# Childhood Abuse and Depression in Adulthood: Review Article

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#### **ABSTRACT**

**Background:** There is widespread agreement that traumatic experiences in early life play a crucial role in setting the stage for adult depression.

**Aim and objectives:** This paper aimed to examine the evidence linking childhood abuse to the development of adult-onset depression.

**Methods:** For the purpose of quantitatively comparing the magnitude of effect across exposure age groups, we scoured scholarly papers and databases including PubMed, Google Scholar, and Science Direct for information on the correlation among both Maltreatment exposure age and Depression. Studies conducted in English were sourced from electronic databases and grey literature up to April 6th, 2022. Included studies had to provide both: Data on when the abuse occurred and quantitative measures of the correlation between abuse in childhood and adult depression.

**Conclusion:** Adults with a record of childhood abuse have a greater likelihood to have depressive disorders with a more severe clinical presentation during their adulthood than adults without. Exposure to severe, early-onset, chronic, and treatment-resistant depression throughout childhood is associated with a history of maltreatment, particularly physical neglect and emotional abuse. Clinical implications include a need for a thorough evaluation of emotional abuse, sexual abuse, and cumulative exposure to trauma in patients with chronic depression.

**Keywords:** Depressive disorders, Childhood abuse, Beck score.

#### INTRODUCTION

Depression is the biggest mental health condition, affecting 300 million individuals globally. Human capital is eroded, and suicide and other causes of early death are linked to depression <sup>(1)</sup>. Major depressive disorder is pervasive and incapacitating, and it frequently recurs and worsens over time. A worldwide 12-month prevalence of 10%-17% and a lifetime prevalence of 17%-40% place depression among the most frequent psychiatric diseases <sup>(2)</sup>.

The association between early-life stress and clinical depression is well recognized as a major contributor to adult mental health issues. It's thought of as a bridge between an outside experience and the way it affects a person's inner world. Early trauma is the leading cause of mental health issues across the board, including cognitive, behavioral, emotional, and physical issues <sup>(3)</sup>.

The recorded incidences of child abuse are only the "tip of the iceberg." or the piece that is visible "above the surface," of the larger problem. The prevalence of maltreatment, the social and demographic elements associated with it, and the impact it has on future health are all poorly understood <sup>(4)</sup>.

Consequences of child abuse and neglect are frequently discussed in terms of their physiological, psychological, behavioral, and social effects. But, in practice, it is utterly difficult to disentangle them. Brain injury in children, for example, can have long-term psychological repercussions like learning and mood problems. High-risk actions are frequently A symptom of underlying mental health issues. Stress and emotional distress might increase the likelihood of engaging in

risky behaviors like smoking, drinking excessively, or using illegal drugs <sup>(5)</sup>.

This article aimed to examine the evidence linking childhood abuse to adult-onset depression.

#### **Depressive disorders**

Debilitating mood, interest, and pleasure alterations, as well as cognitive and vegetative symptoms, are diagnostic criteria for major depressive disorder (MDD), and mental illness. Clinical subtyping of MDD is now possible with the help of updated diagnostic criteria and specifiers included in the 2013 edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) <sup>(6)</sup>.

Although major depressive episodes and MDD share a cluster of symptoms, these symptoms also appear in schizophrenia and bipolar illness. Hence, diagnosis of MDD requires the use of exclusion criteria. Annually, MDD affects about 6% of the world's adult population, with prevalence being roughly twice as high in women as in males. When comparing all diseases and disorders, MDD has the second highest impact on the chronic disease burden (as defined by 'years lived with disability') <sup>(7)</sup>. Moreover, childhood sexual, physical, or emotional abuse is a significant risk factor for MDD, but the complex interplay between environmental variables and genetic and epigenetic factors is still poorly understood <sup>(8)</sup>.

Despite advances in our knowledge of the neurobiology of MDD, no one mechanism has been discovered that accounts for all of the symptoms of the disorder. However, MDD is related with decreased hippocampus sizes and alterations in the activation or

Received: 26/12/2023 Accepted: 26/02/2023 connection of brain networks, including network of cognitive regulation and network of emotional salience (9)

### **Epidemiology**

#### Prevalence and main correlates:

The World Mental Health (WMH) survey, which evaluated the DSM-IV criteria for MDD in nearly 90,000 persons from 18 countries on all continents, provides the most accurate estimate of the prevalence of MDD worldwide. The average prevalence of MDD during a 12-month period is around six percent, which is consistent with previous findings from large-scale worldwide investigations. The lifetime prevalence of MDD is often thrice a lot greater than the yearly average prevalence, indicating that one in six persons suffer from MDD (10).

In addition, both men and women are at a much higher risk for MDD if they have poor levels of education and exposure to a number of social variables (such as childhood adversity, socioeconomic position, and low social support). A recent big study involving over 25,000 people revealed that the link between lower educational attainment and MDD might be attributable in part to shared genetics, but the cause-effect relationship between the two remains unclear. Patients with MDD who have experienced trauma in childhood have a greater chance for more severe symptoms, a worse prognosis, and a reduced responsiveness to treatment than individuals without a history of childhood trauma (11).

#### Childhood Abuse

Physical, sexual, and/or emotional mistreatment or neglect of a child or children, typically on the part of a parent or other primary caregiver, is child abuse or child maltreatment. Abuse of children can occur everywhere a child is vulnerable, whether in the home, at school, or in the community, and can be the consequence of either overt or covert behavior on the part of a parent or other caregiver <sup>(12)</sup>.

Sometimes, "child abuse" and "child maltreatment" are used synonymously; however, some academics draw a distinction between the two, using "child maltreatment" to encompass neglect, exploitation, and trafficking. Abuse and neglect both fall under the umbrella concept of child maltreatment. Cultural norms about children, child rearing, and parenting all contribute to how we classify and define child abuse (13).

The World Health Organization (WHO) defines child abuse and neglect as "any form of physical and/or emotional mistreatment, sexual abuse, neglect or negligent treatment, or commercial or other exploitation that causes or could cause harm to the child's health, survival, development, or dignity in a relationship of trust or power" (14).

Abuse of children is a worldwide issue that has devastating effects. Sexual abuse of children is a widespread problem, affecting 1 out of 5 women and 1 in 13 males between the ages of 0 and 17, and nearly

three quarters of children aged 2-4 years, or 300 million children, frequently subjected to physical and/or psychological violence by their parents and/or caretakers, according to the WHO 2020 report. There have been forced sexual encounters involving 120 million girls and young women under the age of 20 (15).

Maltreated children often suffer tragic deaths that are wrongly attributed to other causes, such as accidents involving fire, heat, or water. In times of war and among refugees, girls are especially at risk for sexual violence, exploitation, and abuse at the hands of adversaries, security forces, community members, relief workers, and others <sup>(16)</sup>.

UNICEF Egypt and the 2014 Egypt Demographic and Health Survey found that nearly all Egyptian children (93%) had experienced some type of violent disciplinary practice, either psychological hostility or physical punishment from their parents or caregivers, typically in addition to nonviolent discipline. Only 4% of children were exclusively disciplined in a non-violent manner. The vast majority of children (1-14 years old) were subjected to some type of psychological aggression as a form of discipline in the month leading up to the poll. Around eight in ten kids were subjected to some type of physical discipline, and more than four in ten were subjected to severe physical punishment (17).

## Childhood abuse in adult depressive disorders

Abuse in childhood is a major contributor to the progression of mood and anxiety problems as an adult. Abuse, for instance, has been linked to a higher vulnerability to emotional distress three to four times as high as the general population, as well as an escalating threat of adult cancer, respiratory disease, and cardiovascular disease two to three times the normal rate. This is significant since psychiatry tends to pay less attention to somatic health despite the fact that those with mental illness have a far higher risk of dying prematurely and a much shorter life expectancy. More and more research suggests that affective disorders related to childhood abuse constitute a specialized form of mental illness with clear diagnostic criteria, distinguished by earlier onset, more severe and persistent symptoms, and poorer response to any form including treatment, psychotherapy, pharmacotherapy, and combinations thereof (18).

Despite the seriousness and widespread frequency of childhood abuse across affective disorders, the reasons why abuse is linked to poor outcomes for anxiety and depression as adults remain unclear, and there are no effective targeted treatments for overcoming the long-term effects of abuse. As a result of this glucocorticoid overproduction in childhood, aberrant stress-response mechanisms arise <sup>(19)</sup>.

Mechanisms in psychology putting together CT and psychopathy:

Characteristics and thoughts of a maladaptive personality: Abuse in childhood has the potential to permanently affect an individual's core cognitive beliefs

about themselves and others. Individuals were classified into one of five unique latent (mal) adaptive personality types based on their levels of neuroticism, extraversion, and, to a lesser extent, conscientiousness and agreeableness. Openness to experience was unrelated to any of the personality types. It was discovered that those with high degrees of neuroticism were more susceptible to the effect of cumulative stress (including childhood abuse) on depressed outcomes, which hints at the role of personality as a moderator and potential mediator of psychopathology. A lack of optimism has been linked to a history of childhood maltreatment, and this effect persists even after controlling for other factors, such as the severity of the abuse or neglect suffered <sup>(20)</sup>.

# Biological processes connecting childhood maltreatment and psychopathy:

Malfunctioning biological stress systems: Changes in the function of the major stress systems: The hypothalamic-pituitary-adrenal (HPA) axis, the immune-inflammatory system, and the autonomic nervous system have been the focus of biological psychiatry studies that attempt to explain the long-term repercussions of childhood maltreatment (ANS). Meta-analyses conducted in the last few years have found robust associations between childhood abuse and lower cortisol levels in the morning and lower cortisol responses to experimental social stress (21).

The research on autonomic dysregulation isn't very consistent, but it does point to a reduced heart rate (HR) and pre-ejection period (PEP) in reaction to artificially induced mental stress and conflicting outcomes on sinus tachycardia <sup>22)</sup>.

Deterioration of physical health caused by premature aging and poor diet and lifestyle: Abuse in childhood has far-reaching impacts, from altered brain development and poor health habits to impaired bodily function. Inactivity, obesity, smoking, sexual risk-taking, heavy alcohol use, and illicit drug use are all linked to multiple experiences of childhood maltreatment, according to a recent meta-analysis. In addition, more dysregulations in the metabolic syndrome were linked to exposure to childhood maltreatment, notably sexual abuse, than to no such exposure. Exposure to unpleasant childhood events is associated with drastically divergent life-course trajectories, including a two-fold increased risk for premature mortality and the increased beginning of numerous somatic disorders, as shown by observational studies. Abuse in childhood may leave behind permanent biological scars that contribute accelerated or premature aging as an adult (23).

Altered brain structure and function: Persistent activation of the HPA-axis and the immune system has been theorized to disrupt brain development after childhood maltreatment. The production of proinflammatory signals is triggered in response to stress

by the activation of immune cells via the sympathetic nervous system. In this way, it is possible that the HPA-axis and the immune system are two pathways through which childhood trauma might affect brain shape and function <sup>(24)</sup>.

The prevalence of adverse life experiences described by victims of child abuse is much higher than that of healthy controls, suggesting a link between childhood abuse and the development of mood and anxiety disorders. Abuse of children has been associated to smaller amygdalae, but not to abuse of hippocampi or the anterior cingulate cortex (ACC) (25). Individuals without psychopathology who have experienced childhood abuse have greater negative connectivity among the dorsal anterior cingulate cortex (ACC) and the lingual gyrus and occipital fusiform gyrus. This finding suggests that in resilient individuals who have experienced childhood abuse, a greater capacity to suppress emotional responses and absorb information in verbal declarative memory may contribute to their ability to reevaluate or "reframe" unpleasant situations (26).

There is a wide range of possible outcomes following experiencing childhood abuse, despite being an important predictor of danger of mental health issues like despair and anxiety. There are a number of hypotheses that suggest that one's vulnerability to the consequences of childhood maltreatment depends on their unique set of circumstances (27).

The effects of a cumulative stress index, which included childhood maltreatment and other stressors, on depression were first found to be greatest in high-risk persons with high degrees of neuroticism. Second, males who have experienced abuse and have the CA haplotype of the mineralocorticoid receptor (MR) have more severe depression symptoms than men with the CG haplotype, who have more robust mental health functioning (28).

Finally, those who carry the BDNF val/val allele exhibit increases in hippocampus activity in reaction to adverse phrases, and improved behavioral responses in people who carry the C allele of the neuropeptide Y (NPY) gene. Increased activation in the amygdala, and decreased prefrontal cortex (PFC) activity in reaction to facial expressions of emotion <sup>(29)</sup>.

#### **CONCLUSION**

Adults with a record of childhood abuse have a greater likelihood to have depressive disorders with a more severe clinical presentation during their adulthood than adults without. Exposure to severe, early-onset, chronic, and treatment-resistant depression throughout childhood is associated with a history of maltreatment, particularly physical neglect and emotional abuse. Clinical implications include a need for a thorough evaluation of emotional abuse, sexual abuse, and cumulative exposure to trauma in patients with chronic depression.

#### **DECLARATIONS**

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