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The Effects of Vicarious Trauma in **Pregnant Helping Professionals**

Andy R Brown^{1*}, Susan J Foster¹ and Brittany M Williams²

¹The Chicago School of Professional Psychology, Chicago, Illinois, U.S.

²The Chicago School of Professional Psychology, Chicago, Illinois, U.S

³Capella University, St, Minneapolis, MN 55402, USA

*Corresponding author: Andy R Brown Capella University, St, Minneapolis, MN 55402, USA

■ bmw040707@knights.ucf.edu

Capella University, St, Minneapolis, MN 55402, USA.

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Abstract

This case report is related from a 54 years old woman who presented with a 1,5-month history of unpleasant smell senses. According to her complaints, her life has been changed due to unpleasant smells. In the examination of mental condition, her attitude has been partial harmonious, speech has been preservative, the affect has been apathetic and irritable, attention deficit, she has had hallucinations on smell milk and animal, had thoughts on self-harming due to her smell, marching ataxia and coreiform movements have been present.

The patient's family revealed that she has had a previous diagnosis of Huntington's disease; there has been also a family history. The patient has been admitted to the psychiatric inpatient unit. After 25 days of hospitalization, the amount of hallucinations has decreased considerably. Treatment has been regulated and as pimozide 2 mg, sertraline 50 mg and olanzapine 15 mg.

Keywords: Epigenetics concerns; Neuron damage; Trauma; Pregnant therapists; Trauma; Mental health

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Short Communication

Pregnant therapists and the effects of vicarious trauma in utero

There is an increased energy in research surrounding the impact of trauma on genetics and epigenetics. Findings in developmental and neurobiology suggest that while the body's natural response to stress is efficient and essential to survival, the chemical disruption can negatively affect neural growth and cell emergence in a person's DNA during specific stages of development [1]. Recent studies show that experiencing trauma either directly or indirectly may impact the body's stress response to the point that mechanisms of damage are created. Ellis and Knight evaluated the hazardous process of "empathetic engagement" with trauma victims that allowed gaps to be filled in current literature. Their research demonstrates the possible implications of the development of an advancing secondary trauma model. Results indicated that while "victim service provision" is helpful and necessary in treating clients, it can create damaging and harmful mechanisms to the counselor [2]. The following article scrutinizes the process of vicarious or secondary trauma within

empathetic engagement and assesses the potential implications it could have to a developing fetus in utero of pregnant therapists from a genetic and epigenetic standpoint. The implications and outcomes potentially point towards the need for applied research to develop treatment and prevention models of vicarious trauma. Additionally, it opens up the door to hypotheses about correlations that exist between therapists and their offspring in later stages of development.

Although there are a number of studies that implicate the dangers of vicarious trauma to helping professionals, little research has been conducted to couple the emergence of epigenetics concerns. The aim of this brief literature review is to establish the need for further research to fill the gaps in understanding and potential implications of future studies. Reviewed the empirical support and historical development of the effects of traumawork on clinicians to provide protective guidelines to clinicians who

experience traumatic stress responses [3]. The pervasive nature of both chronic and acute stress for a child not only impacts their social, cognitive, and psychological development but also recent studies show biological elements of development are effected as well (2015). It is evident that trauma exposure can alter the very DNA of a person's genetics [4].

The study of epigenetics is essentially how a person's genes are either inhibited or expressed [5] and this occurs through a process called myelination or alternately demyelination. Once a gene goes through this process, its gene expression, molecular memory, and inhibition is inherently altered. From a biological perspective, once a gene goes through the process of myelination or demyelination, it can potentially remain this wayeither inhibited or expressive across the lifespan. One exception to this process is in the event of response to an environmental stressor, were the genes are propelled into the demyelination or myelination state [5,6]. According to the Balance Hypothesis, any imbalance in the limbic mineralocorticoid receptors and the glucocorticoid receptors (GR) can alter how one process fear, arousal, reward and resilience, creating lasting expression of these receptors [7]. This results in the release of stress hormones and potential neuron damage.

Even in the absence of direct exposure to a traumatic event, the effects of the trauma can be transmitted to offspring for generations to come [8]. Approximately 7%-21% of women report stress and anxiety during their pregnancy [9]; therefore one can presume that a pregnant helping professional has a similar or higher risk of experiencing epigenetic sensitivities. Due to the exposure to secondary trauma, there is a direct application for

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pregnant helping professionals during the therapeutic process. Within the womb, the development of the fetus is threatened by the same trauma and stress [6,10].

While duration, intensity, and frequency of exposure to trauma can have a mitigating effect on vicarious trauma in the mother, the extent to which children in utero are traumatized is often overlooked. Once exposed to trauma, negative experience can be adaptive or problematic. Again, this largely depends on the connection between genetics and environment. For instance, one might expect a pregnant therapist who treats clients who have experienced trauma on a regular basis to be at greater risk for vicarious trauma and epigenetic transmission of response. In theory, a pregnant therapist who has little to no background in working with trauma can be equally compromised when vicariously exposed. In applying the match/mismatch hypothesis, someone who experiences mild or moderate exposure to adverse conditions during development can have optimal adaptation to similar experiences later in life [11]. Conversely, exposure to prolonged and/or highly adverse distress or conditions in utero can result in similar phenotypical expression in later life.

Knowing the epigenetic transmission of trauma is vital for helping professionals and for those who train them. From a training perspective, considerations should be made to prepare new helping professionals for this potentially foreboding hazard of the job. While theoretical approach and a therapeutic skill set are vital aspects of counseling training, the simplistic, yet difficult task of self-awareness will be a central component to the counselor's resiliency [12].

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