I36 Sex Offenders, Empathy, Aggression, and Oxytocin: A Potential Avenue for Future Exploration?

Alicia L. Bales, MD, PO Box 86125, Los Angeles, CA 90086-0125*

After attending this presentation, attendees will gain a basic knowledge of the current state of research examining effects of oxytocin on empathy and aggression. Attendees will consider the potential avenues of future research with oxytocin and sex offenders.

This presentation will impact the forensic science community and the mental health profession by suggesting that empathy deficits and aggressive behavior in sex offenders may be partially a result of oxytocin deficits in such offenders, particularly given recent research showing oxytocin's important role in increasing empathy and modulating aggression.

Intimacy deficits, cognitive distortions, and problems empathizing with victims have been factors implicated in the genesis and maintenance of sexual offending. Sexual offenders may suffer from a deficit in the ability to identify and appreciate the emotional experiences of others. Based on this framework, the development of empathy has been a central tenant in almost all sex offender treatment programs. The general principle of this emphasis is that if offenders' empathic skills can be improved, they are less likely to re-offend. Psychotherapy is the general treatment modality used to improve empathy in such offenders, but there are several challenges to this process, depending on the offender's motivation, therapist's skill, and a host of other factors. Exploring alternative ways to increase empathy in this population is warranted. If a safe and effective treatment modality can be developed to increase empathy in sex offenders, it is possible that this form of treatment may lead to a reduced risk of reoffending.

Oxytocin is currently receiving much attention from the psychiatric community, as it has been shown to play a role in bonding, attachment, peer recognition, trust, and empathy. Dubbed the "Love Drug" or the "Hormone of Love," it is a neuropeptide that is produced in the hypothalamus and released into the brain and bloodstream. Oxytocin can be given by an intranasal administration that crosses the blood brain barrier and thus has been used in several trials on humans. Several studies have focused on oxytocin's effects on empathy, as defined by the capacity to share and understand the feelings of others. For example, oxytocin has been shown to increase emotional empathy in response to both positive and negative stimuli using the Multifaceted Empathy Test. Another study found that administration of oxytocin increased mock jurors' perception of harm for the victims but did not increase the desire to punish the offenders for their criminal offenses, thus promoting the idea that oxytocin played a role in promoting emotional empathy. There is some evidence demonstrating that oxytocin may improve the accuracy of recognizing emotional state in others, particularly in individuals who would otherwise fail to make appropriate judgments based on social cues. In addition to research examining oxytocin's effects on empathy, there is evidence to show that oxytocin is an important modulator of aggression. For example, mice in which the oxytocin gene is absent from the time of conception have shown to have heightened aggressive behavior compared to normal mice. In humans, the levels of oxytocin in cerebrospinal fluid have shown to be inversely correlated with a life history of aggression.

This presentation will review the literature regarding research on empathy deficiencies in sexual offenders and then examine the literature on oxytocin's effect on empathy and aggression. Deficits in empathy and aggressive tendencies appear to be prominent traits in sex offenders. Given this information, combined with the growing amount of evidence indicating that oxytocin may play a significant role in increasing empathy and modulating aggression, it may be hypothesized that oxytocin deficits could be one of the contributing factors involved in the genesis or maintenance of deviant behavior in sexual offenders. Based on this review of the literature to date, future research into the effects of oxytocin on empathy and aggression in sexual offenders is warranted.

Sexual Offenders, Oxytocin, Empathy

 ** Presenting Author*