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## Comparing the Rate of Developing a Psychiatric Disorder Following Sexual Assault Between Adult and Pediatric Victims

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**Comparing the Rate of Developing a Psychiatric Disorder Following Sexual  
Assault Between Adult and Pediatric Victims**

By

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Capstone Project

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## **Introduction**

Sexual assault and abuse can leave lasting horrors on a victim, be they an adult or a child. While it has been well established that sexual abuse leaves lasting negative physiologic (obesity, heart disease, asthma) and psychiatric (depression, anxiety, suicide, heavy drinking) impressions on a victim,<sup>1</sup> literature has not shown whether the age of a victim affects the prevalence of developing these conditions. Therefore, the question is posed, are victims of sexual assault that are minors (less than 18 years old) compared with victims that are adults (18 years of age and older) at increased risk of developing a psychiatric condition following the event? This question is important to ponder and investigate. By further understanding the prevalence of developing a psychiatric disorder based on a victim's age, medical providers may be guided as to how vigilant they must be in providing psychiatric support and monitoring the mental health of sexual assault victims.

## **Background**

Research has been conducted to investigate how much more likely a minor victim of sexual assault is to develop a psychiatric condition. A National Comorbidity Survey has shown that 78% of women and 82% of men who report having experienced childhood sexual assault meet diagnostic criteria for at least one psychiatric disorder in their lifetime, versus the 49% and 51%, respectively, among those who did not report childhood sexual assault.<sup>2</sup> Furthermore, a prospective cohort study has shown that victims of childhood sexual abuse are four times more likely than their counterparts to develop a psychiatric disorder. They are particularly at increased risk of developing conduct disorder,<sup>3</sup> a disorder in which adolescents exhibit a persistent pattern of

behavior in which the basic rights of others are violated. These psychiatric disorders negatively affect victim's quality of life, ability to form lasting healthy relationships, and overall health. While the exact statistics vary as to how much more likely a child is to develop a psychiatric disorder following sexual assault than their non-assaulted peers, the overall research shows an undeniable and substantial increase. However, it should be noted that due to the sensitivity of the subject matter these numbers may be underreported.<sup>4</sup> Therefore the increased incidence may in fact be significantly higher. This underreporting should be kept in mind by medical providers when pediatric patients exhibit a new onset of a psychiatric disorder, in particular conduct disorder. The presentation of a pediatric patient with recently developed conduct disorder should trigger healthcare professionals to provide a thorough screening to investigate the possibility of sexual abuse.

## **Findings**

Once it has been established that minor victims of sexual assault have significantly increased rate of developing psychiatric disorders, it should be investigated as to how these psychiatric conditions develop. The answer can be found by analyzing victim's neurological and psychological development and adaption. A cross sectional study that compared the cortisol and dehydroepiandrosterone sulfate (DHEAS) levels between adolescent female rape victims and a control group of healthy adolescent females who had not experienced a rape found that adolescent rape victims had increased rates of dysregulation of their Hypothalamic Pituitary Adrenal (HPA) axis.<sup>5</sup> The HPA axis is responsible for secreting and regulation multiple hormones in the body. Dysregulation of this axis can lead to a myriad of health problems. These findings of

HPA axis dysregulation following sexual assault are similar to previous studies that have shown hypercortisolism in victims of chronic sexual abuse. This data suggests that chronic stress, which leads to HPA-axis dysregulation, may not only refer to the actual presence of stressor during an extended period but also to the long-lasting subjective sense of stress after rape. This study also showed decreased DHEAS levels in rape victims. These findings are believed to be due to normalization of hypothalamic CRF secretion after initial down-regulation.<sup>5</sup>

In addition to the HPA dysregulation, research has been performed to investigate the differences in regional brain structure development between victims of childhood abuse and their non-abused counterparts. Neuroimaging has shown that the corpus callosum, the largest white matter structure in the brain that controls arousal, emotion, and higher cognitive abilities, is consistently decreased in size in victims of childhood abuse compared to their non-abused peers.<sup>6</sup> Due to this decrease in size of their corpus callosum, it can come as no surprise that victims of childhood sexual assault have been shown to have poorer coping skills than adult victims of sexual assault.<sup>7</sup> Indeed, it has been shown that victims of childhood sexual assault exhibit higher rates of avoidance coping and substance use coping than their adult counterparts whose corpus callosums have already fully developed.<sup>7</sup> These poor coping mechanisms and poorer emotional regulation are hypothesized to contribute to the higher rates of post traumatic stress disorder and depression in victims of childhood sexual assault compared to their adult counterparts.<sup>7</sup>

While adolescent victims of sexual assault have higher rates of post traumatic stress disorder and depression than adult victims, it should be noted that adult victims of

sexual assault have higher rates of self-blame than childhood victims.<sup>7</sup> In short, this means that adult victims of sexual assault blame themselves for their assault, often attributing the event to things such as intoxication or their attire. Childhood victims have not been shown to exhibit this self-blaming behavior, likely due to the fact that they have not been exposed to these societal beliefs and pressures for an extended period of time. This difference in self-blame rates should be understood by medical providers and their treatments should be tailored to address these issues.

## **Discussion**

The fact that victims of sexual assault commonly present to medical providers that are not psychiatrists immediately after the event puts these medical providers in a difficult position, as they must now provide the victim with physical and psychiatric care. This is particularly true for medical providers working in the emergency department, where victims are able to obtain medical care as well as forensic testing immediately following the assault. This initial presentation of a victim is a crucial cornerstone in their psychiatric care following the event, as it has been shown that only approximately one third (31.4%-43.5%) of victims utilized psychiatric treatment within six months of their assault.<sup>8</sup> Victims are more likely to seek psychiatric treatment following an assault if they had received prior psychiatric treatments, had a history of alcohol abuse, or if they have private insurance, Medicaid, or Medicare.<sup>8</sup> As children who are victims of sexual abuse have not commonly established care with mental health care providers due to their young age, they are at increased risk of not receiving psychiatric services following the event. Therefore, the initial presentation of a pediatric victim to the emergency department is a crucial chance for medical providers to establish victims with a

psychiatric resource. However, some pediatric emergency departments do not currently have clinical pathways for the testing and prophylactic protocol, including psychiatric services, for victims of childhood sexual abuse.<sup>9</sup> By establishing treatment protocols, emergency departments can be the first to refer victims to psychiatric resources where they may receive treatments that have been shown to benefit victims of sexual assault, such as cognitive behavioral therapy.<sup>10</sup> Failing to refer pediatric victims of sexual assault to psychiatric services may inadvertently contribute to their development of a psychiatric disorder by delaying their treatment.

### **Conclusion and Recommendations**

In conclusion, to answer the question of whether victims of sexual assault that are minors compared with victims that are adults are at increased risk of developing a psychiatric condition (such as depression, anxiety, PTSD) following the event, further investigation must be done. Research has shown that victims of childhood sexual assault are approximately four times more likely to develop psychiatric disorders than their non-abused peers.<sup>3</sup> However, no studies have directly compared the rate of developing a psychiatric disorder following sexual assault between victims younger than 18 years of age and victims 18 years of age or older. Regardless, research has been done to investigate how these psychiatric conditions arise in victims of sexual assault. The neurological developmental changes that occur in victims of childhood sexual assault, such as a decreased volume of the corpus colosseum<sup>6</sup> and Hypothalamic Pituitary Adrenal axis dysregulation, have been well established.<sup>5</sup>

It has also been shown that victims of childhood sexual assault are at increased risk of developing Post Traumatic Stress Disorder than their adult counterparts due to

poorer emotional regulation.<sup>7</sup> However, adult victims have higher rates of self-blame,<sup>7</sup> which must be addressed in subsequent treatment. Treatment should include Cognitive Behavioral Therapy, which has been shown to be effective in assisting victims in coping with their trauma.<sup>10</sup> Cognitive Behavioral Therapy aims at improving mental health by helping individuals recognize and change negative cognitive distortions such as thoughts, behaviors, and attitudes. It also aims to improve individual's emotional regulation, behaviors, and coping strategies. Originally developed as a method for treating depression, it has since expanded to treating other psychiatric disorders such as anxiety and posttraumatic stress disorder and is now considered first line treatment for conditions such as conduct disorder. As Cognitive Behavioral Therapy treatment covers such a broad range of psychiatric disorders, it should be strongly recommended for all victims of sexual assault.

These findings and recommendations are significant, for they may guide medical providers in their treatment of victims of sexual assault, ultimately leading to a better treatment plan for their patients. For example, medical providers in emergency departments should ensure that their department has a protocol for pediatric victims of sexual assault, and should incorporate a referral for Cognitive Behavioral Therapy into the protocol. Victims of childhood sexual assault should also be screened regularly for Post-Traumatic Stress Disorder and should have their Hypothalamic Pituitary Adrenal axis monitored. In contrast to these recommendation, adult victims should be monitored for self-blaming tendencies and treated appropriately.

By understanding how these psychiatric conditions arise in victims of sexual assault, medical practitioners may be better prepared to treat them as they arise.



Future research should aim at directly comparing the rate of developing a psychiatric disorder following sexual assault between victims younger than 18 years old and victims 18 years old and older. In addition to this, future research should aim at investigating how appropriately victim's treatment plans are tailored to address their own needs by medical providers, such as self-blame in adults and poor emotional regulations in adolescent victims. As discussed previously, there is no specific "cookie cutter" treatment plan to address sexual assault in victims. Medical providers must remember that every victim presents with their own individual experience, trauma, and beliefs. Every case must be evaluated and the treatment plan must be tailored to address the victim's individual needs. Doing so will improve victim's lives and result in better clinical outcomes by increasing adherence to the treatment plans and reducing patient's symptoms.

The opportunity presents itself for medical providers to drastically improve the lives of victims of sexual assault. With diligence, patience, and a deeper understanding of how sexual assault affects victim's neurological and psychological health, medical providers can provide patients with the necessary tools to ease the terrible burden of sexual assault.

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