occurring in a home or in an apartment and by an acquaintance. However, more research is needed to further evaluate these associations.

The results of this study show a strong connection between SA and the use of drugs and/or alcohol. Study findings revealed that victims reported consuming alcohol in 42% of SA cases. Alcohol may increase vulnerability to SA, not only because it is physically debilitating, but also because it hinders one's ability to perceive and appropriately respond to situations (Larsen et al., 2014). A 2014 study found that nearly half of women involved in SA had consumed five or more units (8g ethanol/unit) of alcohol that day (Larsen et al., 2014). The use of drugs or alcohol by the suspect also has significant presence among SA cases. Our findings suggest that suspects are influenced by alcohol 35% of the time, and drugs 15% of the time. Our study was limited to only the victim's perspective, which resulted in a large percentage of unknown responses regarding suspects' use of drugs or alcohol. Another study similarly found that 43.2% of suspects claimed to be under the influence of alcohol at the time of the assault (Janisch et al., 2010).

Asleep and awakened to assault is a variable not addressed by previous studies. Yet, in this study, this type of event was repeatedly reported by SA victims. The SA examination form did not provide a prompt documenting the awakening from sleep to being sexually assaulted. Yet, 13% of victims recounted in their narrative being awakened from sleep to being assaulted, suggesting a possible vulnerability for SA. Predators prey on vulnerable individuals, and sleeping individuals are vulnerable to SA. The sedative effect of psychotropic medications is possibly related to the association found between awakening to SA and individuals who use

psychotropic medications. Sleeping individuals are more likely to be assaulted by multiple suspects than individuals who are awake during the assault. Perhaps perpetrators work together to incapacitate a victim, and then take turns assaulting him or her. Additional studies need to be conducted to further explore and validate this SA vulnerability.

Limitations

Due to the retrospective nature of this study, the information in this study is solely dependent on documentation from the SA examination forms. Much of the documentation is based on the responses from the individual victims and is therefore subjective in nature. Additionally, the accuracy and thoroughness of the documentation is dependent upon the examiner who is recording the victim's responses. Also, the design of the SA examination forms may have affected certain data such as in the omittance of questions specifically targeting the presence of MI, the use of psychotropic medications, and victim asleep and awakened to assault. These omissions decreased the patient reporting in these categories. Furthermore, this study was conducted in a state where the population is primarily white, resulting in the findings not representing more diverse populations.

Recommendations

Several recommendations can be made based on the findings of this study regarding vulnerabilities for SA through examination of extralegal variables. In identifying vulnerabilities, the focus is on improving our understanding of SA to decrease the occurrence. The vulnerabilities should not be interpreted as victim characteristics which victims should modify, as this results in victim blaming. Rather, identifying vulnerabilities provides insight into vulnerable individuals and populations targeted by SA perpetrators. Additionally, identifying vulnerable individuals and populations is helpful when developing SA community prevention

programs. SA prevention groups and efforts need to be focused on younger women of every

racial group, including Native Americans, Black Americans, and other racial minorities that may

be at higher risk. Women need safe activities and environments where they can safely socialize.

Promoting awareness that acquaintances are the most common suspect relationships may be

helpful in protecting victims against SA. Advocating awareness of SA vulnerabilities in the

community would be beneficial in providing funds and other necessary resources desperately

needed to aide in SA prevention. The findings from this study were shared with the state health

department, which oversees SA prevention programs.

Study findings suggest that many SA victims are already in the health care system due to

chronic and acute medical health conditions. Implementing a history of SA screening process in

the health care settings would be an effective way to identify and address the unique needs of SA

victims. General screening would also increase awareness among healthcare providers who are

seeing young women potentially before and after SA occurs.

The high prevalence of MI in SA victims underscores the need for primary and mental

health care practitioners to adequately screen patients for sexual violence and provide

appropriate support and resources to victims. Therefore, primary and mental health care

providers need to be informed about SA vulnerabilities, screening measures, and available

referral options for patients with history of SA. While targeting these efforts toward younger

women who are most vulnerable, it is important to continue providing support and resources to

women in all stages in life.

Conclusion

Several vulnerabilities for SA were identified through this study. Women in their late

teens and early twenties are at the highest risk for sexual assault. Racial minority groups,

including Native Americans and Black Americans, could potentially be at significantly higher

risk for SA; however, more studies are needed to support this conclusion. Additionally, patients

with physical and mental illnesses appear to have increased vulnerability for SA. Current

research regarding acute and chronic physical illness and SA is limited. Women are much more

likely to be sexually assaulted by someone with whom they are already acquainted and within a

home. Vulnerability to SA is associated with the use of drugs and/or alcohol as well as being

around potential perpetrators who are using drugs and/or alcohol. Being asleep in the presence

of potential predators also seems to play a significant role in increasing vulnerability to SA. The

findings from this study on SA vulnerabilities are critically important in better understanding the

devastating phenomena of SA and in developing measures to decrease SA in our society.

References

Acierno, R., Resnick, H., Kilpatrick, D. G., Saunders, B., & Best, C. L. (1999). Risk factors for rape, physical assault, and posttraumatic stress disorder in women: Examination of differential multivariate relationships. *Journal of Anxiety Disorders*, *13*(6), 541-563. doi.org/10.1016/S0887-6185(99)00030-4

Avegno, J., Mills, T. J., & Mills, L. D. (2009). Sexual assault victims in the emergency department: Analysis by demographic and event characteristics. *The Journal of Emergency Medicine*, *37*, 328-334. doi.org/10.1016/j.jemermed.2007.10.025

Conley, A. H., Overstreet, C. M., Hawn, S. E., Kendler, K. S., Dick, D. M., & Amstadter, A. B. (2017). Prevalence and predictors of sexual assault among a college sample. *Journal of American College Health*, *65*(1), 41-49. doi.org/10.1080/07448481.2016.1235578

Federal Bureau of Investigations, (2015). FBI: UCR 2015 crime in the United States. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2015/crime-in-the-u.s.-2015/tables/table-1

Grossman, S. F., & Lundy, M. (2008). Double jeopardy: A comparison of persons with and without disabilities who were victims of sexual abuse and/or sexual assault. *Journal of Social Work in Disability & Rehabilitation*, *7*(1), 19-46. doi.org/10.1080/15367100802009715

Hudson, A. L., Wright, K., Bhattacharya, D., Sinha, K., Nyamathis, A., & Marfisee, M. (2010). Correlates of adult assault among homeless women. *Journal of Health Care for the Poor and Underserved*, *21*, 1250-1262. doi.org/10.1353/hpu.2010.0931

Janisch, S., Meyer, H., Germerott, T., Albrecht, U., Schulz, Y., & Debertin, A. S. (2010, February 25). Analysis of clinical forensic examination reports on sexual assault. *International Journal of Legal Med*, *124*, 227-235. doi.org/10.1007/s00414-010-0430-z

Kimmerling, R., Rellini, A., Kelly, V., Judson, P. L., & Learman, L. A. (2002, May). Gender

differences in victim and crime characteristics of sexual assaults. *Journal of*

Interpersonal Violence, *17*, 526-532. doi.org/10.1177/0886260502017005003

Larsen, M., Hilden, M., & Lidegaard (2014). Sexual assault: A descriptive study of 2500 female

victims over a 10-year period. *Royal College of Obstetricians and Gynaecologists*, *122*,

577-584. doi.org/10.1111/1471-0528.13093

Masho, S. W., Odor, R. K., & Adera, T. (2005). Sexual assault in Virginia: A population-based

study. *Women's Health Issues*, *15*, 157-166. doi.org/10.1016/j.whi.2005.04.001

Mitchell, C., & Peterson, B. (2008). *Rape in Utah 2007: A survey of Utah women*. Retrieved

from https://justice.utah.gov/Documents/Research/SexOffender/RapeinUtah2007.pdf

Morgan, R. E., & Kena, G. (2017). *Criminal victimization, 2016* (NJC 251150). Retrieved from

https://www.bjs.gov/content/pub/pdf/cv16.pdf

National Institute of Justice. (2016). *Five things about violence against American Indian and*

Alaska Native women and men. Retrieved from www.nij.gov/five-things/Pages/violence-

against-american-indian-and-alaska-native-women-and-men.aspx#three

Perry, S. W. (2004). *A BJS statistical profile, 1992-2002: American Indians and crime* (NCJ

203097). Retrieved from https://www.bjs.gov/content/pub/pdf/aic02.pdf

Rosay, A. B. (2016). *Violence against American Indian and Alaska Native women and men:*

2010 findings from the National Intimate Partner and Sexual Violence Survey (NCJ

249736). Retrieved from https://www.ncjrs.gov/pdffiles1/nij/249736.pdf

Substance Abuse and Mental Health Services Administration. (2014). The NSDUH report: State

estimates of adult mental illness from the 2011 and 2012 national surveys on drug use

and health. Retrieved from https://www.samhsa.gov/data/sites/default/files/sr170-mental-

illness-state-estimates-2014/sr170-mental-illness-state-estimates-2014/sr170-mental-illness-state-estimates-2014.htm

United States Census Bureau. (2016). 2016 American community survey 1-year estimates. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_1YR_B01003&prodType=table

United States Census Bureau. (2017). *Quick facts: New Orleans city, Louisiana*. Retrieved from https://www.census.gov/quickfacts/fact/table/neworleanscitylouisiana/INC110216

United States Census Bureau. (2017). *Quick facts: Utah*. Retrieved from https://www.census.gov/quickfacts/UT

United States Department of Justice Office on Violence Against Women. (2013). A national protocol for sexual assault medical forensic examinations: Adults/adolescents second edition (NCJ 228119). Retrieved from https://nicic.gov/national-protocol-sexual-assault-medical-forensic-examinations-adultsadolescents-second-edition

Wolitzky-Taylor, K. B., Resnick, H. S., Amstadter, A. B., McCauley, J. L., Ruggiero, K. J., & Kilpatrick, D. G. (2012, August 1). Reporting rape in a national sample of college women. *Journal of American College Health*, *59*, 582-587. doi.org/10.1080/07448481.2010.515634

Zilkens, R. R., Smith, D. A., Kelly, M. C., Mukhtar, S. A., Semmens, J. B., & Phillips, M. A. (2017). Sexual assault and general body injuries: A detailed cross-sectional Australian study of 1163 women. *Forensic Science International*, *279*, 112-120. doi.org/10.1016/j.forsciint.2017.08.001

Table 1

SA Victim Demographics: 2010 – 2016, n=4,038

Gender		
Female	95.3%	
Male	4.6%	
Transgender – Male to Female	0.1%	
Age		
Mean	27	
Median	24	
Mode	18	
Minimum	14	
Maximum	93	
25th Percentile	14 – 19	
50th Percentile	14 – 24	
75th Percentile	14 – 33	
Race	Victims	Western State
White	78.8%	78.5%
Black	3.4%	1.4%
Hispanic	11.4%	14.0%
Asian/Pacific Islander	1.8%	3.6%
American Indian	2.7%	1.5%
Other	0.9%	1.0%

Table 2

Use of Alcohol/Drugs by Patient and/or Suspect

	Yes	No	Unknown
Patient Alcohol Use	42.4%	56.6%	1.0%
Patient Drug Use	13.4%	85.3%	1.2%
Suspect Alcohol Use	34.8%	27.1%	26.5%
Suspect Drug Use	15.4%	45.1%	39.5%
Patient/Suspect Alcohol or Drug Use	53.7%	19.9%	26.5%

Table 3

Associations between Victim Asleep and Awakened to Assault and Other Variables

Association	Chi-Square Value	DF	P value
Self-disclosure MI or use of psychotropic meds	252.624	4	.000
Suspected-drug facilitated assault	323.624	4	.000
Patient used drugs before assault	762.352	4	.000
Patient used alcohol before assault	760.004	4	.000
Multiple suspects	152.719	4	.000

Appendix A

State of Utah
Sexual Assault Examination

_____
Patient's Name

Preliminary Report of History and Findings
Revised 1/11

Male/Female DOB: _____ Age: _____ Date of examination: _____ Time examination started: _____
Race: ☐ White ☐ Black ☐ Hispanic ☐ Asian/Pacific Islander ☐ American Indian ☐ Other _____
Person assisting with the examination:_____
Location of Exam: _____
Who Requested Examination: _____
Law Enforcement Agency: _____ LE Case No: _____
Agency Case Number: (SANE, Hospital, CJC, etc) _____
Does the patient have a guardian who must legally consent for the examination? ☐ yes ☐ no

PATIENT COMPLAINT
Chief Complaint_____
Patient complaining of pain or injury ☐ no, or describe:_____
_____
_____

MEDICAL HISTORY
Current Medication(s): ☐ no or list _____
Allergies to Medication: ☐ no or list _____
Current medical problems: ☐ no or list _____
Any surgeries/Medical Procedures: ☐ no or list _____
_____
Tetanus: ☐ current ☐ over 10 years ☐ unknown _____
Hepatitis B vaccine: ☐ yes ☐ no ☐ unknown_____
LMP: _____ Age of Menarche: _____ Prior vaginal deliveries: ☐ yes ☐ no _____

Sexual contact within 72 hours of assault: ☐ yes ☐ no, When _____ With (name) _____ Relationship_____
What type?_____

HISTORY OF SEXUAL ASSAULT

Date of assault: _____Time of day: _____
Location: ☐ house/apartment ☐ car ☐ outside ☐ other_____
Brief Summary of assault described by Patient: _____
_____
_____
_____
_____
Surface assault occurred on: _____Name of Suspect/Suspects: _____
Relationship to Suspect: ☐ stranger ☐ acquaintance ☐ spouse/partner ☐ other _____
Race of Suspect: ☐ White ☐ Black ☐ Hispanic ☐ Asian/ Pacific Islander ☐ American Indian ☐ Unknown ☐ other _____
Suspect's dress during assault: ☐ unclothed ☐ clothed. Describe: _____
_____
Patient's dress during assault: ☐ unclothed ☐ clothed. Describe: _____
_____

Suspect's actions:	Yes	No	Unknown	Description
Weapon:	☐	☐	☐	_____
Grabbed/held:	☐	☐	☐	_____
Physical blows:	☐	☐	☐	_____
Strangled (Choked):	☐	☐	☐	_____
Restraints:	☐	☐	☐	_____
Burned:	☐	☐	☐	_____

State of Utah
Sexual Assault Examination
Other: ☐ ☐ ☐

_____
Patient's Name

_____

INDICATORS OF DRUG FACILITATED SEXUAL ASSUALT

Patient provided with food, drink, drugs prior to assault by suspect(s)? ☐ no; if yes describe: _____

_____

Patient used drugs/alcohol before assault? ☐ no, if yes describe:_____

_____

Suspect used alcohol/drugs near time of assault: ☐ no ☐ unknown, if yes describe _____

Patient lost consciousness/awareness: ☐ no, if yes descaribe _____

NATURE OF SEXUAL ASSAULT

Was There Contact with _Patient's_ Vagina by:

	Yes	No	Unknown
Penis/Genitals	☐	☐	☐
Finger/Hand	☐	☐	☐
Mouth/Tongue	☐	☐	☐
Object	☐	☐	☐

Describe object _____

Was There Contact with _Patient's_ anus by:

	Yes	No	Unknown
Penis/Genitals	☐	☐	☐
Finger/Hand	☐	☐	☐
Mouth/Tongue	☐	☐	☐
Object	☐	☐	☐

Describe object_____

Was There Contact with _Patient's_ Penis by

	Yes	No	Unknown
Genitals	☐	☐	☐
Finger/Hand	☐	☐	☐
Mouth/Tongue	☐	☐	☐
Object	☐	☐	☐

Describe object _____

Was There Contact with _Patient's_ Mouth by:

	Yes	No	Unknown
Penis/Genitals	☐	☐	☐
Finger/Hand	☐	☐	☐
Mouth/Tongue	☐	☐	☐
Object	☐	☐	☐

Describe object_____

Did _Suspect's_ mouth contact Patient's:

	Yes	No	Unknown
Genitals	☐	☐	☐
Breasts	☐	☐	☐
Mouth	☐	☐	☐
Other	☐	☐	☐ Specify Sites _____

Ejaculation: ☐ yes ☐ no ☐ unknown: (list where) _____

Condom: ☐ yes ☐ no ☐ unknown _____

Lubrication: ☐ yes ☐ no ☐ unknown: type _____

Suspect washed/cleaned patient: ☐ yes ☐ no ☐ attempted ☐ unknown _____

Suspect injured by patient during assault: ☐ yes ☐ no ☐ unknown _____

If yes, explain _____

POST ASSAULT ACTIONS BY PATIENT (circle and check all that apply)

	Yes	No	Unknown		Yes	No	Unknown
Urinated	☐	☐	☐	Brushed Teeth	☐	☐	☐
Defecated	☐	☐	☐	Bathed/Showered	☐	☐	☐
Douched	☐	☐	☐	Genital Wipe/Wash	☐	☐	☐
Vomited	☐	☐	☐	Changed clothing	☐	☐	☐
Gargled/Rinsed	☐	☐	☐	Removed/Inserted Tampon/Pad/Diaphragm	☐	☐	☐

State of Utah _____   _____
Sexual Assault Examination   *Patient's Name*

GENERAL PHYSICAL EXAMINATION
(DIAGRAM AND CHART ALL OBSERVABLE INJURIES)

Describe general demeanor/appearance:

_____
_____
_____
_____
_____
_____
_____
_____

Did patient appear to have any physical or mental impairment ☐ no. If yes, describe_____
_____

	CHECK IF NORMAL OR NO TRAUMA	DESCRIBE ABNORMAL/TRAUMA FINDINGS (Use diagrams to document findings)
HEAD (EENT)		
NECK		
BREASTS		
CHEST/BACK		
ABDOMEN		
EXTREMITIES		
OTHER		

State of Utah
Sexual Assault Examination

_____
Patient's Name
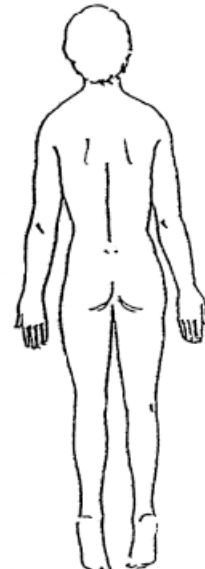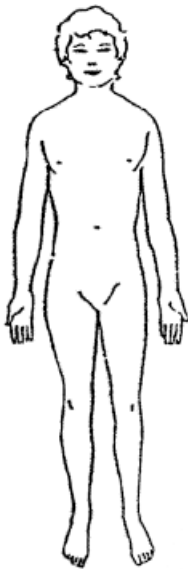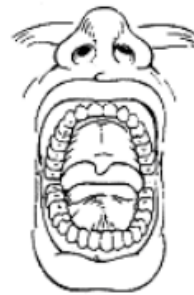
FEMALE ADOLESCENT/ADULT ANOGENITAL EXAMINATION
(DIAGRAM AND CHART ALL OBSERVABLE INJURIES!)

	CHECK IF NORMAL/ OR NO TRAUMA	DESCRIBE ABNORMAL/TRAUMA FINDINGS
INNER THIGHS		
VULVA		
CLITORAL HOOD/CLITORIS		
LABIA MAJORA		
LABIA MINORA		
PERIURETHRAL TISSUE And URETHRA		
PERIHYMENAL TISSUE		
HYMEN		
VAGINA/CERVIX		
FOSSA NAVICULARIS		
POSTERIOR FOURCHETTE		
PERINEUM		
ANAL/RECTAL		

State of Utah _____   _____

Sexual Assault Examination   *Patient's Name*

LABORATORY/FORENSIC SPECIMENS COLLECTED

	Yes	No			SWABS
Blood-Purple Top (serology)	☐	☐ Time_____	Oral	☐ yes ☐ no	
Blood-Grey Top (tox)	☐	☐ Time_____	Perineal	☐ yes ☐ no	
Urine (tox)	☐	☐ Time_____	Vaginal	☐ yes ☐ no	
Head hair standard	☐	☐	Cervical	☐ yes ☐ no	
Pubic hair standard	☐	☐	Anal	☐ yes ☐ no	
Pubic hair combing	☐	☐	Rectal	☐ yes ☐ no	
Matted pubic hair	☐	☐	Penile	☐ yes ☐ no	
Fingernail scraping	☐	☐	External stains	☐ yes ☐ no Location_____	

Debris: ☐ no ☐ yes. Describe _____

_____

Control Stain ☐ yes ☐ no Location_____
Bite ☐ yes ☐ no Location_____
Control Bite ☐ yes ☐ no Location_____

Patient's clothing collected: ☐ yes ☐ no

Describe_____

_____

Other ☐ yes ☐ no Location_____
Other ☐ yes ☐ no Location_____

Other specimens: ☐ yes ☐ no

Describe: _____

Other ☐ yes ☐ no Location_____

_____

Anal/genital photo-documentation: ☐ yes ☐ no   Additional Dictation/Documentation: ☐ yes ☐ no

Other photo-documentation: ☐ yes ☐ no   Toluidine Blue 1% Dye used: ☐ yes ☐ no

MEDICAL LABORATORY TESTS PERFORMED

NOTE: Cultures should only be collected after the forensic evidence has been collected.

CULTURES	GONORRHEA		CHLAMYDIA		SEROLOGY TESTING		
	Yes	No	Yes	No		Yes	No
Genital	☐	☐	☐	☐	Syphilis	☐	☐
Vaginal	☐	☐	☐	☐	HIV	☐	☐
Cervical	☐	☐	☐	☐	Hepatitis B	☐	☐
Rectal	☐	☐	☐	☐	Hepatitis C	☐	☐
Penile/Urethra	☐	☐	☐	☐	Other tests_____		
Other_____					Pregnancy Test: Blood ☐ Urine ☐		
Wet mount	☐ yes ☐ no				Results: Positive___ Negative___		

Time when the examination was completed: _____

MEDICATIONS GIVEN

ANTIBIOTICS:_____

_____

EMERGENCY CONTRACEPTON: _____

_____

OTHER MEDICATIONS: _____

_____

COMMUNITY REFERALS/INSTRUCTIONS: ☐ yes ☐ no _____

_____

ADULT PROTECTIVE SERVICES NOTIFIED: ☐ yes ☐ no   **CHILD PROTECTIVE SERVICES NOTIFIED:** ☐ yes ☐ no
LAW ENFORCEMENT AGENCY NOTIFIED: ☐ yes ☐ no

Printed Name of Examiner: _____

Signature of Examiner: _____

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