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Sara Repo

# NURSING CARE OF THE ADULT WOMAN FOLLOWING RAPE

– A systematic literature review



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A systematic literature review was conducted to find ten articles that met the inclusion criteria for this study. This bachelor's thesis examines the current literature related to sexual assault in women and analyzes for content in order to find common themes related to the nursing care of rape survivors. This study focuses on adult female victims of completed rape in an acute care setting.

The main themes comprising effective nursing care for rape survivors were the qualities of the nurse, immediate physical care of the survivor, immediate mental healthcare needs of the survivor, and continuing care for long-term mental health needs of the survivor.

## KEYWORDS:

Rape, sexual assault, nurse examiner, nursing care, mental health, post-traumatic stress disorder, rape victims, rape trauma syndrome, women's health

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ASIASANAT:

raiskaus, mielenterveys, sairaanhoito, naisten terveys

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## **LIST OF ABBREVIATIONS (OR) SYMBOLS**

ASD	Acute Stress Disorder
CINAHL	Cumulative Index to Nursing and Allied Health Literature
ED	Emergency Department
PEP	Post-exposure prophylaxis
PTSD	Post-traumatic Stress Disorder
SA	Sexual Assault
SANE	Sexual Assault Nurse Examiner (sometimes "Expert")

## 1 INTRODUCTION

There are a several strong four letter words in the English language. These words reflect the human experience in its splendor, banality, vulgarity and even evil. But perhaps the four letter word that carries the most weight for many women is RAPE. A brief search of the definition will turn up conflicting answer as to what defines rape.

The etymology of the word *rape* is muddled. The *Oxford English Dictionary*, now considered to be the standard in defining the English language, defines *rape* as “the act of taking something by force;” which was derived from the Latin word *rapere* which means “to seize, carry off by force, plunder;” A more current definition states: “Originally and chiefly: the act or crime, committed by a man, of forcing a woman to have sexual intercourse with him against her will, esp. by means of threats or violence. In later use more generally: the act of forced, non-consenting, or illegal sexual intercourse with another person; sexual violation or assault.” (*Oxford English Dictionary*, online edition at <http://www.oed.com/>).

Rape is a heinous crime of violence in which sex is the weapon. Rape affects people from all nationalities, socioeconomic backgrounds, ages, ethnicities and genders. The vast majority of rape victims are female (97%), although males can also be targets (Zinzow HM, Resnick HS, Barr SC, Danielson CK & Kilpatrick DG. 2012).

Experiencing a rape is detrimental to every aspect of a woman’s life. It can greatly affect social functioning, mental wellbeing, spirituality and physical health. Typical problems experienced by women following a rape include sleep disturbances, emotional outbursts of sadness and anger, gastrointestinal problems, headaches, impaired sexual functioning, substance misuse, disrupted eating patterns and general malaise (Wadsworth P & Van Order P. 2012).

## 1.1 About Sexual Violence

Sexual assault is considered to be the “silent, violent epidemic (Sommers MS & Buschur C, 2004)”. The lifetime risk of attempted or completed rape is estimated to be 20% for women, and 4% for men. Sadly, the percentage of rapes that are ever reported to police is estimated by many studies to be far less than 25%. (Mason F & Lodrick Z. 2013)

Rape is defined in one article as “forced sexual intercourse (vaginal, anal, or oral penetration, including incidents where the penetration is from a foreign object) including both psychological coercion as well as physical force (Sommers MS & Buschur C, 2004, p. 63).” Sexual assault is a broader term that encompasses unwanted touching, verbal threats and attempted rape, as well as completed rape. The United States Department of Justice defines rape as: “The new definition is “the penetration, no matter how slight, or the vagina or anus with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim”. (ACEP 2013).

An accurate tally of rapes is impossible to achieve due to the secretive and sensitive nature of sex crimes, and the large portion of which are unreported (Gökdoğan MR & Bafra J. 2010). It is estimated that in the United States, 65% of rapes are never reported (ACEP 2013).

## 1.2 Consequences of sexual assault

A recent estimate puts the cost of each rape in the United States at approximately \$151,423 USD. These costs include loss of productivity, medical care, mental health care, police and emergency services, victim/social services, property loss/damage, and loss of quality of life for the victim. Roughly half of all rape victims quit or were forced to leave their jobs in the year following their assaults due to the severity of their reactions. In the United States, rape has the highest annual victim costs at over \$127 billion USD per year. (ACEP, 2013, p.15).



One of the most important factors that predict severity of post-trauma symptomatology in any rape victim is the post-trauma response received from the environment. Some situations increase the risk of PTSD in rape survivors, such as when the experience of rape is ignored (deliberately or as a result of people simply not knowing) or minimized, or when the survivor is held responsible for the rape, or met with further violence. Lack of empathy and understanding can reduce the chances for a recovery. (Mason F & Lodrick Z. 2013)

Common physical signs of injury include bruises, erythema and abrasions to various parts of the body. Rape is a crime of violence that uses sex as a weapon. Therefore, injuries are common to parts of the body outside the genital region. Mouth injuries can occur from hitting, punching and forced oral sex. Injuries to extremities can stem from being restrained during the attack and from fighting the attacker. Bite marks, breaks in tissue integrity, ecchymosis (discoloration due to the damage of small blood vessels), abrasions, redness and swelling anywhere on the body must be noted and documented. Clinicians should be careful to inspect the genital region carefully for any signs of forced penetration; these may include bruising, swelling or laceration of the internal and/or external genitalia. Less than a third of rapes involve penetration of the anus, but in any case it is important to check for signs of damage such as pain or anal bleeding. A dishearteningly small percentage of rapes are ever reported, and very few survivors seek medical care. Some estimates place this figure at 17%. (Sommers MS & Buschur C, 2004)

The experience of being raped can have a detrimental effect on every aspect of a woman's life. It is a deep wound that does not necessarily manifest physically. The burden of rape is a heavy one to bear alone, and women deserve holistic and supportive care while they deal with the aftermath of assault.

## **2 PURPOSE, AIM AND RESEARCH QUESTION**

The purpose of this study was to conduct a systematic literature review on the topic of nursing care for adult patients in an acute care setting who have recently experienced sexual assault.

The aim of the study was to examine and disseminate current literature on the topic of nursing care for rape survivors from a global perspective.

### **2.1 Research question**

The research question for this literature review was: what constitutes the nursing care for a woman who has been raped?

## **3 METHOD, DATA COLLECTION AND ANALYSIS**

### **3.1 Systematic literature review**

The Information Age has made research from the around the globe available to everyone with an internet connection. However, this massive amount of data is overwhelming for practitioners and researchers alike. Literature reviews have become essential tools for those who want to keep up with the new evidence that is accumulating in health care fields. Reviews synthesize and criticize existing data retrieved from observational studies and randomized controlled trials. Literature reviews also help to identify areas in which available evidence is lacking or insufficient. Systematic literature reviews produce explicitly formulated, reproducible and up-to-date summaries of the effects of health care interventions. A systematic approach to literature reviews minimizes biases and errors and enables others to achieve similar results using the same methods. (Egger G, Smith GD & Altman DG, 2001, p.3-5)

A systematic literature review process was undertaken in the writing of this thesis in order to minimize bias. The rigorous research methodology included a protocol of thesis review, clear objectives, inclusion criteria of the literature used in this study (i.e. articles), a comprehensive search strategy, an article selection process, comprehensive article analysis and data synthesis.(Bettany-Saltikov J. 2010)

The PICO (population, intervention, comparative intervention, outcomes) technique formed the basis of the articles analyses (Bettany-Saltikov J. 2010). Corresponding topics were: participants/sample size (population), method & data collection (intervention) data analysis (comparative intervention) and main results (outcomes). Author, title and objective were also included so as to clarify the purpose of each article's study.

Randomized trials, observational studies, case studies and qualitative studies were all used so as to add depth to the relevantly broad research topic. A latent content analysis approach was used.

### 3.2 Database search

An electronic database search was conducted in April 2014 using Cumulative Index to Nursing and Allied Health Literature (CINAHL) and Elsevier Science Direct. Search databases were selected according to their ease of use for the researcher and availability through Turku University of Applied Sciences library services.

An initial Boolean search of CINAHL using the terms "rape" "sexual assault" and "nursing" returned 11 results. Of these, 6 were selected by the abstract. 1 was available in full text.

An initial Boolean search of Elsevier Science Direct was more fruitful, yielding over 1000 results using terms "rape" "sexual assault" and "nursing". Results were then refined using the following Inclusion Categories (# of articles in parenthesis) provided on the left side toolbar of the website:

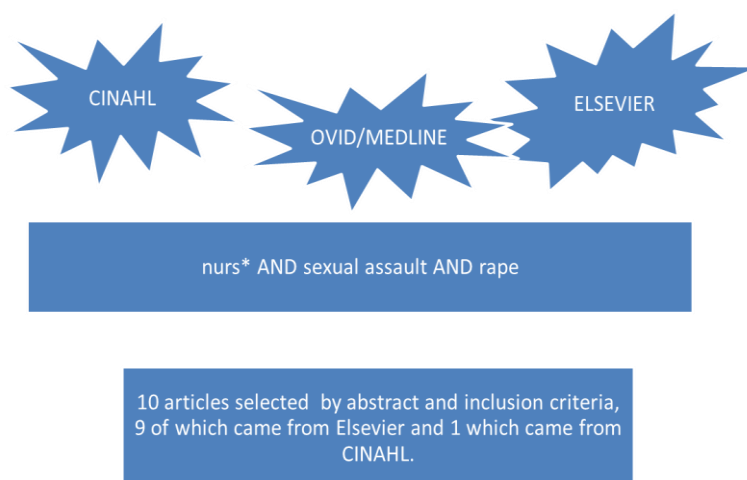
- Publication: Journal article (203)
- Journal/Book Title: Journal of Emergency Nursing (111) Archives of Psychiatric Nursing (30) Journal of Nurse-Midwifery (24) Journal of the Association of Nurses in AIDS Care (14) Journal of Midwifery & Women's Health (13)
- Year: 2000 and younger (96)
- Results were also refined using the following categories:
- Topic: Sexual assault (45) mental health (15)
- Year: 2004 and younger (60)

Publication	Journal title	Year	Topic	Year
Journal article (203)	JEmerNur (111) ArchPschNur (30) JAsNurAIDS (14) Jmidwifery (13)	2000 and younger (96)	Sexual assault (45) mental health (15)	2004 and younger (60)

Picture 1a. Elsevier database search terms and results

Ovid Nursing Database was searched using the term "rape". Selected limits included "English Language" "Full Text" and publication year 2004 – 2014. 64 results were returned. Of the 64 results, 9 were duplicates and only 2 articles were deemed relevant to the study question. Unfortunately neither of these included a study, so they were relegated to background information in this literature review.

Articles were then selected by reading the abstract. A brief content analysis was conducted to determine the relevancy of each article to the study question.



### Picture 2b. Database search process

A second search through Elsevier Science Direct using the terms “rape” “sexual assault” and “nurs\*” yielded 2,129 results. Results were then limited by the following categories (# of articles in parenthesis):

- Publication: Journal (845)
- Topic: sexual assault (105) mental health (19) health care (14)

This yielded a remaining 137 articles, which were then selected by abstract. Several articles (4) selected from the first search appeared again in the second search. An additional 3 articles were collected from the second search.

### 3.3 Inclusion criteria

Nursing care in an acute setting of a sexually assaulted client requires holistic care. There are many aspects to be considered, ranging from the physical collection of evidence in cases of a rape kit to providing emotional support for a woman who is in a fragile mental state. Articles were selected from a variety of sources and each article reflects a different aspect of the nursing care.

Research articles were selected based on the following inclusion criteria:

- The article answered some aspect of the study question
- Published between the years 2000 – 2014

- Article was available in full text in English at no additional cost to the researcher
- Articles were obtained only from peer-reviewed journals related to health care fields
- Article involved nursing practice or nurses
- Article contained a study involving participants\*. Both randomized trials and observational studies were eligible for inclusion.

\*Articles that met all inclusion criteria but did not include a study involving participants were used for background information only, and not included in the analysis of articles.

### 3.4 Data analyses

A latent content analysis was conducted to discover themes common to the articles regarding the nursing care of rape survivors. Content analysis is the process of organizing and combining narrative, qualitative information according to reoccurring themes and concepts. Content analysis can be done using an inductive or deductive analysis process which is comprises of three phases: preparation, organizing, reporting. The main feature is that words of the text are organized into content categories. An inductive approach to content analysis was used in order to develop conclusions from specific observations in lieu of an existing theory. (Polit D.N. & Beck C.T. 2006)

Articles were identified by the first author's name only and the year of publication. Latent content analysis discovered the following themes:

Table 1. Article coding

Article	Themes	Category
Ackerman (2006)	Factors associated with follow-up care in SA survivors	Continuing care both mental and physical
Arend (2013)	Post-exposure prophylaxis in South African SA survivors	Immediate physical care and emotional needs of survivors
Ericksen (2002)	Client's experiences with specialized SA services	Qualities of the nurse, continuing care and emotional support
Jackson (2007)	Midwives' knowledge and attitudes towards patients with SA history	Qualities of the nurse
Martin (2007)	SA survivors in North Carolina physical & mental wellbeing and functional impairment	Continuing care for mental health and long-term somatic problems
McClean (2012)	Acute severe pain as a consequence of SA	Immediate physical needs of the client
Renck (2006)	Psychological stress reactions of women survivors of SA in Sweden	Immediate and long-term mental healthcare needs of client
Stein (2004)	Somatic symptoms and health care utilization among female military veterans linked to SA	Both physical and mental long-term health care needs of SA survivors
Symes (2000)	Emotional recovery of women after rape	Continuing mental healthcare
Woods (2004)	PTSD and somatic symptoms in abused women	Continuing care, need for trauma screening by healthcare personnel

#### 4 NURSING CARE OF THE RAPE VICTIM

Four themes essential to nursing care of the raped woman emerged from latent content analysis. The qualities of the nurse providing care, the physical care of the survivor, the mental healthcare of the survivor and continuing care were common themes throughout the articles.

#### 4.1 Qualities of the nurse

Being respected as a whole person seemed to be of utmost importance to the rape survivors. The words “caring, empathetic, compassionate, and personable” were used to describe the ideal nurse. Other studies have also demonstrated the need for nurses to believe and validate survivors’ accounts of sexual assault (ACEP, 2013).

Specific behaviors of the nurse that were deemed helpful by clients included making eye contact, sitting near the client, not rushing, active listening, and talk that distracted and reassured. Being touched by the nurses, being given options, like having only female care providers, and having the procedures explained to the client enabled the survivors to feel safe in the clinical setting and in control of the process. Women also mentioned the importance of feeling validated in their emotional response to the stressful situation as being normal. (Ericksen et al, 2002)

Another important factor in good nursing care was demonstrated expertise on behalf of the nurse. This was accomplished by maintaining a calm and peaceful demeanor, believing the client and presenting information to the survivor. Follow-up phone calls and referrals to community support groups further contributed to positive experiences for the rape survivors. The nursing presence was described as being the most important encounter following sexual assault for the survivors. (Ericksen et al, 2002)

Arend et al (2013) also found that survivors adhered to post-exposure prophylaxis (PEP) better if the nurses normalized the emotional responses of the survivors at the beginning of treatment. Nurses should reassure clients that the wide range of emotional changes and feelings are normal following an abnormal event, such as rape, and find ways to accommodate medication taking into a daily routine for the PEP-taking period.

Jackson & Fraser (2007) noted that the majority of nurse midwives do not feel confident or comfortable in dealing with a disclosure of sexual assault by a patient. 56% of nurse midwives surveyed did not feel adequately prepared to



deal with a disclosure of sexual abuse, and a further 29% were 'unsure' whether or not they could handle the situation. The study authors noted the possibility of unintentional re-traumatization to the client when the nurses' education is lacking in sufficient education regarding sexuality and sexual assault. This could also cause clients with a rape history to have additional feelings of helplessness during childbirth and delivery when paired with a midwife lacking experience in dealing with such special patients. **Woods SJ & Wineman NM. (2004)**

Woods & Wineman (2004) determined in their research that health care practitioners should assess for a history of sexual trauma in all adult female patients who are high users of health care services and present with multiple nonspecific physical health complaints, as this is often highly correlated with chronic stress resulting from rape.

#### 4.2 Physical care of the survivor

The Arend et al (2013) study demonstrated that "proactive, individualized nursing care could have a significant impact on sexual assault survivors' emotional and psychological outcomes, and it highlighted important opportunities for nurses to enhance the quality of post-sexual assault care and potentially increase the likelihood of survivor PEP adherence." PEP caused a great deal of emotional distress for many rape survivors, as it made them feel dirty and guilty about what had happened. Others found the experience better, feeling that a full assortment of medications "cleaned" them following the "dirty" experience of being raped.

A similar article not included in the analysis clearly defined the standard protocol for adult sexual assault survivors as requiring the following: STD prophylaxis (gonorrhea, chlamydia, trichomoniasis), tetanus vaccination, pregnancy prevention (emergency contraception), HIV prophylaxis in addition to lab tests for pregnancy, hepatitis and HIV (Finkel MA, Mian P, McIntyre J, Sellas-Ferrer MI, McGee B & Balch N. 2005). These medications were similar to the medications prescribed in the Arend et al (2013) study.

Woods & Wineman (2004) found that women who have been raped will often present with multiple nonspecific somatic ailments such as headache, gastrointestinal problems and pelvic pain. These conditions can occur at any time following sexual assault, but most commonly present themselves in women who have been dealing for several months or years with the chronic emotional stress following rape.

McLean et al (2012) also found that acute pain is a very common consequence following sexual assault but is very rarely treated. Only 12 out of 83 women reported mild or no pain following rape. Severe pain was reported among 53 of 83 participants but was only treated for 7 (13%). Of these 7, only 4 received medication. Location of pain was not always correlated to the location of trauma, as neurobiological factors are suspected to play a role in pain reactions. Many of these women also had severe pain a week following the initial attack. It is shocking how few women are treated for their physical pain following rape.

#### 4.3 Mental healthcare

Acute care of the rape victim provides an initial forum for emotional support and establishment of a care plan for further evaluation. Follow-up care initially includes reviewing test results for STIs, pregnancy testing, and management of injuries that may have been sustained during the attack. However, discussion of legal issues and referral to mental health care professionals are logical components of a follow-up exam. Up to 55% of victims of rape develop depression and/or PTSD symptoms. Without further treatment, these women are at risk of developing major depression, panic disorders, anxiety disorders, substance abuse and multiple nonspecific somatic complaints. Unfortunately, only a fraction of rape survivors will continue for follow-up visits. The rates are estimated between 10% - 31%. (Ackerman et al. 2006)

Renck (2006) found that the most common initial psychological reactions to sexual assault among women were shock, fear, anxiety, irritation and anger. This study also found that the majority of psychological recovery takes place during the first 3 months following a rape, although up to 84% of women meet

criteria for PTSD after 3 months. Acute stress decreased significantly after 3 months. Satisfaction with one's previous life, previous mental health problems and earlier abuse were not found to be significant factors contributing to the acute stress reaction. The findings found that early intervention may reduce the level of post-assault PTSD symptoms in raped women, and that health care providers are a valuable resource for early identification of such potential clients.

#### 4.4 Continuing care

Initial care of rape victims often includes referrals to counseling and rape crisis centers. There is a need to retest for such STIs as hepatitis, HIV after 3 and 6 months (Arend et al. 2013). These appointments for physical care should be used to assess for additional counseling and mental health care needs, especially given the small percentage of women who even seek medical care following rape (Ackerman et al. 2006)

This is where it gets murky. Each rape survivor's recovery is individual and may take months or years. Symes (2000) described a process that leads individuals to recovery and acknowledged that prompt psychological intervention can reduce the severity of rape-related psychosomatic problems.

Martin et al (2008) found that sexual and physical violence is experienced by roughly a quarter of all women in North Carolina. The evidence is similar to other studies that have found violence and sexual abuse to be very common in women's lives. Women who had experienced sexual violence were at a far higher risk of developing various stress-related physical problems, such as gastrointestinal problems. These women were also found to have poor mental and physical health when compared to women who did not experience sexual violence. They were also reported feeling limited in their day-to-day functionality when compared to women without a background of sexual assault. A similar study by Stein et al (2003) among women military veterans in San Diego found that "sexual assault was also a significant statistical predictor of having multiple sick days in the prior 6 months and of being a high utilizer of

primary care visits in the prior 6 months.” The effect of sexual violence on these women’s lives was significant and the cost to society estimated to be large. These studies underscored the need for trauma assessment by clinicians for female patients.

## 5 DISCUSSION OF RESULTS

The purpose of this study was to conduct a systematic literature review on the topic of nursing care for adult female patients who have experienced sexual assault. The aim of the study was to examine and disseminate current literature on the topic of nursing care for rape survivors from a global perspective. The research question for this literature review was: what constitutes the nursing care for a woman who has been raped?

### 5.1 Discussion of the results

The most important factor to note is that rape and sexual assault are not acts of sex; rape is an act of violence in which sex is the weapon. Therefore, these studies all included violence against women in some form, but not always necessarily a completed rape. The results prove that providing nursing care for a woman who has experienced sexual assault is a very complicated task that requires insight, experience, proper education and a holistic “whole person” healthcare approach.

In the immediate aftermath of a rape, women should be given a standard protocol for PEP and disease screening, as outlined by Finkel et al (2005) and described in section 4.2 of this thesis. Additionally, women should be specifically asked about their physical pain and treated for it, as studies have shown this is grossly neglected by healthcare practitioners.

Women who report for medical care following rape should also be validated and reassured by the nurse who is caring for them, and given information and referrals for counseling or community based support (i.e. rape crisis centers).

Every nurse who confronts a client in the immediate aftermath following rape should be trained on basics of how to handle such a situation and how to react. It is unfortunate that so few nurses feel confident in handling victims of sexual assault.

Follow-up care should include telephone calls and additional disease screening. It is important for nurses and doctors to make an effort to follow-up on these vulnerable patients. These screening appointments and follow-up calls also serve as opportunities to inquire as to the survivor's mental healthcare needs and to further identify patients who should be referred for additional counseling and mental health services. Effective and prompt psychological interventions can help minimize symptoms of ASD, PTSD and rape trauma syndrome. Appropriate mental health care can also increase the chances of the victims' recovery and return to a functional role in society, thus minimizing the costs and burdens associated with rape (Symes 2000, ACEP 2013).

Recovery from rape is a long-term process and for some survivors it is life-long. Sadly, sexual assault is common in all societies and will likely remain endemic until greater awareness and acceptance of the consequences of rape are understood.

## 5.2 Reliability and limitations of the literature review

The literature review was limited due to financial constraints. Only articles that were freely available in full text form were utilized, as the researcher was not granted an allowance for obtaining literature. Further limitations include that only 3 databases were searched; however, the Elsevier database yielded sufficiently fruitful results.

Articles that were analyzed within this literature review were peer-reviewed and from reliable sources. Due to the inclusion criteria, many worthwhile articles were not permitted because they did not include a study. The articles approached the topic (nursing care of a rape victim) from different perspectives, such as that of client, healthcare provider, or society at large.

### 5.3 Research ethics and implications of the study

The researcher did not manipulate data retrieved from the studies and did not falsify information in this literature review. The researcher does not find any conflict of interest which would implicate the literature review. However, this literature review was conducted by a single person and therefore is subject to personal bias on the part of the researcher.

## 6 CONCLUSION

Violence against women is epidemic worldwide. Nor is Finland immune to this problem; studies show that Finland has significantly higher rates of violence against women than other developed countries and that violence in general is a serious problem. Rape has often been attributed to alcohol abuse or family dysfunction in Finland, although these alone cannot account for the problem of intimate partner violence and rape. (Clarke K, 2011)

Rape is often called the “silent, violent epidemic” as its survivors often remain quiet about it, and even healthcare professionals are hesitant to discuss the topic of rape. Rape is a secretive crime by nature and its victims are often overwhelmed by feelings of fear, shame and humiliation. Care of sexual assault survivors is incredibly complex and requires specialized knowledge in posttraumatic stress, forensics and trauma nursing. Untrained nurses should never attempt a sexual assault forensic examination, as any mistake could damage potential legal proceedings. Nurses can create a secure environment by speaking quietly, moving slowly and narrating actions to the survivor. Nurses without specialized training should not ask for details about the attack, as this could further traumatize the patient, whose perceptions may be disrupted by the stressful situation. Of the utmost important when confronting a survivor of rape is creating a safe environment. (Sommers MS & Buschur C. 2004)

Nurses who are given education in dealing with patients whom have experienced sexual assault are more confident in treating these types of clients. Research has shown that as little as one semester of forensics is sufficient to train a nurse to become an expert in evidence collection for rape kits (Jina R, Jewkes R, Christofides N & Loots L., 2014).

## 6.1 Closing thoughts

There exist many words similar in meaning to *rape*, but lacking the same harsh connotation. One such example is the word *ravish*, often used to describe something exciting and lovely, or when one has great hunger. A definition of *ravish* from Merriam-Webster's gives two conflicting definitions that illustrate the struggle facing abused women: "1. to fill (someone) with pleasure, joy, or happiness; 2. To force (a woman) to have sex by using violence or the threat of violence;" (<http://www.merriam-webster.com/dictionary/ravish>).

Rape is an idea so ingrained into humanity that even the dictionaries struggle to clearly define it. How is it that words often associated with pleasure and joy concurrently also describe the rape of a woman by a man using violence? It is a lesson in the human condition and the complexity of human behavior. In the battle of the sexes, it seems that some beasts will continue to use sex as a weapon against women for as long as the two walk the earth together.

## SOURCE MATERIAL

Ackerman DR, Sugar NF, Fine DN & Eckert LO. 2006. Sexual assault victims: Factors associated with follow-up care. *American Journal of Obstetrics & Gynecology* 194 (2006) 1653-9. Elsevier & Mosby, Inc. doi:10.1016/j.ajog.2006.03.014

American College of Emergency Physicians (ACEP), project co-directors Riviello RJ & Rozzi HV. 2013. Evaluation and management of the sexually assaulted or sexually abused patient, 2<sup>nd</sup> edition. Dallas, Texas: ACEP. Available freely online from: <http://www.acep.org/> (in handbooks, e-books)

Amstadter AB, Zinzow HM, McCauley JL, Strachan M, Ruggiero KJ, Resnick HS & Kilpatrick DG. 2010. Prevalence and correlates of service utilization and help seeking in a national college sample of female rape victims. *Journal of Anxiety Disorders* 24 (2010) 900–902. Elsevier Ltd. doi:10.1016/j.janxdis.2010.06.014

Arend E, Maw A, de Swardt C, Denny LA & Roland M. 2013. South African Sexual Assault Survivors' Experiences of Post-Exposure Prophylaxis and Individualized Nursing Care: A Qualitative Study. *Journal of the Association of Nurses in AIDS Care*, Vol. 24, No.2, March/April 2013, pp. 154-165. doi:<http://dx.doi.org/10.1016/j.jana.2012.02.007>

Bettany-Saltikov J. 2010. Learning how to undertake a systematic review: part 1. *Nursing Standard*. 24, 50, 47-55.

Clarke K. 2011. The Paradoxical Approach to Intimate Partner Violence in Finland. *International Perspectives in Victimology* 6 (1), 9-19. Fresno, CA, USA: California State University Press. doi: 10.5364/ipiv.6.1.9 Also available online at: [http://www.academia.edu/992154/The\\_Paradoxical\\_Approach\\_to\\_Intimate\\_Partner\\_Violence\\_in\\_Finland](http://www.academia.edu/992154/The_Paradoxical_Approach_to_Intimate_Partner_Violence_in_Finland)

Du Mont J & Parnis D. 2003. Forensic Nursing in the Context of Sexual Assault: Comparing the Opinions and Practices of Nurse Examiners and Nurses. *Applied Nursing Research*, Vol. 16, No. 3 ( August), 2003: pp 173-183. Elsevier Inc.

Egger G, Smith GD & Altman DG. 2001. Systematic reviews in health care: meta-analysis in context, 2<sup>nd</sup> edition. UK: BMJ Publishing Group.

Ericksen J, Dudley C, McIntosh G, Ritch L, Shumay S & Simpson M. 2002. Clients' Experiences with a Specialized Sexual Assault Service. *J Emerg Nurs* 2002; 28:86-90. Canada: Emergency Nurses Association. doi:10.1067/men.2002.121740

Finkel MA, Mian P, McIntyre J, Sellas-Ferrer MI, McGee B & Balch N. 2005. An Original, Standardized, Emergency Department Sexual Assault Medication Order Sheet. *J Emerg Nurs* 2005;31:271-5. USA: Emergency Nurses Association. doi: 10.1016/j.jen.2005.04.031

Gökdoğan MR & Bafra J. 2010. Development of a sexual assault evidence collection kit – The need for standardization in Turkey. *Nurse Education Today*, Vol. 30 (2010) 285-290. Elsevier.

Grubb A & Turner E. 2012. Attribution of blame in rape cases: A review of the impact of rape myth acceptance, gender role conformity and substance use on victim blaming. *Aggression and Violent Behavior* 17 (2012) 443–452. Elsevier Ltd. doi:10.1016/j.avb.2012.06.002

Houmes B, Fagan MF & Quintana NM. 2003. Establishing a sexual assault nurse examiner (SANE) program in the emergency department. *Journal of Emergency Medicine*, Vol. 25, No. 1, pp 111-121. USA: Elsevier Inc. doi:10.1016/S0736-4679(03)00159-8



- Jackson KB & Fraser D. 2009. A study exploring UK midwives' knowledge and attitudes towards caring for women who have been sexually abused. *Midwifery* (2009) 25, pp. 253–263. UK: Elsevier. doi:10.1016/j.midw.2007.05.006
- Jina R, Jewkes R, Christofides N & Loots L. 2014. A cross-sectional study on the effect of post-rape training on knowledge and confidence of health professionals in South Africa. *International Journal of Gynecology and Obstetrics* (2014), doi: 10.1016/j.ijgo.2014.02.011
- Kumar A, Nizamie SH & Srivastava NK. 2013. Violence against women and mental health. *Mental Health & Prevention* (2013) 1, 4–10. India: Elsevier GmbH. <http://dx.doi.org/10.1016/j.mhp.2013.06.002>
- Martin SL, Rentz ED, Chan RL, Givens J, Sanford CP, Kupper LL, Garrettson M & Macy RJ. 2007. Physical And Sexual Violence Among North Carolina Women: Associations With Physical Health, Mental Health, And Functional Impairment. *Women's Health Issues* 18 (2008) 130–140. USA: Elsevier. doi:10.1016/j.whi.2007.12.008
- Mason F & Lodrick Z. 2013. Psychological consequences of sexual assault. *Best Practice & Research Clinical Obstetrics & Gynaecology* 27 (2013) 27-37. Elsevier Ltd. <http://dx.doi.org/10.1016/j.bpobgyn.2012.08.015>
- McLean SA, Soward AC, Ballina LE, Rossi C, Rotolo S, Wheeler R, Foley KA, Batts J, Casto T, Collette R, Holbrook D, Goodman E, Rauch SAM & Liberzon I. 2012. Acute Severe Pain Is a Common Consequence of Sexual Assault. *The Journal of Pain*, Vol 13, No 8 (August), 2012: pp 736-741. USA: Elsevier & American Pain Society. doi:10.1016/j.jpain.2012.04.008
- Peters K. 2013. The growing business of human trafficking and the power of emergency nurses to stop it. *Journal of Emergency Nursing* 2013; Vol. 39: pp. 280-8. USA: Elsevier & Emergency Nurses Association. <http://dx.doi.org/10.1016/j.jen.2012.03.017>
- Polit D.N. & Beck C.T. (2006) 6th Ed. Essentials of Nursing Practice. *Methods, Appraisal, and Utilization*. Philadelphia: Lippincott Williams & Wilkins. Also available at [books.google.com](http://books.google.com)
- Renck B. 2006. Psychological stress reactions of women in Sweden who have been assaulted: Acute response and four-month follow-up. *Nursing Outlook* 2006 Vol. 54 No. 6: pp 312-319. USA: Mosby, Inc. doi:10.1016/j.outlook.2006.03.002
- Resnick HS, Holmes MM, Kilpatrick DG, Clum G, Acierno R, Best CL & Saunders BE. 2000. Predictors of Post-Rape Medical Care in a National Sample of Women. *American Journal of Preventive Medicine* Vol. 19, No.4, 2000: pp 214-219. USA: Elsevier Science Inc.
- Saltzman LE, Basile KC, Mahendra RR, Steenkamp M, Ingram E & Ikeda R. 2007. *Annals of Emergency Medicine*, 49(2) February 2007: 210-217. USA: ACEP. doi:10.1016/j.annemergmed.2006.10.015
- Seng JS & Sanubol M. 2004. The First Year As Sexual Assault Nurse Examiner: Role Transition and Role-related Stress Within A New SANE Team. *Journal of Emergency Nursing* 2004;30:126-33. USA: The Emergency Nurses Association. doi: 10.1016/j.jen.2003.12.009
- Sommers MS & Buschur C. 2004. Injury in women who are raped: What every critical care nurse needs to know. *Dimensions of Critical Care Nursing*, 23(2): 62-68. USA:
- Stein MB, Lang AJ, Laffaye C, Satz LE, Lenoz RJ & Dresselhaus TR. 2004. Relationship of sexual assault history to somatic symptoms and health anxiety in women. *General Hospital Psychiatry* 26 (2004) 178–183. USA: Elsevier. doi:10.1016/j.genhosppsy.2003.11.003
- Symes L. 2000. Arriving at Readiness to Recover Emotionally After Sexual Assault. *Archives of Psychiatric Nursing*, Vol. XIV, No. 1 (February), 2000: pp 30-38. USA: W.B. Saunders Company.

Taylor WK. 2002. Collecting evidence for sexual assault: the role of the sexual assault nurse examiner (SANE). *International Journal of Gynecology and Obstetrics* 78 Suppl 1 (2002) S91-94. Ireland: Elsevier Science Ireland Ltd.

Wadsworth P & Van Order P. 2012. Continuing Education: Care of the Sexually Assaulted Woman. *The Journal for Nurse Practitioners*, Vol 8, Issue 6, June 2012: pp 433-440. MD, USA: Elsevier.

Woods SJ & Wineman NM. 2004. Trauma, Posttraumatic Stress Disorder Symptom Clusters, and Physical Health Symptoms in Postabused Women. *Archives of Psychiatric Nursing*, Vol. XVIII, No. 1 (February), 2004: pp 26-34. USA: Elsevier Inc. doi:10.1053/j.apnu.2003.11.005

Zinzow HM, Resnick HS, Barr SC, Danielson CK & Kilpatrick DG. 2012. Receipt of Post-Rape Medical Care in a National Sample of Female Victims. *American Journal of Preventive Medicine* Vol. 43, No. 2, 2012: pp 183-187. USA: Elsevier Inc. <http://dx.doi.org/10.1016/j.amepre.2012.02.025>

## Article analysis

Table 1. Articles (n=10) analyzed

1 (10)

AUTHOR(S) YEAR AND TITLE	PURPOSE	PARTICIPANTS (SAMPLE SIZE)	METHOD AND DATA COLLECTION	DATA ANALYSIS	MAIN RESULTS	REMARKS
<b>Ackerman</b> DR, Sugar NF, Fine DN, Eckert LO. (2006) Sexual assault victims: factors associated with follow-up care	To describe patient, assault, and examination characteristics associated with compliance with follow-up in SA victims	812 records met inclusion criteria, 288 of these attended follow-up care.	Retrospective analysis of records of female patients over 15yrs reporting SA between July 2001 and June 2004 in a large urban hospital, with permission.	Data were abstracted from ED records and entered into study database. Pt. demographics, assault characteristics, and exam findings were linked to the follow up records. Statistical analysis performed with Fisher exact tests and x <sup>2</sup> ; multivariable logistic regression used incl. all variables at significance level of .10 or less. SPSS software performed analysis. Base follow-up rate of 36% , sample 812 with odds ratio of 1.5 and alpha = .05, power equals 0.81	Only 35.5% of SA victims seek any type of follow-up. 2.5% had only counseling follow-up, 150 subjects had medical and counseling, and 7% attended more than 1 counseling visit. Partner assault, assault in a public place, illicit substance use, psychiatric diagnosis, and homelessness are all associated with significantly decreased compliance with follow-up. Raped women are at high risk for depression, PTSD, and substance abuse.	Retrospective limited by data recorded on standardized form. Socioeconomic status not recorded. The study bundled medical and counseling appointments because so few patients returned for counseling only.

2 (10)

AUTHOR(S) YEAR AND TITLE	PURPOSE	PARTICIPANTS (SAMPLE SIZE)	METHOD AND DATA COLLECTION	DATA ANALYSIS	MAIN RESULTS	REMARKS
<p><b>Arend E., Maw A., de Swardt C., Denny L.A. and Roland M. (2013)</b> South African Sexual Assault Survivors' Experiences of Post-Exposure Prophylaxis and Individualized Nursing Care: A Qualitative Study</p>	<p>To develop an in-depth understanding of individual experiences of PEP and participation in the original observational quantitative study (n=135), in order to identify ways to enhance post-sexual assault care.</p>	<p>10 (out of 135) sexual assault survivors who presented for care at a hospital-based sexual assault clinic outside of Cape Town, South Africa between March and September of 2004.</p> <p>A non-probabilistic to sample selection was taken, accounting for survivors' abilities to discuss in great detail and length their experiences.</p>	<p>Qualitative sub-study of a quantitative observational PEP study. Nurses from the original quantitative study selected 10 participants to continue with the qualitative study. Of these, 3 were chosen out of concern for further care. Individual interviews were held at hospital research office and conducted by a clinical psychologist and study nurse. Open-ended questions and a semi-structures style were used. The survivor was allowed to freely construct the narrative and her emotions directed the interview.</p>	<p>Interviews were analyzed using a grounded theory approach. Data analysis was viewed as an emergent process: codes and analytic categories are formed and grounded in the data. Fully transcribed interviews were categorized and entailed coding of data, followed by focused coding. Memo-writing was also used. Bias was acknowledged and mitigated by reflexive memo-writing process.</p>	<p>Taking PEP was emotional; taking pills brought feelings of being "dirty" or "sick" and needing to be "cleaned" following the assault. Physical side effects including nausea and vomiting. Survivors preferred private discussion in a clinical setting. Consistent psychosocial support from the nurses was a key aspect of PEP adherence and survivors' own feelings of recovery.</p>	<p>6 month care relationship with the same nurse supported PEP adherence and bolstered survivors' confidence. The intense psychosocial support provided by the study nurses helped participants recover from their trauma, and the study process itself seemed therapeutic. Participants reported overwhelmingly positive experiences. Proactive, individualized nursing care can have a significant impact on sexual assault survivors' mental health outcomes.</p>

3 (10)

AUTHOR(S) YEAR AND TITLE	PURPOSE	PARTICIPANTS (SAMPLE SIZE)	METHOD AND DATA COLLECTION	DATA ANALYSIS	MAIN RESULTS	REMARKS
<b>Ericksen</b> J, Dudley C, McIntosh G, Ritch L, Shumay S, & Simpson M. (2002) Clients' Experiences with a Specialized Sexual Assault Service	To understand the experience of raped women cared for in ED by specially trained professionals, discover themes in the experiences, and discern implications for delivery of care to women who have been sexually assaulted	8 women cared for at a specialized sexual assault service were interviewed 2 months later. 39 women consented to being telephoned for the study while in the ED but only 8 could be reached 2 months later	Interpretive research methodology with qualitative data collection technique of interviews. 2 hour semi-structured interview over the telephone that was taped and transcribed.	Transcribed conversations were analyzed using latent content analysis to identify emerging themes	9 themes emerged from latent content analysis of interviews: respect as a whole person, nursing presence, feeling safe, being touched, being in control, being reassured, demonstrated expertise, being given information, and beyond contact beyond hospital walls (follow-up care)	Small sample size. Focus on the qualities of the nurse and emotional support of the patient.

4 (10)

AUTHOR(S) YEAR AND TITLE	PURPOSE	PARTICIPANTS (SAMPLE SIZE)	METHOD AND DATA COLLECTION	DATA ANALYSIS	MAIN RESULTS	REMARKS
<p><b>Jackson K.</b> and Fraser D. (2007) A study exploring UK midwives' knowledge and attitudes towards caring for women who have been sexually abused</p>	<p>To investigate midwives' knowledge and attitudes in relation to caring for women who have been sexually abused.</p>	<p>489 community and hospital-based midwives. 372 midwives returned the questionnaire, giving 76% response rate.</p>	<p>Survey using anonymous standardized questionnaire including fixed and open-ended questions that was sent via post.</p>	<p>Quantitative data were analyzed using chi squared test, logistic regression, Mann Whitney U-test, Krukal Wallis test and Mantel- Haenszel test. Qualitative data analyzed using a modified constant comparative approach as described by Morse and Field.</p>	<p>Majority (56%) of midwives didn't feel adequately prepared to deal with a disclosure of sexual abuse, with 29% being unsure. Small number were very knowledgeable (15%), but majority did not have education in this area. Midwife education should focus more on caring for patients who have been sexually abused.</p>	<p>Reliable study with large sample size. Findings show that midwives not equipped to deal with disclosures of sexual assault may give bad advice or unknowingly further traumatize clients with a history of SA.</p>

5 (10)

AUTHOR(S) YEAR AND TITLE	PURPOSE	PARTICIPANTS (SAMPLE SIZE)	METHOD AND DATA COLLECTION	DATA ANALYSIS	MAIN RESULTS	REMARKS
<p><b>Martin</b> SL, Rentz ED, Chan RL, Givens J, Sanford CP, Kupper LL, Garrettson M &amp; Macy RJ. (2007) Physical and sexual violence among North Carolina women: associations with physical health, mental health, and functional impairment</p>	<p>To examine links between women's experiences of violence in adulthood and their physical health, mental health and functional status</p>	<p>9,830 North Carolina women surveyed by the North Carolina Behavioral Risk Factor Surveillance System (BRFSS)</p>	<p>The BRFSS is funded by the CDC. Continuous random-digit anonymous telephone call survey. Data from 2000-2002 was used. Brief questions were asked about experiences of physical violence, sexual violence, either types or none. Socio-demographic information collected. Brief questions re: physical health, mental health and functional impairment were asked, along with estimated # of days that any of the above were "not good"</p>	<p>Variety of statistical analyses and SUDAAN to take sample weights into account. Descriptive analyses used to compute mean # of days physical or mental health being "not good".</p>	<p>¼ of women experienced violence as adults, similar to other studies. Violence is common in women's lives and usually perpetrated by a partner. Logistic regression analyses that controlled for socio-demographic characteristics found that women who experienced violence were significantly more likely to have poor physical health, poor mental health, and functional limitations.</p>	<p>Health care services are used more by women who have experienced trauma/violence, but they often present with problems seemingly unrelated to abuse like chronic stress-related issues, CNS problems, gynecological...women who experienced both sexual and physical violence had the greatest risk of poor health. Responses limited to households with landlines, and maybe have underreporting because the interview was over the phone in the person's household. Women living in institutions were not included, and they have very high rates of SA histories.</p>

6 (10)

AUTHOR(S) YEAR AND TITLE	PURPOSE	PARTICIPANTS (SAMPLE SIZE)	METHOD AND DATA COLLECTION	DATA ANALYSIS	MAIN RESULTS	REMARKS
<p><b>McLean SA, Soward AC, Ballina LE, Rossi C, Rotolo S, Wheeler R, Foley KA, Batts J, Casto T, Collette R, Holbrook D, Goodman E, Rauch SAM &amp; Liberzon I. (2012) Acute Severe Pain Is a Common Consequence of Sexual Assault.</b></p>	<p>To evaluate the distribution and severity of pain symptoms at the time of examination for SA and 1 week following in a sample of women reporting for care within 48 hours of SA. Among women reporting pain, frequency of pain medication treatment and types of medication provided.</p>	<p>Female SA survivors over age 18yrs reporting within 48 hrs of SA. Women who lived with assailant, were hospitalized, prisoners, pregnant, did not have a telephone or did not live within driving distance for the follow up interview were excluded. 10 SANE programs around the USA participated. n=83 women.</p>	<p>When a potential candidate was available the SANE nurse notified the on-call research nurse who then came to the site and asked for consent and to perform a 1 week follow-up. Brief questionnaire assessing pain in each of 8 body regions using numeric rating scale (NRS) and evaluation of acute stress disorder (ASD) symptoms. Sexual assault history, patient physical exam info, demographic info and medication prescribed at initial SANE evaluation were obtained from SANE records.</p>	<p>NRS and ASD cutoff scores were based on previous research. Patient characteristics were evaluated using standard descriptive statistics. Changes in pain in follow-up were compared using paired t-tests. Correlation between pain and ASD symptoms was evaluated using Spearman's rank correlation analysis. Statistical analyses performed using SPSS software.</p>	<p>Most women were white, had post-secondary education, middle income, and did not have children. Severe pain in 1 or more body regions was reported by 64% at the initial exam and 52% one week later. Common locations at initial exam were genital region, head, back, and abdomen. At 1 week the most common were abdomen, back, genital region, and head/neck. Pain in multiple regions was common, and pain in 4 or more regions was reported by more than half. Pain decreased after 1 week. Some women reported no pain at the initial exam but pain during follow-up. All women met criteria for ASD 1 week after assault. Bad dreams, trouble sleeping, irritability and feeling jumpy were most associated with pain. Only 7% of SA survivors received pain meds at initial exam, with only 1 receiving opioids. 1 week after SA, only 28% reporting severe pain received medication.</p>	<p>Acute pain common after SA but very rarely treated. First study of its kind. Majority of pain areas were not in body areas that experienced direct trauma. This suggests that pain may be a neurobiological sequela of the stress experience itself, much like psychological symptoms. Preliminary evidence suggests that treatment of acute pain following SA may also improve psychological outcomes. Nurses should emphasize that acute pain is common after SA and provide specific recommendations for pain evaluation and treatment. Limitations of study include working with severely traumatized individuals and a minority of eligible women. Finally, evidence suggests that majority of SA survivors never present for care or treatment following assault.</p>



7 (10)

AUTHOR(S) YEAR AND TITLE	PURPOSE	PARTICIPANTS (SAMPLE SIZE)	METHOD AND DATA COLLECTION	DATA ANALYSIS	MAIN RESULTS	REMARKS
<p><b>Renck, B. (2006)</b> Psychological stress reactions of women in Sweden who have been assaulted: Acute response and four-month follow-up.</p>	<p>To examine the psychological stress reactions of female victims to an individual act of interpersonal violence in the short term (after 2-3 weeks) and long term (after 4 months). To extend the knowledge about the mental health consequences of violence against women.</p>	<p>68 women who had been assaulted by a man or woman and during a 20 month period registered as injured parties in 2 police districts in a county of central Sweden. The police system of describing and coding crime was used to select individuals who might be eligible for recruitment. Assault in an ongoing relationship or violence between family members was excluded.</p>	<p>The researcher sent out 100 questionnaires, of these 68 responded to the first (Questionnaire I + 3 self-administered scales) Of these 68, 60 responded to the second questionnaire (Questionnaire II + 3 self-administered scales). The researcher contacted the participants by telephone to increase the response rate. Self-administered scales included Post-Traumatic Stress scale (PTSS-10), Impact of Event Scale (IES), General Health Questionnaire (GHQ).</p>	<p>Cronbach's <math>\alpha</math> coefficient was computed to analyze the internal consistency reliability of all measures. 2-sided Wilcoxon Matched Pairs Signed-Ranks Test was applied and Fisher's Exact Test was employed to control bivariate relations. Multiple linear regression analyses were used to construct the predictive indices, which were based on selected predictors. SPSS software was used.</p>	<p>5 of 68 women were subjected to aggravated assault and 63 to assault. 55 victims were assaulted by a man. In 33 cases, the women knew the perpetrator and for 10 of these it was an earlier partner. Most common initial reactions were shock, fear/anxiety, irritation/anger, worry, and surprise. Humiliation was the most common feeling, helplessness and disappointment were also common. Most common physical symptoms were headaches and muscle tension/pain.</p>	<p>High rates of distress reported. High levels of avoidance symptoms and numbing. 1/2 of the women still experiencing distress 4 months post assault. Extent and severity of assault were not able to be measured. Need for early interventions for post assault PTSD symptoms. 4 months is not really "long term", need for 1 or 2 year follow up studies.</p>

8 (10)

AUTHOR(S) YEAR AND TITLE	PURPOSE	PARTICIPANTS (SAMPLE SIZE)	METHOD AND DATA COLLECTION	DATA ANALYSIS	MAIN RESULTS	REMARKS
<p><b>Stein</b> MB, Lang AJ, Laffaye C, Satz LE, Lenoz RJ &amp; Dresselhaus TR. (2004) Relationship of sexual assault history to somatic symptoms and health anxiety in women.</p>	<p>To determine whether there is an association between SA history and measures of somatic symptoms and illness attitudes in a sample of Veterans Affairs (VA) primary care patients</p>	<p>Cross-sectional study of a representative sample of 219 women in a VA primary care outpatient clinic. 419 questionnaires sent, but response rate was 56%, yielding only 219 participants.</p>	<p>SA history, somatic symptoms and health anxiety assessed by self-report questionnaire. VA Sand Diego Healthcare System primary clinic in 1998. Sent consent form and questionnaires by post. <i>Diagnostic &amp; Statistical Manual of Mental Disorders</i> (4<sup>th</sup> ed.) clinician-administered PTSD scale was used. Somatization measured using Symptom Checklist 90-Revised (SCL-90-R). Illness Attitudes Scale measured health anxiety</p>	<p>Multivariate analyses used to examine relationships between SA exposure and these outcomes. Descriptive statistics were used to describe the rate of traumatization in the sample. SPSS 10.0 for Windows was used to conduct statistical tests.</p>	<p>44% reported experience of SA. SA associated with significant increase in somatization scores, physical complaints across multiple symptom domains and health anxiety. SA also a significant statistical predictor of having multiple sick days in the prior 6 months and of being a high utilizer of primary care visits in prior 6 months</p>	<p>Data confirm a strong association between sexual trauma exposure and somatic symptoms, illness attitudes and healthcare utilization in women. However, only female military veterans were included in the study, as they have higher rates of SA experiences than civilians. Difficulty in differing between PTSD related symptoms and SA symptoms.</p>

9 (10)

AUTHOR(S) YEAR AND TITLE	PURPOSE	PARTICIPANTS (SAMPLE SIZE)	METHOD AND DATA COLLECTION	DATA ANALYSIS	MAIN RESULTS	REMARKS
<p><b>Symes L. (2000)</b> Arriving at Readiness to Recover Emotionally After Sexual Assault.</p>	<p>To discover behaviors and processes that lead survivors of SA to seek help with emotional recovery.</p>	<p>11 adult American women, ages 19 -47 recruited from a large metropolitan rape crisis center. All had secondary school and some had post-secondary education as well. They were referred to the researcher through the staff at the crisis center. SA history was as recent as 3 weeks or as old as 27 years.</p>	<p>Grounded theory study. Data collection guided by theoretical sampling strategy—coding, memos and diagrams were used. Data collection occurred during 9 months in 1995-1996 at a large metropolitan rape crisis center (Houston Women's Center). Interviews were 50-90 minutes and audiotaped.</p>	<p>Substantive theory "Arriving at Readiness" was developed from interviews with 11 women survivors of SA. 11 categories, each containing several strategies, form the theory.</p>	<p>Categories were: protecting, triggering event, helping responses, getting ready, motivating event, dealing with stuff, testing the waters, telling, harming responses, silent cry for help, healing</p>	<p>Some of the categories of "arriving at readiness" are harmful to the survivor and occasional to others. These stages can be used by psychiatric nurses to identify survivors and help them with emotional recovery and delivery care to those not receiving needed help. Need for multiple sources of support for survivors, and the study population were already help-seeking.. Nurses should support clients to gain the stability necessary to recover.</p>

10 (10)

AUTHOR(S) YEAR AND TITLE	PURPOSE	PARTICIPANTS (SAMPLE SIZE)	METHOD AND DATA COLLECTION	DATA ANALYSIS	MAIN RESULTS	REMARKS
<p><b>Woods SJ &amp; Wineman NM. (2004) Trauma, Posttraumatic Stress Disorder Symptom Clusters, and Physical Health Symptoms in Post-abused Women.</b></p>	<p>To examine the relationships between violent and nonviolent trauma, PTSD and its symptom clusters of avoidance, intrusive/re-experiencing, hyper arousal and self-reported physical symptoms in 50 post-abused women.</p>	<p>50 women who had been out of an abusive relationship for at least a year recruited through bulletin board postings and pamphlets in community agencies, libraries, supermarkets, YWCAs, and churches.</p>	<p>Retrospective, predictive-correlation design examined relationship between lifetime trauma, PTSD symptom clusters, and physical health symptoms in post-abused women. Women completed a questionnaire booklet containing several self-report instruments. Index of Spouse Abuse (ISA) and Symptom checklist for PTSD (SCL-90-R) for diagnosis of PTSD in DSM-IV was used. Physical Health Problems Survey (PHPS)</p>	<p>Multivariate statistical analyses and multiple regression equations were used, as was SSPS software. Cronbach's alphas used in SCL-PTSD.</p>	<p>PTSD hyper-arousal and avoidance symptom clusters were positively associated with physical health symptoms, and childhood physical abuse accounted for a significant and unique portion of the variance in physical health symptoms</p>	<p>Health care practitioners should assess for a trauma history in female patients, especially when a woman presents with multiple nonspecific physical health complaints. Prevalence of lifetime violent trauma in women and its short and long-term sequelae on health are great. Effective components of nursing and psychosocial interventions could delay the onset and progression of diseases in person experiencing chronic stress as a result of violence or trauma.</p>