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Research Article

Post-Abortion Psychological Sequelae:- An explorative study to identify the Psychological Outcomes: Focus on Post-Traumatic Stress Symptoms among post abortion women.

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ABSTRACT:

Abortion, whether spontaneous or induced, can lead to significant psychological effects, including post-traumatic stress, which may affect a woman's mental health, relationships, and overall quality of life. Common emotional reactions include grief, guilt, anxiety, and depression, with some women developing symptoms resembling post-traumatic stress disorder. These outcomes are influenced by personal beliefs, prior mental health, social support, and cultural context. Despite its importance, post-abortion psychological consequences remain under-researched in many communities.

This quantitative exploratory study examined post-traumatic stress among 280 primigravida women following abortion at selected hospitals in Dadra & Nagar Haveli, India, from January to December 2023. Data were collected using a structured interview based on the PTSD Checklist – Civilian Version (PCL-C), with ethical approval and informed consent obtained. Findings revealed a mean PTSD score of 58.7 (73.41%), above the clinical threshold of 32, indicating moderate stress. While no participants required urgent medical care, all experienced varying levels of psychological stress, highlighting the need for post-abortion counselling and support.

Keywords: Abortion, PTSD, Psychological outcomes

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INTRODUCTION

Abortion, whether spontaneous or induced, is a complex and multifaceted experience that can have significant physical, emotional, and psychological consequences for women. While medical and social aspects of abortion have been widely studied, the psychological aftermath continues to receive growing attention in both clinical and research settings. Among the various psychological outcomes, post-traumatic stress symptoms have emerged as a critical concern, as they can negatively

influence women's mental health, interpersonal relationships, and overall well-being.

Evidence suggests that women who undergo abortion may experience a range of emotional responses such as grief, guilt, anxiety, and depression, with some progressing to trauma-related symptoms resembling post-traumatic stress disorder (PTSD). These responses may be shaped by multiple factors, including the circumstances leading to abortion, personal and cultural beliefs, prior mental health status, and the availability of social and emotional support. Despite this, the

psychological sequelae of abortion remain underexplored in many cultural contexts, particularly within societies where abortion carries stigma and limited discourse.

A study by Hanna Söderberg and colleagues on emotional distress following induced abortion, conducted in Malmö, Sweden, reported that 50–60% of women experienced some level of emotional distress, with 30% classified as severe. The identified risk factors included living alone, lack of emotional support from family and friends, negative changes in partner relationships after abortion, underlying ambivalence or negative attitudes toward abortion, and active religious involvement. These findings indicate that such distress could potentially be reduced or prevented through targeted support and interventions.

Understanding post-abortion psychological outcomes, especially post-traumatic stress symptoms, is essential for developing targeted interventions and providing comprehensive post-abortion care. Such insights can help health professionals recognize early signs of psychological distress, offer timely counselling, and promote long-term mental well-being among affected women.

A cross-sectional study conducted in 2018 by Sedighe, Alipanahpour and colleagues in Shiraz, Iran, assessed 104 mothers to determine the severity of post-abortion stress following spontaneous, induced, and Forensic Medical Center (FMC)-permitted abortions. The findings showed that the mean (SD) post-traumatic stress scores were 83.87 (18.35) and 77.40 (9.88) for spontaneous abortions, 82.28 (13.27) and 75.71 (14.73) for FMC-permitted abortions, and 86.66 (10.10) and 74.98 (12.99) for induced abortions, immediately and one month after the procedure, respectively. In all three groups, stress levels decreased significantly after one month. The frequency of stress was recorded as 3.10% in FMC-permitted abortions and 5.10% in induced abortions.

A study by Abolghasem Pourreza and Aziz Batebi on the psychological consequences of abortion among women seeking post-abortion care in Tehran found that at least one-third of participants experienced psychological side effects. The most frequently reported consequences included depression, anxiety about future infertility, and abnormal eating behaviors. Other outcomes such as reduced self-esteem (43.7%), nightmares (39.5%), guilt (37.5%), and feelings of regret (33.3%) were also observed but at comparatively lower prevalence rates.

This study, **“Post-Abortion Psychological Sequelae: An Explorative Study to Identify the Psychological Outcomes with a Focus on Post-Traumatic Stress Symptoms,”** seeks to investigate the prevalence and nature of post-traumatic stress symptoms among women following abortion. By exploring these psychological outcomes, the research aims to bridge gaps in knowledge and contribute to the development of supportive care frameworks that address both the medical and emotional needs of post-abortion women.

OBJECTIVE:

- To assess the level of post-traumatic stress among the post-abortion women

METHODOLOGY

Study Design: A quantitative explorative study design was employed to assess the level of post-traumatic stress among the post-abortion women among postabortion women.

Study Setting and Duration: The study was conducted at the selected hospitals of Dadra & Nagar Haveli, Gujarat. The data collection spanned over a period of twelve months, from January to December 2023.

Population and Sampling: The study population comprised primigravida postabortion women admitted in the selected hospitals of Dadra & Nagar Haveli. A non-probability purposive sampling technique was used to select eligible participants. The samples of the study were 280 post abortion women who were admitted at selected hospitals of Dadra & Nagar Haveli.

Inclusion and Exclusion Criteria

Inclusion Criteria

The study included post-abortion mothers who:

- Had undergone either complete or incomplete abortion
- Were primigravida (first pregnancy)
- Were available during the period of data collection
- Expressed willingness to participate in the study
- Were able to understand the Hindi language

Exclusion Criteria

The study excluded post-abortion mothers who:

- Were critically ill or hemodynamically unstable
- Had a known history of mental health disorders
- Had experienced threatened abortion
- Were involved in medico-legal cases (MLC)

Ethical Considerations: Ethical approval was obtained from Institutional Ethical Committee, NAMO Medical Education and Research Institute, Dadra Nagar Haveli, India (Approval No. DMHS/IEC/2016/204/1109, dated 02/03/2023). All participants were briefed about the purpose of the study, the voluntary nature of participation, and their right to withdraw at any time. Written informed consent was obtained from each participant before enrolment. Confidentiality and anonymity were strictly maintained throughout the study.

DATA COLLECTION TOOLS:

The tool used for data collection consisted of a structured interview schedule based on the PTSD Check List – Civilian Version (PCL-C).

Structured Interview Schedule

This section was designed to assess participants' post abortion stress after the abortion episode. The tool used for the stress assessment was PTSD Check List – Civilian Version (PCL-C). PTSD checklist - The PCL-5 is a standardized self-report rating scale for PTSD

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developed by National Centre for PTSD comprising 20 items that correspond to the key symptoms of PTSD. Responses were recorded systematically, allowing for objective analysis of participants' stress levels. For all

the items the maximum score given is 4 and the minimum score is 0. The subscale scores of PTSD checklist were as follows,

SUBSCALES	ITEMS	TOTAL SCORE
Re-experiencing	Items 1-5	20
Avoidance	Items 6-7	8
Negative alterations in cognition and mood	Items 8-14	28
Hyper-arousal	Items 15-20	24
TOTAL	Items- 20	80

Respondents are asked to rate how bothered they have been by each of 20 items in the past week on a 5-point Likert scale ranging from 0-4 (0 = Not at all, 1 = A little bit, 2 = Moderately, 3 = Quite a bit, 4 = Extremely). Items are summed to provide a total severity score (range 0-80).

Scores	Interpretation
0-32	Below clinical threshold
33-80	Above clinical threshold

PTSD Checklist - PCL-5: ANALYSIS

The post abortion stress level was assessed in the following heads as per the PTSD Checklist - PCL-5

SR.NO.	ITEMS	MEAN	MEAN PERCENTAGE	STD DEV
1.	Repeated, disturbing, and unwanted memories of the stressful experience?	2.921429	58.42857	0.868137
2.	Repeated, disturbing dreams of the stressful experience?	3.207143	64.14286	1.005337
3.	Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	3.064286	61.28571	0.917459
4.	Feeling very upset when something reminded you of the stressful experience?	2.717857	54.35714	0.981387
5.	Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	2.9	58	0.941287
6.	Avoiding memories, thoughts, or feelings related to the stressful experience?	2.853571	57.07143	0.877836
7.	Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	2.885714	57.71429	0.880581
8.	Trouble remembering important parts of the stressful experience?	2.932143	58.64286	0.983212
9.	Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	2.910714	58.21429	0.936645
10.	Blaming yourself or someone else for the stressful experience or what happened after it?	2.964286	59.28571	1.018895
11.	Having strong negative feelings such as fear, horror, anger, guilt, or shame?	2.785714	55.71429	1.007397
12.	Loss of interest in activities that you used to enjoy?	2.725	54.5	0.907604
13.	Feeling distant or cut off from other people?	2.946429	58.92857	0.935551
14.	Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	2.942857	58.85714	1.045704

15.	Irritable behaviour, angry outbursts, or acting aggressively?	2.996429	59.92857	1.052385
16.	Taking too many risks or doing things that could cause you harm?	3.321429	66.42857	0.971035
17.	Being “super alert” or watchful or on guard?	2.907143	58.14286	0.9496
18.	Feeling jumpy or easily startled?	2.885714	57.71429	1.030612
19.	Having difficulty concentrating Trouble falling or staying asleep?	2.860714	57.21429	1.070236
20.	Trouble falling or staying asleep?	3.007168	59.92857	1.010708
	TOTAL (Max score: 80)	58.7	73.41964286	8.302619282

The above table explains that the mean score of PTSD scale was 58.7 with a standard deviation of and the mean percentage was 73.41 which is above the clinically suggested threshold of 32 score. No subjects were in severe stress who require an immediate medical attention, but were psychologically low in many of the

items of the stress scale. The study findings indicate that all the postabortion mothers are experiencing different levels of stress after the abortion episode which can be taken care by the health care agency and health care workers positively.

PTSD Checklist - PCL-5: SUBSCALE ANALYSIS

SR NO	SUBSCALES	ITEMS	TOTAL SCORE	MEAN	MEAN PERCENTAGE	STD DEV
1.	Re-experiencing	Items 1-5	20	14.81071	59.24286	2.608896
2.	Avoidance	Items 6-7	8	5.739286	57.39286	1.28399
3.	Negative alterations in cognition and mood	Items 8-14	28	20.20714	57.73469388	3.673008
4.	Hyper-arousal	Items 15-20	24	17.97857	59.8928571	3.663181
	TOTAL	Items- 20	80	58.7	73.41964286	8.302619282

The subscale analysis reveals that the most expressed stress manifestation is avoidance where the mean percentage is 57.39 with standard deviation of 1.28 and the least expressed stress manifestation is Hyper-arousal where the mean percentage is 59.89 with a standard deviation of 3.66.

DISCUSSIONS

The findings of this exploratory study highlight that post-abortion women are vulnerable to experiencing a range of psychological sequelae, with post-traumatic stress symptoms emerging as a significant concern. While the intensity and prevalence of these symptoms may vary depending on individual, social, and contextual factors, the results underscore the need for early identification and timely psychosocial support. Integrating psychological screening and counselling into post-abortion care can play a crucial role in mitigating adverse outcomes, promoting emotional well-being, and supporting recovery.

A cross-sectional study conducted by Bitu Jamali and colleagues in the obstetrics emergency departments of Imam Ali Hospital and Shomal Amol Hospital, Amol City, Northern Iran, between October 2023 and March 2024, examined the prevalence of perceived stress and depression among women experiencing abortion and associated risk factors. The study found that 18.8% of participants reported high levels of perceived stress, while 15.6% exhibited depressive symptoms.

Significant associations were identified between depression and perceived stress ($p = 0.029$), as well as between perceived stress and low social support ($p = 0.034$), history of previous abortion ($p = 0.001$), and social causes of abortion ($p = 0.045$). However, no significant relationship was observed between perceived stress or depression and other variables such as resilience, domestic violence, or marital quality ($p > 0.05$).

RECOMMENDATIONS

In light of the study findings, it is recommended that psychological screening be routinely integrated into post-abortion care to identify women who may be at risk of post-traumatic stress symptoms and related emotional challenges. Enhancing access to counselling services before and after abortion, as well as encouraging support from family and partners, can play a vital role in alleviating psychological distress. Training healthcare professionals to detect early indicators of post-abortion sequelae and ensuring timely referrals is equally important. In addition, community awareness programs are necessary to reduce the stigma surrounding abortion and to promote mental health care. Future studies with larger, more diverse populations are also recommended to gain deeper insights into long-term psychological outcomes and to assess the effectiveness of targeted interventions.

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Conflicts of interest

There are no conflicts of interest.

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