# Impact of Adverse Childhood Experiences on the Treatment Journey of Women Facing Infertility

Dear Editor,

Infertility in women is defined as the inability to conceive after a year of regular, unprotected sexual activity <sup>1</sup>. While technological advancements offer various medical interventions for treatment, infertility can stem from issues with ovulation, the uterus, fallopian tubes, or abdominal factors. Sometimes, the cause remains elusive despite thorough testing. However, infertility isn't solely a biological issue; adverse childhood experiences (ACE) also play a role. ACE encompass stressful or traumatic events during the first 18 years of life, such as domestic violence, substance abuse, parental mental illness, divorce, or incarceration, which can impact fertility beyond mere physiological factors.

ACE serve as a significant risk factor for the emergence of various psychological challenges and have been linked to the development of conditions like personality disorders, depression, anxiety, substance abuse, post-traumatic stress disorder, suicidal thoughts or actions, and psychotic episodes 2. They can lead to social, emotional, and cognitive difficulties, as well as the adoption of health-compromising behaviors such as smoking, substance abuse, eating disorders, and unsafe sexual practices—often used as coping mechanisms. Notably, ACE don't just affect mental health but also impact physical well-being in adulthood. Research suggests that trauma and chronic stress, typical of ACE, can influence reproductive health and fertility. Some studies have highlighted potential gynecological issues associated with specific adverse childhood experiences; for instance, both physical and emotional abuse may elevate the risk of pelvic floor disorders and chronic pelvic pain due to stress.

A Longitudinal study conducted research involving 1652 women from the National Survey of Youth's 1997 cohort, revealing that those who had experienced stressful events during childhood were more likely to face infertility <sup>3</sup>. Similarly, an integrative review which examined 20 articles, suggested a potential link between pregnancy loss and infertility in women with a history of ACE. This review also highlighted related concepts such as racial and ethnic diversity, social determinants of health, modifiable risk factors, and stress assessments <sup>4</sup>. A cross-sectional study indicating that as the number of ACE increased, so did the likelihood

of fertility difficulties. Those with four or more ACE had a 2.75 relative risk of infertility compared to those with no ACE <sup>5</sup>. Furthermore, mental health issues like depression, anxiety, and PTSD can intensify the emotional strain. Thus, comprehending the impact of ACE on infertility treatment among women is vital, given their potential effects on both mental and reproductive health outcomes.

The process of IVF treatment is intricate and comes with emotional and psychological challenges. Infertility can disrupt one's sense of self, leading to feelings of isolation, stigma, and judgment, ultimately resulting in a sense of inadequacy or shame. Moreover, IVF treatment entails significant financial investment and uncertainty, which can amplify financial stress, strain relationships, and worsen mental health conditions. A woman's past traumas and experiences significantly influence her IVF journey. Those with ACE typically contend with heightened levels of stress, anxiety, and depression, impacting their emotional well-being and coping mechanisms. Research indicates that this adversely affects treatment outcomes 6. ACE often manifest as issues stemming from trauma, such as difficulties with trust or forming attachments, fear, and avoidance, further complicating decision-making processes.

Women who have experienced ACE may struggle to disclose sensitive information or articulate their needs during psychological assessments due to feelings of being overwhelmed or judged. Trusting medical professionals, adhering to treatment protocols, or feeling secure in medical environments may pose challenges. Hormonal fluctuations can intensify symptoms of depression, anxiety, and mood swings, complicating stress management during IVF medication and stimulation. Anderheim et al., noted that infertile women often engage in rumination during treatment, excessively dwelling on negative emotional responses, which can lead to heightened psychological strain <sup>7</sup>. They may find certain aspects of the IVF process, such as egg retrieval and embryo transfer, particularly triggering, especially if they have a history of

**How to cite this article:** Lazar V. Impact of Adverse Childhood Experiences on the Treatment Journey of Women Facing Infertility. J Neurobehav Sci 2024; 11: 89-90.

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**Received:** 02.05.24 **Accepted:** 05.08.24 **Published:** 31.12.24

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#### Access this article online

Website: https://dergipark.org.tr/tr/pub/jnbs/issue/89057/1608176

**DOI:** 10.32739/jnbs.11.1608176

Quick Response Code:



Ethics committee approval: There is no need for Ethics Committee approval.

physical or emotional trauma.

Hence, it's essential to evaluate ACE during the IVF process to understand patients' psychological backgrounds. This assessment can unveil potential trauma triggers, coping mechanisms, and emotional susceptibilities, enabling healthcare professionals to devise personalized treatment plans. SCREENIVF serves as an effective screening tool to distinguish between women entering IVF treatment with lower and higher risks of emotional issues during and after a treatment cycle. It serves as the initial step in triaging, determining the need for additional psychosocial support for women embarking on IVF. The subsequent step involves a more comprehensive diagnostic inquiry, which could identify those requiring further psychosocial interventions.

Early intervention can enhance well-being and treatment outcomes. The findings from the descriptive study indicate that psychological challenges among infertile women undergoing IVF treatment methods are particularly severe, creating a detrimental cycle §. On one hand, these psychological issues diminish patients' physical resilience and their response to infertility medical therapies, the persistence of infertility and potential setbacks in treatment exacerbate patients' psychological distress. This underscores the necessity for providing psychiatric care alongside infertility treatment. Successful navigation through IVF necessitates collaboration among various stakeholders. When patients disclose ACE, gynecologists can collaborate with psychologists. Psychologists can assess a woman's ACE history and identify any underlying mental health issues that might be exacerbated by IVF treatment.

Recognizing the importance of incorporating ACE assessment and intervention into infertility treatment is essential for enhancing patient outcomes. Tailored interventions and support can alleviate the emotional strain associated with infertility treatment. Future clinical approaches and research endeavors should prioritize the integration of ACE assessment and intervention into infertility treatment, emphasizing the necessity for holistic care addressing both physical and emotional dimensions of infertility. Exploring innovative strategies, fostering collaboration among stakeholders, and promoting trauma-informed care within fertility clinics are critical steps to ensure optimal care for women undergoing infertility treatment.

### Patient informed consent

There is no need for patient informed consent.

# Ethics committee approval

There is no need for ethics committee approval.

# Financial support and sponsorship

No funding was received.

## Conflict of interest

There is no conflict of interest to declare.

### Author contributions subject and rate:

Gangadhar Bareddy (25%): Contributed to writing a manuscript draft, literature search

Veparala Lazar (25%): Contributed to writing a manuscript draft, literature search

Khushi Mahajan (25%): Contributed to writing a manuscript draft and content of the manuscript.

Srikanth Pallerla (25%): Contributed to the review and content of the manuscript.

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