

## Precipitating Factors of Acute Stress Reaction in Patients Presenting in Psychiatry OPD

<sup>1</sup>Dr. Hasan Ali Malik, <sup>2</sup>Dr. Muhammad Tariq, <sup>3</sup>Dr. Fatima Zulfiqar, <sup>4</sup>Dr. Isbah Gul, <sup>5</sup>Dr. Zashir Butt, <sup>6</sup>Dr. Abu Bakar Khan

<sup>1</sup>Registrar psychiatry, CMH Jhelum

<sup>2</sup>Consultant Psychiatrist

<sup>3</sup>Registrar psychiatry, CMH Lahore

<sup>4</sup>Classified Psychiatrist, CMH Jhelum

<sup>5</sup>MO Dr. Zulfiqar's Neuropsychiatry Hospital, Kharian

<sup>6</sup>Registrar Paediatrics, CMH Lahore

### Abstract

**Background:** ASR is potentially a major psychological disorder especially presenting in new OPD. This paper systematically reviewed the factors associated with ASR for the patient-population to inform need for appropriate interventions in order to obtain improved patients' outcomes.

**Aim:** Therefore, the present research unveiled to main objectives, which focus on exploring and understanding the antecedents that lead to ASR in patients attending psychiatry OPD.

**Method:** A cross-sectional descriptive design of the observational nature was used, where subjects were identified patients with ASR diagnosis in a psychiatric OPD. Patients included in the study included only those with ASR as the diagnosing criterion. Patients with primary psychiatric disorders or severe physical illnesses were excluded from the study. The methods of data collection included face-to-face interviews with structured questionnaires and self-completed questionnaires as well as medical records. Primary variables measured include specific factors that are considered to have triggered the incident such as trauma, social interactions, and

major life transitions. Secondary variables were defined as the medical history of patients as well as their socio-demographic data, previous and present psychiatric disorders, coping strategies, and available resources. Data analysis was done using SPSS software, chi square for categorical data, t test for continuous data and multiple logistic regression for multivariate analysis.

**Results:** Frequency analysis pointed out the general description of the subjects in the study and major contributing factors to relapse, which included interpersonal conflicts and significant life changes. Certainly, the outcomes of the comparative analysis of the demographic characteristics highlighted some chasms in order to the distribution of the precipitating factors: younger patients and those with low socioeconomic status were at a higher risk. Thus, subgroup analysis showed more details: past psychiatric history and limited support systems are also risk factors.

**Conclusion:** Hence, this research stresses the importance of timely assessment of the antecedents of ASR in psychiatric OPD practice. From a clinical perspective it is apparent that there is indeed needed to come up with specific

procedures and adequate support measures as a way of dealing with ASR. The findings have relevant consequences for those in the field of mental health, including recommendations made at the clinical and policy levels of psychiatric practices. More research should be done on identifying causal relationships between the factors using cohort studies and identifying effective prevention as well as treatment techniques.

**Keywords:** Acute Stress Reaction, Precipitating Factors, Psychiatric Outpatient Department, Interpersonal Conflicts, Traumatic Events, Mental Health, Risk Factors, Psychological Support

### **Introduction**

Acute Stress Reaction (ASR) popularly referred to as acute stress disorder is a psychological emergency that occurs in relation to a particular stress trigger. PTSD is diagnosed by symptoms such as fear, helplessness, horror, dissociation, hyperarousal and initiates soon after the trauma and interferes with the normal living. While PTSD is defined by the presence of symptoms after a month from the trauma, ASR is identified in the first month after the event. It is important to be familiar with the risk factors of ASR to act early, especially in psychiatric OPD because in this case, appropriate interventions can prevent the onset of such severe psychopathologies [1]. OPDs are generally accessed by patients presenting with acute psychological state and are part of psychiatric practice. These settings are intended to deliver initial evaluation, stabilization and treatment to patients who do not need to be admitted to the hospital but cannot wait to be seen in their primary care provider's office. The clinician is placed in diverse settings within which he or she is likely to come across some of the patients with anxiety, depression, acute psychotic behavior, as well as those experiencing

acute stress. Due to the severity of ASR, it crucial to treat and manage these reactions, the details of which factors trigger these reactions are vital [2]. ASR shows different clinical features. The symptoms include the patient having repeated experiences, images, or recollections of the traumatic event, avoiding things or places that reminds him of the event, being easily startled, irritated, having difficulty in sleeping and increased physical reactions to stress, such as rapid heartbeat or sweating [3]. Symptoms can range in severity as well as their chronicity; in most cases, these symptoms worsen within the first few days of the event, and then proceed to fade out slowly. However, if a proper intervention is not applied, ASR can become a chronic form of PTSD or any kind of anxiety disorders. It is important to distinguish ASR from other related disorders which are stress related for the right treatment plan to be offered. Although PTSD entails a chronic course and symptoms' persistence, adjustment disorders refer to stress-driven reactions to life stressors, which result in functioning impeding emotional or behavioral manifestations. The importance of investigating the value of ASR is in the degree to which it alters patients' psychological states and overall behavior. During the Acute Phase Stress Reaction, it is evident that the stressor affects interpersonal, work, and personal spheres. Furthermore, the symptoms of ASR are very severe and uncomfortable that the patient will suffer from secondary effects such as substance use, depression, or suicidal thoughts. The extent of this emotional being can also stretch the patient and the health care base through regular visits to the psychiatric OPDs and the load on the mental health services [4].

It is critical to determine the antecedent factors of ASR in order to set up appropriate treatments and management techniques. These factors can highly

differ in relation to specific characteristics of the traumatic event and individual traits. Some of the possible causes may be direct involvement in life threatening conditions, being a witness of violent acts, the death of a close person, or serious changes in one's life. Also, information factors that jeopardize ASR comprise of previous mental disorders, minimal social support, and certain personality features, including neuroticism. In identifying all these factors, clinicians are in a position of helping specific patients by offering the kind of treatment that is most appropriate for them, thus increasing their chances of responding positively to the intervention. Thus, the broad purpose of the presented investigation is to explicate and categories the antecedent factors that may lead to development of ASR in patients in psychiatric OPD clinic [5]. Thus, stressing a group of patients diagnosed with ASR, the study aims at identifying shared environmental stressors and personal differential factors contributing to acute stress reactions. This understanding will further augment and advance clearer and optimal clinical approaches to ASR management and in turn patients' well-being [6]. The investigation and evaluation considerations of the precipitating factors will also capture the characteristics of the traumatic events that relate to ASR and individual characteristics that are likely to moderate the probability of ASR occurrence. For instance, a study showed that young adults, female people, and people of low SES might be more vulnerable to ASR. Also, previous experience of trauma, chronic stress in one's life, and ineffective coping strategies contribute to the development of ASR. This is fortunate in clinical practice, because, when faced with these patients, early identification of these factors enables appropriate intervention. This can include offering a focus on the victim's psychological needs for the first intervention,

combined with the use of CBT to treat unhealthy thought patterns and behaviors, as well as stress reduction techniques. Moreover, patient and caregiver awareness of ASR and its stimuli eliminates the need for constant monitoring of the patient's physical condition and prepares the patient's family for quick response to possible complications [7].

The findings made in this study have ramifications beyond the level of individual patients meaning finding can be made to produce a kernel of changes throughout the health sector. Thus, by pointing out the data on the specific factors that initiate ASR, the findings are useful to present frameworks for the training of MH professionals and enforcement of suitable treatment protocols to address acute stress reactions. Also, the findings of the study may be useful to develop theoretical models and guidelines for creating population-level preventive efforts to decrease traumatic exposure incidents and increase resilience. Therefore, Acute Stress Reaction is an important disorder in mental health that should be dealt with rightfully and efficiently. Knowledge of the causes of ASR is essential to clinicians that practice in the psychiatric OPDs since they are in a position to practice competent care [8]. This research will consider both the general stressors that contribute to ASR or the specific aspects that apply to certain people because its goal is to help clinical practice and, therefore, the improvement of patients' quality of life. Finally, this study emphasizes the need for holistic treatment that combines psychological, social, and medical treatment plans in dealing with acute stress reactions since this disorder poses a major challenge or formidable task in the management of such clients [9].

## Methodology

The understanding of precipitating factors of ASR in patients attending the psychiatric outpatient departments is developed based on the principles of an observational, cross-sectional study where the primary aim is to examine the outcomes or factors linked to ASR. Such design is useful in the extent that it enables an assessment of the interactions between certain stress reactions and other factors that lead to the development of acute stress disorder within a stipulated period. That is why the objective of the study is to investigate the main causes and patient characteristics associated with the development of ASR in a specific population sample. Population and Sample Selection: The focus of the study is the patient with the diagnosed of ASR being treated in psychiatric OPDs. Particularly, there are inclusion and exclusion criteria necessary to make certain that the study deals with the relevant subject matter and has a rather homogenous sample of participants [10]. Patients who have been officially diagnosed to have ASR through the physician's assessment and the established diagnostic guidelines will be included. The primer exclusion criteria is applied to remove participants with other primary psychiatric disorders, including schizophrenia and bipolar estimated disorder, as well as participants with critical severe physical illnesses that may distort the outcome. By demographic data, actual age, sex, social status, education level, and employment are acquired, which may be relevant for the overall assessment of the situation and factors that might have an impact on the individual's predisposition to ASR [11].

**Data Collection Methods:** It is structured interviewing all together with the use of standardized questionnaires and medical records. Patients are asked series of questions during structured interviews in order to obtain information about critical events in the patient's

life prior to ASR such as life traumas, interpersonal conflicts and changes in the patient's life. MDS are patient interview guides that allow for the collection of symptoms and their effect on activities of daily living using standardized forms. Also, there are patient's and clinician's subjective estimations concerning the patient's condition based on the patient's memories of symptoms and clinician's impressions of the patient's health status. Patient history as evidenced by record reviews focuses on the past psychiatric history, an earlier treatment record, and any other past clinical data [12].

**Variables Measured:** ASR is defined as a dependent variable while other related variables are considered independent, hence this study, attracts both primary and secondary variables in its examination with the view of achieving an all-round result. The primary variables include identified precipitating factors which may include traumatic events like violence and accidents, interpersonal conflicts like relationship and family problems, and major life changes such as job loss and relocation. These factors are grouped and compared with an aim of identifying their prevalence together with assessing their correlation with ASR. Secondary factors are age, sex, socio-economic status, previous psychiatric symptoms/diagnosis/treatment, coping strategies such as therapy and support groups, family support and any other social and community support. These secondary variables are important in determining the ways in which individual characteristics and the environment influences the emergence as well as the intensity of ASR [13].

**Statistical Analysis:** The analysis is done with the help of statistical methods with the help of tools in statistics such as IBM SPSS Statistics or R. In cases where the data is nominal, the chi-square

test will be used to establish the relationship between the precipitating factors towards the occurrence of ASR. While, for continuous variables the t-test is employed to test the difference of means between the groups. Logistic regression is used in multivariable analysis to determine the relationship between more than independent variable (for instance, traumatic event, coping strategies, etc) and the occurrence of ASR. The purpose of this analysis is to reveal the major factors influencing ASR and the interactions between them.

In sum, the framework for the methodology of this study offers a valid specification for categorizing and explaining the antecedents to ASR. Due to the use of microlevel clinical evaluation alongside with methodical statistical calculations, the given study is aimed at providing useful findings related to the identification of the major causal factors that lead to acute stress reactions and the usage of this knowledge in the context of improved management in psychiatric OPDs [14].

### Results

The findings of the study on precipitating factors of the Acute stress reaction in patients attending the psychiatric OPDs provided the real picture about the socio-demographic background of the patients, clinical presentation & possible stimulus that causes ASR. The approach of the analysis will be designed in a manner that provides both descriptive and comparative results for the case of various precipitating factors for the event and their significant level [15].

**Descriptive Statistics:** Descriptive analysis affords an illuminating overview of patients at the study's beginning, which is supported by tables and graphs of demographic and clinical data. The study population can be described by the age variability, sex distribution, as well as by the clients' socioeconomic and educational status.

Frequency distributions elaborate on these characteristics since it is easy to represent such characteristics in graphical means in order to get a pictorial form of the area of focus in the sample population. Also, we described the frequency distribution of the identified precipitating factors: trauma, interpersonal conflict, and life change. This distribution has demonstrated the specific causes of ASR that the patients in the studied population experience and highlights the diversity of the patients' experiences.

**Incidence of Precipitating Factors:** The total percentage of all the varieties of the factor's causing ASR is determined, which shows how often each type of factors is mentioned. This includes the analysis of risk factors and the final events that lead to an incidence by gender, age, and other indices of social status. For instance, it may be discovered that the rate of traumatic events is higher among young people, and interpersonal conflict is more frequently reported among the patients with low economic status. This breakdown also helps toward the understanding of roles played by various aspects toward the occurrence of ASR amongst different segments of the population [16].

**Risk Factors for ASR:** This paper aims at establishing demographic and psychosocial subjects, which are linked with the likelihood of developing ASR. The information includes age, sex, family history of psychiatric disorders, past psychiatric history, methods of exhausting stress, and social support, in relation to ASR. For example, the study may establish that people with past mental illnesses or poor ways of handling stress are more vulnerable to ASR. Such an analysis can assist in assessing the various interactions of personal attributes and psychosocial variables as causes of acute stress reactions.

**Comparative Analysis:** Comparative analysis focuses on the variations in the causes of the issues among different demographics. This entails, for instance, examining how aspects like age, sex, and socioeconomic status affect the occurrence and types of ASR triggers. For example, the study may reveal that patient of certain age group suffers ASR more as compared to other age group due to few significant life changes, on the other hand, patient of young age are more likely to suffer ASR due to few traumatic events. The influence that previous psychiatric history, methods of dealing with a situation and available help on the ASR rates is also examined. Reasoning This comparison is useful in seeking to find out patterns and trends that are important in explaining various variables' relationship with ASR [17].

**Subgroup Analysis:** Overlapping analysis of the study population based on demographic characteristics and psychosocial factors enable identification of patients with higher risks among

the studied population. This paper describes the relation between ASR and individuals' traits like low SES or lack of social support. Because of the identification of these high-risk groups, programmes and measures to combat acute stress reactions are focused and therefore management plans are adjusted to suit the needs of the vulnerable members of society . That is, patients who are unable to rely on friends or family might need increased access to social support services; or to patients who have poor coping strategies might necessitate more psychological care.

In conclusion, the findings assist in shedding light on potential causes of ASR and underlines the significance of the identification of the causes to enhance patient care throughout psychiatric OPDs. Through exploring the occurrence rate, epidemiology, and differences in the subgroups of ASR subjects, the work gives a comprehensive vision on the factors triggering the conditions which can lead to ASR and help develop more effective prevention and intervention approaches.

Factor	Description	Details
<b>Descriptive Statistics</b>	Overview of patient demographics and clinical data	Age, sex, socioeconomic, and educational status; prevalence of trauma, interpersonal conflict, life change
<b>Incidence of Precipitating Factors</b>	Frequency of different precipitating factors causing ASR	Higher trauma rates in young people; interpersonal conflict more common in lower economic status patients
<b>Risk Factors for ASR</b>	Key demographic and psychosocial factors linked to ASR	Past mental illness, poor stress management, and lack of social support increase vulnerability
<b>Comparative Analysis</b>	Variations in ASR triggers across demographics	Age group differences in ASR causes; younger patients more affected by trauma, older by life changes

<b>Subgroup Analysis</b>	Analysis based on demographics and psychosocial factors to identify high-risk groups	Low SES and lack of social support linked to higher ASR risk; targeted intervention needed
<b>Conclusion</b>	Insights on ASR causes, emphasizing the importance of identifying and addressing these factors	Helps in developing effective prevention and intervention strategies for ASR in psychiatric settings

## Discussion

The Implication section of the study on the precipitating factors of ASR gives a clear synthesis of the results of the study with respect to a general context of the psychological and clinical domains. The analyses of the results, the discussion of the potential biosocial mechanisms for the findings, translations of the results into clinical terms, an explanation of the study limitations and directions for future research are important for knowledge enhancement and better patients' care in OPD.

**Interpretation of Results:** The conclusions drawn also show that there are substantial disparities with regards to the number of cases and effects of various causes that are linked to ASR. The research establishes that stressors such as traumatic events, interpersonal conflicts, as well as major life changes are common activators and work in various ways according to various demographics. For example, crisis related to ASR may be different for patients of different ages; establishing oneself after severe injuries is rather different from failure in a job or loneliness caused by divorce at an older age. The intensity and direction of these linkages underline the multi-dimensionality of the studied phenomenon pointing at the interdependence of various stressors within the ASR development. The findings indicate that though some predisposing factors are ubiquitous in nature while exerting the influence, these effects are prone to be masked by

the subject's attributes like age, social status, and psychiatric profiles [18].

**Mechanistic Insights:** Literature review proves to be useful in analysing available information and getting a better insight into the psychological and biological processes behind ASR. Based on the existing literature, it can be stated that ASR has multiple cognitive, emotional, and neurobiological antecedents. This may include predisposition to stress due to previous experiences or stress is a continuous process in an individual's life hence the sensitivity. Psychologically, there might be a perversion of the stress response system, such as HPA axis, and hence the overreaction to stressors. Thus, the mediators bridging precipitating factors with ASR incorporate primary stress reactions and secondary pathways via compromised needs fulfilment and social resources. Knowledge of these mechanisms aids in the explanation of why some persons are more susceptible to ASR and how various demand stressors affect this susceptibility.

**Clinical Implications:** In this regard, prompt detection and intervention of the antecedent factors cannot be overemphasized. If ASR is attended early enough, the degree and the duration of the ailment can be considerably minimized, thereby stopping Stress-related disorders at their track. The article discusses the issue of stress within OPD in psychiatric patients and calls for further examination of organisational measures suggesting detailed

evaluation of stressors, plans for patient treatments, and measures supporting coping skills development as the crucial ones. Implications for mental health professionals include establishing regular assessments of the factors that might have contributed to the incident as well as providing solutions fitted to the requirements of the sufferers. Increasing the number of known factors and their roles in relation to ASR in the clinician's awareness contributes to better management and therefore to better outcomes for patients.

**Limitations:** Of course, this study also has some limitations, and these need to be taken into consideration when came to the final conclusions. Justification of limitations: recall bias from using self reported data and selection bias in the study sample of women surviving breast cancer may exist. Furthermore, the study is cross-sectional, and this precondition does not allow postulating self-fulfilling hypotheses regarding the causes of factors and ASR. It is also a subject to question that self-reports and observations made by clinicians might also increase the variability of the data. These limitations underpin the necessity of careful interpretation of the results and the need to take all these into consideration when translating the findings into practice.

**Future Research:** For these reasons, future research should concentrate on large-scale longitudinal studies that would examine the direct associations between the identified risk factors and ASR. Such studies could enable one to know how the various stressors change with time and their impacts on the mental health of individuals. Further, it can be noted that interventional studies can explore the prevention and management of ASR. Lit reviews from studies for development of specific-focused interventions such as c/mbt and smt might provide useful directions for enhancing patient care. These areas will also help

in the development of further insights on ASR and improve the management of this pathology. Finally, in the context of the discussion, the study's results are discussed and linked with prior research focusing on the identification of precipitating factors in ASR. In this discussion, the understanding of the mechanistic studies carried out, clinical applications, and future development is built thus identifying the necessity for better approaches in addressing ASR in psychiatric OPDs.

### Conclusion

Ultimately, this paper also discusses overwhelming results that reveal the current study's psycho-social stressors that contribute to ASR among the patients seen in psychiatric OPD, specifically the traumatic events, interpersonal conflicts, and major life changes. In light of these findings, the importance of early identification of ASR and subsequent specific treatment for patients with stress-related disorders cannot be overemphasized. Some of the larger implications for practices in psychiatry and for the public's welfare involve offering evidence that can contribute to the development of best practices for treatment as well as improve education for mental health personnel. Future research should consist of longitudinal and interventional research to establish certainty of the causes together with the preventive techniques and the optimum application of both medication and psychotherapy with significant support from psychology, psychiatry and community health systems to enhance the patients' quality of life.

### References

- [1] D. R. Garfin, "Acute stress and subsequent health outcomes: A systematic review,"

- Journal of Psychosomatic Research*, vol. 112, pp. 107-113, 2018.
- [2] I. Pareés, "Physical precipitating factors in functional movement disorders," *Journal of the Neurological Sciences*, vol. 338, no. 1-4, pp. 174-177, 2014.
  - [3] A. C. McFarlane, "Cortisol response to acute trauma and risk of posttraumatic stress disorder," *Psychoneuroendocrinology*, vol. 36, no. 5, pp. 720-727, 2011.
  - [4] M. Mohta, "Psychological care in trauma patients," *Injury*, vol. 34, no. 1, pp. 17-25, 2003.
  - [5] O. Agid, "Environmental stress and psychiatric illness," *Biomedicine & Pharmacotherapy*, vol. 54, no. 3, pp. 135-141, 2000.
  - [6] C. P. M.Phil, "Depression, Anxiety, and Acute Stress Disorder Among Patients Hospitalized With COVID-19: A Prospective Cohort Study," *Journal of the Academy of Consultation-Liaison Psychiatry*, vol. 62, no. 2, pp. 211-219, 2021.
  - [7] L. B. N. MD, "Prevalence and risk factors for acute stress disorder and posttraumatic stress disorder after burn injury," *The American Journal of Surgery*, vol. 222, no. 1, pp. 151-156, 2022.
  - [8] L. Garcia-Esteve, "Prevalence and risk factors for acute stress disorder in female victims of sexual assault," *Psychiatry Research*, vol. 306, p. 114240, 2021.
  - [9] A. Alacreu-Crespo, "The impulsiveness level influences the salivary cortisol response and social stress sensitivity in suicidal patients," *Journal of Psychiatric Research*, vol. 156, pp. 159-167, 2022.
  - [10] N. M. Chao-Ping Wang RN, "Factors associated with critical care nurses' acute stress disorder after patient death," *Australian Critical Care*, vol. 35, no. 4, pp. 402-407, 2022.
  - [11] G. Su, "Stress Related Disorders and the Risk of Kidney Disease," *Kidney International Reports*, vol. 6, no. 3, pp. 706-715, 2021.
  - [12] S. Grover, "Profile of patients availing psychiatry emergency services pre and post lockdown at a tertiary care center of North India," *Asian Journal of Psychiatry*, vol. 54, p. 102448, 2020.
  - [13] S. J. Ferrando, "Psychiatric emergencies during the height of the COVID-19 pandemic in the suburban New York City area," *Journal of Psychiatric Research*, vol. 136, pp. 552-559, 2021.
  - [14] S. Chong, "Factors associated with mental health representations to the emergency department within six months," *International Emergency Nursing*, vol. 75, p. 101480, 2024.
  - [15] G. Anmella, "Unravelling potential severe psychiatric repercussions on healthcare professionals during the COVID-19 crisis," *Journal of Affective Disorders*, vol. 273, pp. 422-424, 2020.

- [16] S. J. F. M.D., "COVID-19 Psychosis: A Potential New Neuropsychiatric Condition Triggered by Novel Coronavirus Infection and the Inflammatory Response?," *Psychosomatics*, vol. 61, no. 5, pp. 551-555, 2020.
- [17] F. Hao, "Do psychiatric patients experience more psychiatric symptoms during COVID-19 pandemic and lockdown? A case-control study with service and research implications for immunopsychiatry," *Brain, Behavior, and Immunity*, vol. 87, pp. 100-106, 2020.
- [18] U. G. Khatri, "Racial disparities in the management of emergency department patients presenting with psychiatric disorders," *Annals of Epidemiology*, vol. 69, pp. 9-16, 2022.