

Title:

Understanding Peri-Traumatic Symptoms of Sexual Assault: Transforming Nursing Care of Victims World-Wide

Linda Mabey, DNP

College of Nursing, Brigham Young University, Provo, UT, USA

Session Title:

Nursing Research on Sexual Assault: Utilizing Data to Increase Knowledge and Improve Practice

Slot:

J 11: Saturday, 29 July 2017: 1:30 PM-2:45 PM

Scheduled Time:

1:50 PM

Keywords:

Forensic Nursing, Peri-traumatic symptoms and Sexual Assault

References:

Dartnall, E., & Jewkes, R. (2013). Sexual violence against women: The scope of the problem. *Best practice and Research Clinical Obstetrics and Gynaecology*, 27, 3-13.

Substance Abuse and Mental Health Services Administration (2015). Trauma-informed care and alternatives to seclusion and restraint. Accessed from <http://www.samhsa.gov/nctic/trauma-interventions>.

Valentine, J., Mabey, L., & Miles, L. (2016). Neurobiology of trauma. In A. F. Amar, & L. K. Sekula, (Eds.), *A practical guide to forensic nursing* (pp. 303-320). Indianapolis, IN: Sigma Theta Tau International

van der Kolk, B. (2014). *The body keeps the score*. New York: Viking.

Wheeler, K. (2014). The neurophysiology of trauma and psychotherapy. In K. Wheeler (Ed.), *Psychotherapy for the advanced practice nurse* (pp. 53-93). New York, NY: Springer

Abstract Summary:

This presentation shares findings from a retrospective chart review on the incidence of peri-traumatic symptoms, including loss of consciousness and memory loss, of patients seen for a forensic medical examination following sexual assault. Predictors of peri-traumatic symptoms will be explored.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Discuss peri-traumatic symptoms experienced by many sexual assault victims and their relationship to key brain structures and processes.	A. Briefly report on the results of the study, emphasizing the extent and types of peri-traumatic symptoms noted by sexual assault nurse examiners in charts. B. 53% report loss of consciousness or awareness, including memory loss, tonic immobility, and dissociation. Each of these terms will be defined by the presenter. C. Direct victim

	<p>statements will be read that illustrate each of these symptoms to help the attendees understand how these symptoms are expressed by victims of sexual assault. D. Discuss the brain's role in producing peri-traumatic symptoms, including: 1. The limbic system – the body's fight, flight, freeze response 2. The hypothalamus - the brain's command center 3. Hypothalamic Pituitary Axis – the role of cortisol 4. Anterior cingulate – attention and processing 5. Endogenous opioids – result of confusing chemically mediated feelings E. Discuss how these brain structures and systems impact patient behaviors. 1. "Shutting down" 2. "Forgetting details" 3. "Difficulty sequencing events" 4. "Numbing" 5. "Being there while not being there" 6. "Acting unconcerned"</p>
<p>Examine the role of nurses in improving the care of victims of sexual assault through the use of a case study.</p>	<p>A. Utilize case study to reinforce knowledge of peri-traumatic symptoms through patient presentation and statements. B. Utilize case study to examine how the application of the principles of trauma-informed care (safety, peer support, trustworthiness, transparency, collaboration, empowerment, cultural, historical and gender issues) assists the nurse to provide care for the sexually assaulted patient without further traumatization.</p>
<p>Propose ideas for how nurses can utilize this research to transform the care of sexual assault victims.</p>	<p>A. Patient advocacy: individual and community. B. Discuss education needs for health care and law enforcement. C. Next steps: creating national and international nursing partnerships to improve care of sexually assaulted victims and promote research.</p>

Abstract Text:

Purpose:

Sexual assault is a world-wide mental and physical health epidemic (Dartnall & Jewkes, 2013) and often results in peri-traumatic symptoms, such as loss of memory, or changes in consciousness or awareness (van der Kalk, 2014). Nurses across the globe treat victims of sexual assault and need to be knowledgeable about peri-traumatic symptoms of sexual assault in order to provide evidenced-based care. The purpose of this presentation is discuss how the care of sexual assault victims can be transformed through improved understanding of the prevalence of peri-traumatic symptoms, and the alterations in brain function that underlie these symptoms (Valentine, Mabey, & Miles, 2016, Wheeler,

2014). The presentation is based on the results and implications of a large retrospective chart review ($n=2350$) of sexual assault nurse examiner records, exploring the prevalence of peri-traumatic symptoms of sexual assault, and factors associated with vulnerability to them. Background information on the neurobiological mechanisms which produce peri-traumatic symptoms will be discussed, and nursing implications will be explored utilizing a case study. Next steps in improving the care of sexually assaulted will be proposed.

Methods:

A retrospective chart review of 722 sexual assault victims was completed to identify peri-traumatic symptoms from written statements by sexual assault nurse examiners on a chart section inquiring about victims' reports of loss of consciousness or awareness. Themes related to victims' disclosures of peri-traumatic symptoms were identified from both male and female victims using Nvivo10 software. The emerging themes included loss of consciousness, alteration of awareness, memory loss, tonic immobility, and dissociation from self and/or environment. These themes were then coded as variables in SPSS for analysis of study sample of charts from 2,350 sexual assault victims. Frequencies were calculated for variables measuring peri-traumatic symptoms. These themes were then transferred as variables into SPSS to calculate frequencies. Chi-square tests of association were completed to identify factors associated with loss of memory or change in consciousness or awareness. Logistic regression was conducted on the predictor variables with statistical significance from the Chi-square tests of association. The logistic regression model was especially important to explore if the predictor variables explain all of the occurrence of changes in or loss of consciousness, awareness or memory, or if there might be other factors such as the neurobiological effects of sexual assault trauma that influence changes in or loss of consciousness, awareness or memory.

Results:

The majority of sexual assault victims (54%) who had a forensic examination reported loss of memory, or changes in consciousness or awareness. Themes identified from victims' statements about loss or change in consciousness or awareness included loss of consciousness, changes in feelings of awareness, memory loss, symptoms of dissociation, and symptoms of tonic immobility. Factors associated with peri-traumatic symptoms of memory impairment and loss of consciousness or awareness identified through Chi-square tests of association were: use of drugs prior to the assault ($X^2 = 9.645$, $df=1$, $p=.002$); use of alcohol prior to the assault ($X^2= 126.011$, $df = 1$, $p= .000$); suspected drug facilitated assault ($X^2= 178.246$, $df = 1$, $p = .000$); strangulation ($X^2= 208.610$, $df = 2$, $p= .000$); and history of sexual assault prior to age 14 ($X^2= 7.100$, $df = 2$, $p = 0.029$). The logistic regression model predicted 71.5% of the cases in which victims reported a loss in consciousness or awareness, but failed to classify 28.5% of the cases. These results indicate variables not measured in this study impact victims' peri-traumatic loss of consciousness or awareness during a sexual assault.

Conclusion: The findings from this study indicate that a significant portion of victims, 28.5%, reporting peri-traumatic symptoms following sexual assault of loss of consciousness and memory loss have these symptoms without the statistically significant predicting variables of use of alcohol or drugs, suspected drug-facilitated assault, and strangulation. We postulate that the victims experience loss of or changes in consciousness and memory loss due to the brain's response to the traumatic event of the rape. Peri-traumatic symptoms have significant consequences for sexual assault victims, including rendering them unable to defend themselves at the time of the attack and difficulties describing the attack to health care providers and law enforcement personnel. Nurses should conduct sexual assault victim interviews and examinations with the knowledge of how peri-traumatic symptoms present, and provide nursing care utilizing trauma-informed approaches that do not further traumatize victims (Substance Abuse and Mental Health Services Administration, 2015). They can act as advocates for victims of sexual assault by improving the process of sexual assault examinations, and educating healthcare providers and community justice system partners about peri-traumatic symptoms of sexual assault. Finally, because sexual assault is a global health issue affecting individuals, families, communities, and nations, nurses must be in the forefront of a world-wide effort to improve the care of victims of sexual assault.