Person-in-Situation Framework of Aggression Among Persons with Severe Mental Illness: A Case Series

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Aggressive behavior (AB) in individuals with severe mental illnesses (SMIs) presents a challenge when determining the cause and implementing timely management. This is especially relevant as people with SMI do not always display AB.[1] In the context of SMI, AB refers to a range of behaviors intended to harm or otherwise injure another person or destroy property or objects. It is inferred from the events preceding or following the act.[2] There are slight differences between specific terms such as aggression and violence; however, they are often used interchangeably. Violence represents a more extreme and severe manifestation of AB involving direct physical harm or destruction.[3] AB in SMI is mainly of four types: verbal aggression, aggression towards properties, physical aggression, and aggression towards oneself.[2] Studies have reported the prevalence of AB ranging from 8% to 76% in acute psychiatric treatment settings,[4,5] but the wide variation in findings can be attributed to varying study designs and factors such as the definition of AB, study settings, illness types/stage, and country where the study was undertaken.[5-9] AB in SMI is attributed to multiple bio-psycho-social factors warranting further exploration. Indian studies exploring the same are scanty; one observational study reported a 55.7% prevalence.[10] Risk factors associated with AB in persons with SMI include the presence of positive symptoms, history of aggression, involuntary admission, past or family history of substance abuse, and adverse environmental circumstance, including poor communication patterns, challenging living conditions, limited social support, overt criticality from caregivers, a longer period of hospitalization, provocative situations, and unemployment.[5,11-15] Various antecedents of AB in individuals with SMI have been proposed by neurobiological correlates, psychological theories, and social theories. Neurobiological correlates encompass the limbic system, hypothalamus, frontal lobes, and neurotransmitters like dopamine. Psychological theories focus on adverse developmental and life experiences. Social theories encompass internal, external, and interactional/situational models.[16,17] Social psychologists have proposed multiple theories to explain the precursors of AB,[18] which stem from the initial psychodynamic theory to the general aggression model in the 20th century.[19] The general aggression model, a bio-social-cognitive model, unifies other models such as cognitive theory, social information processing theory, learning theories, and script theories into one framework.[20] A limited understanding of these theories or models has led many to the misconception that SMI is always accompanied by AB, which can stigmatize persons with SMI in the community. Hence, it is important to understand AB using person-in-situation framework, which primarily focuses on individual or personal, psychological, and social factors and their impact on a person's life to understand AB.

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This case series highlights the heterogeneity of precursors and risk factors, helping understand the person-in-situation framework and formulating more effective strategies for intervention and prevention. The selected cases were considered for cross-case analysis to assess how sociocultural constructs influence aggression while maintaining participant confidentiality through anonymization. The authors received written informed consent from all participants involved in the cross-case analysis.

Case Details

Case 1

Mr A, a 40-year-old unemployed single gentleman residing with his mother and sister, was diagnosed with Paranoid Schizophrenia at the age of 20 years. The family members denied any deliberate self-harm or substance use in the patient in his lifetime. Mr A had a slow-to-warm-up temperament with introverted nature, and additionally, he had social skill deficits. His childhood discipline by his mother was inadequate, which resulted in permissive parenting patterns. Mr A's sister has a strained relationship with him, as she believed her life would be adversely affected by his illness.

His father, a government employee, had passed away, leaving Mr A single-parented since early childhood. His mother, now old, is the primary caregiver, and their source of income includes his father's pension and profits from the home-based small-scale business. Mr A's mother supervises the treatment, but adherence is partial. Mr A experiences a sense of dissatisfaction when his family members do not listen to him, leading to AB characterized by verbal and physical aggression towards family members, and sometimes extending to damage to household properties. Critical responses from the family increase the intensity of the aggression, resulting in multiple hospitalizations. The major types of aggression the family members noticed included physical, verbal, and aggression towards property.

The treating team identified that Mr A's AB was an expression of dissatisfaction toward family members. The triggering factors for agitation were jointly identified by the family, and behavioral strategies for handling the agitation were implemented. These strategies included noncoercive verbal de-escalation measures, such as actively listening to his words, validating his viewpoint, finding a way to respond that acknowledges his position, and being sensitive to his emotions. Additionally, the idea that violence is not necessary to resolve conflict related to dissatisfaction was introduced. The family perceived these measures as useful and appreciated their effectiveness in decreasing the frequency and severity of AB towards them. As a result of the intervention, there were no hospital readmissions.

Case 2

Ms B, a 35-year-old graduate and married office assistant from middle socioeconomic status, was diagnosed with Bipolar Affective Disorder. Although she had traits of impulsivity, sensitivity to criticism, and childhood temper tantrums, she was able to manage her studies, relationships, and job. The family members were not aware of any deliberate self-harm or substance use in the patient's lifetime. Her behavior changed drastically after the onset of BPAD, and she started becoming verbally and physically aggressive with her husband and children for trivial reasons, neglecting household chores, failing in emotional connectedness with family, and overspending on clothes and accessories. Her husband tried to modify her behavior with physical abuse before realizing she needed medical assistance. He used to engage her in work to reduce frequent conflicts in the family, and later he had to stop going to work to look after the child and family responsibilities. Ms B was frequently admitted to a tertiary mental health care center, six times, due to non-compliance. The associated symptoms of aggression were delusion of persecution, auditory hallucination, overfamiliarity, and overgrooming. The types of aggression seen were verbal and physical. Mainly, AB occurred in the family context regarding culturally inappropriate dressing, eating behavior, increased religiosity, and overspending. Ms. B's husband initially had hostility and criticality towards her even during the remission phase, which can be understood through the deficit model: inadequate information about the illness results in negative behavior. The husband was psycho-educated about the nature of the illness, symptoms, and approach to handling illness-related challenging behavior. Psychosocial interventions, including individual and couple therapy, were provided along with pharmacological interventions. Even though we addressed the compliance issues resulting from individual and interpersonal factors, after discharge, she became non-compliant with medication, and a re-emergence of aggression was noted. This non-compliance can be attributed to the illness and the family's interactions.

Case 3

Ms C, a 32-year-old, post-graduate, married lady, was diagnosed with Bipolar affective disorder nine years ago. Despite an initial good response to treatment and inter-episodic recovery, she used to have a frequent recurrence of manic episodes due to poor drug compliance. Temperamentally she was introverted, dependent on her parents for major life decisions, and lacked close friends. She had been admitted to the hospital five times due to the relapses. She did not have any self-harm attempts, even though there were suicidal ideations in past episodes of depression. The family members reported no personal history of substance use disorder. The associated symptoms of aggression included sleep disturbances, fear of abandonment by the husband, and interpersonal relationship issues with the in-laws during mood episodes. Subsequently, her husband often ignored her phone calls, was critical, and discouraged interactions with their children, leading to marital separation. The passive attitude of the husband was often the reason for aggression. During the episodes, she was verbally and physically aggressive toward family members, requiring hospitalization. Ms C had poor insight into the illness and often discontinued the medication. Though caregivers were well-educated and advised to supervise medication, they succumbed to the patient's demands to stop medications. Psychoeducation was provided to both the husband and the parents regarding the illness and the necessity of medication. They were also educated on identifying the factors triggering AB. After discharge, the parents supervised the medication, and the husband fully understood the

importance of maintaining the treatment. Currently, she is in remission from her illness, and no AB has been observed during this period.

Case 4

Mr D, a 27-year-old gentleman from low socioeconomic status, was diagnosed with paranoid schizophrenia eight years ago. He had been a temperamentally difficult child with temper tantrums and emotional dysregulation and had difficulty adapting to new situations and people. There were no self-harm attempts or substance use disorder in the past. He had a younger brother who had intellectual impairment. Mr D used to be aggressive towards family members and neighbors. Unfortunately, due to his condition, they called him "mental," which only further provoked him, resulting in physical altercations. His AB was associated with delusions of persecution, intrusive naked imageries of his mother, and wandering behavior. The major types of aggression present were verbal, physical, and aggression towards property. His mother believed that the cause of mental illness was possession by evil spirits and did not believe in medication. Instead, she thought his aggression would be relieved after marriage, as suggested by faith healers. Mr D would exhibit high levels of aggression on specific days of the month, such as the new moon (Amavasya) and full moon (Pournami) days, as believed by his family. Consequently, they would take him to temples to perform magico-religious practices.

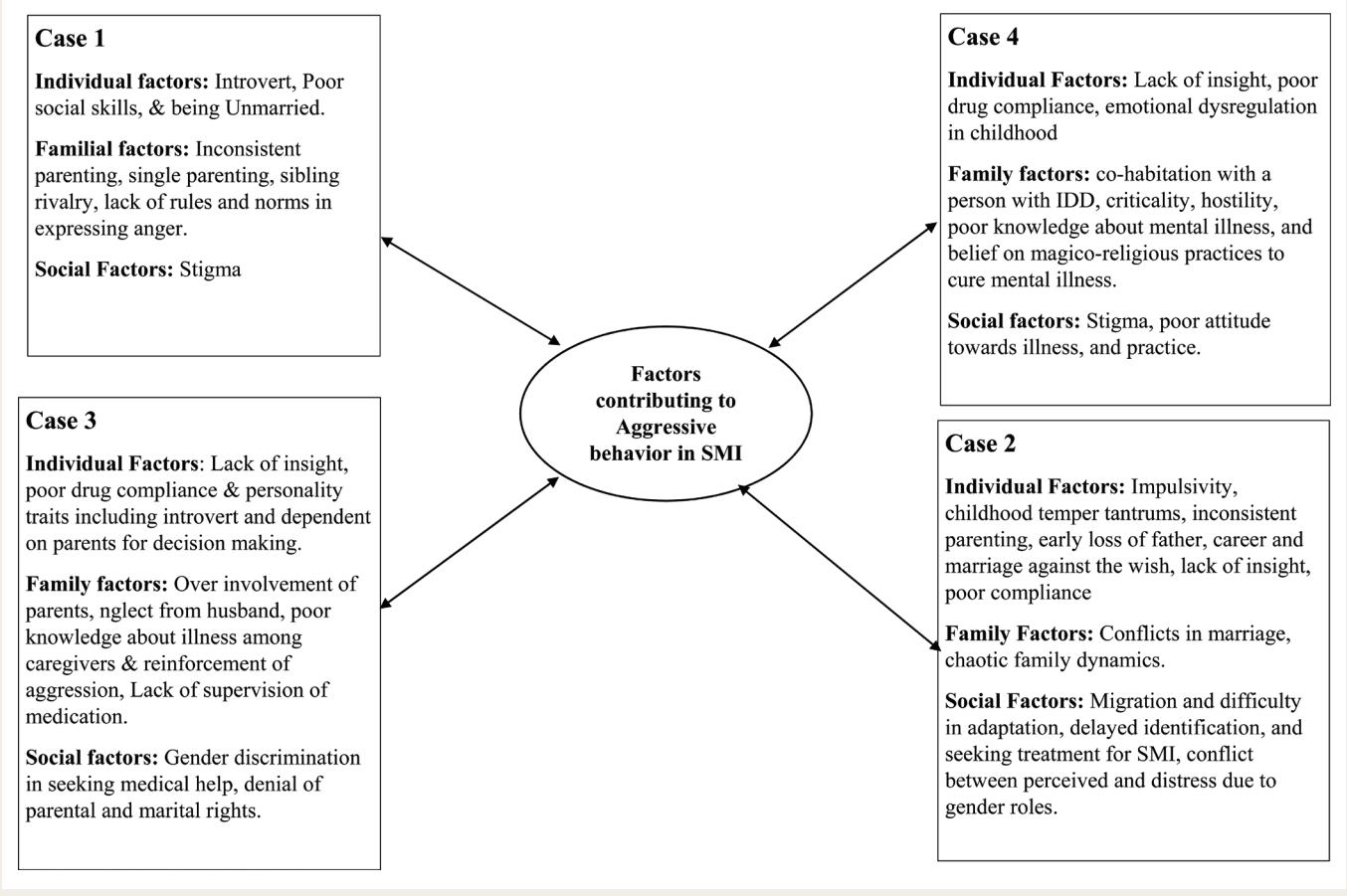
Furthermore, Mr D frequently experienced a denial of equal opportunities in the neighborhood, contributing to his AB. His family displayed critical emotions, so he was admitted to the hospital thrice due to AB. His treatment involved a combination of pharmacotherapy and psychosocial interventions. These included discussing misconceptions about mental illness in relation to marriage and faith healing practices. We also addressed the high expectations that the mother had towards the patient and the physical separation of the patient from the younger sibling who had intellectual impairment. After discharge, neither the patient nor the family made any visits to the hospital, thus preventing us from assessing the impact of the intervention on AB within the family context.

Discussion

The analysis of the case series reveals that AB in individuals with mental illness is influenced by a range of factors, including individual, familial, social, and cultural. Contrary to the conventional view that attributes AB solely to psychotic or mood symptoms, recent studies have indicated that mental illness alone is not the sole contributor to AB. According to current understanding, factors such as a past history of violence, impulsivity, emotional dysregulation, previous juvenile imprisonment, experiences of physical abuse, parental behavior, substance abuse,

FIGURE 1.

Factors Contributing to Aggressive Behavior in SMI: Case Analysis.



perceived threats, age, gender, income, and contextual factors such as life events, victimization, unemployment, family dynamics, parenting style, the criticality of family members, hostility, and setting limits can all contribute to AB.[21-23] Here, the authors are attempting to form a model through case series.

Cross-Case Analysis

Figure 1 provides an overview of the psychosocial factors related to AB among the four cases. The cross-case analysis identified the following personal and situational factors as contributors to AB: temperament, coping skills, patterns of expressing aggression, motivation, poor insight, the influence of modeling within the family, parenting styles, relationship dynamics, conflicts, perceived stigma among patients and caregivers, distress, reinforcement of aggression, and cultural elements.

Person-in-Situation Framework for Understanding the Context of Aggressive Behavior

A bidirectional relationship exists among the psychosocial factors mentioned above, and the interactive effect amplifies the risk of AB (**Figure 2**). Unfortunately, the interactions between these elements are often overlooked, with greater emphasis placed on symptom management and addressing expressed emotions. However, an approach solely focused on symptom reduction, without addressing the underlying psychosocial causes of aggression, can result in frequent readmissions and contribute to the stigmatization.

Understanding the individual's environment or situation is vital in comprehending the multiple reasons behind such behavior. Therapists and clinicians should adopt an approach that considers and addresses all these factors or components, tailoring their interventions accordingly. In our series, the AB of Cases 1 and 3 improved after addressing expressed emotions, such as criticality, and by validating their points of view while being sensitive to their emotions. This highlights the significance of understanding AB within the context of interpersonal interactions and providing insights and practical solutions for managing such behavior. These interventions are crucial because AB often arises from interpersonal interactions rather than being solely caused by the illness itself.

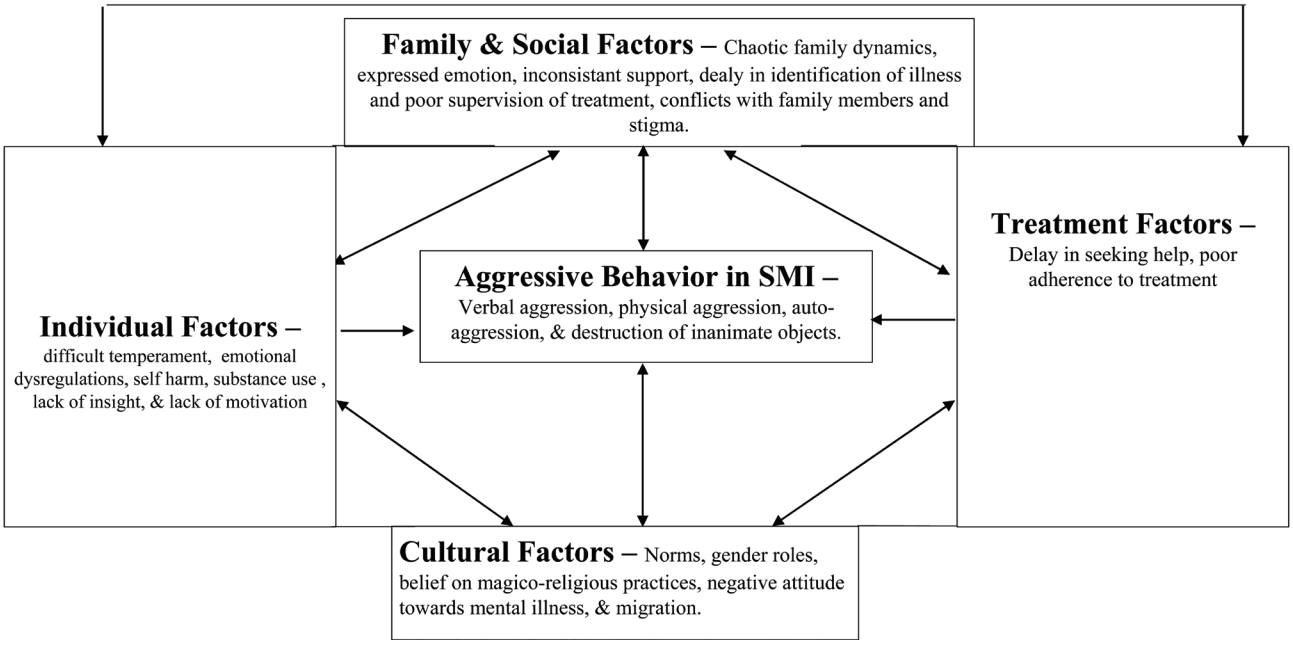
However, in Case 2, there was a recurrence of AB, emphasizing that it is important for patients and families to take the interventions seriously and implement them in their daily lives. Merely receiving interventions is insufficient; active participation and commitment are necessary for effectiveness. Unfortunately, we cannot provide any information on case 4 as no data is available after discharge.

The person-in-situation model offers valuable insights for analyzing the precursors of aggression and implementing customized interventions for individuals with SMI exhibiting AB. The primary objective of this model is to identify indicators for clinical interventions. By comprehensively understanding family, social, individual, treatment, and cultural factors, this model aids in the development of an intervention package that addresses setting limits, medication compliance, expressed emotions, family dynamics, the impact of stigma, and the various consequences of undesirable behaviors in an individual's life.

Traditionally, AB has been viewed through a psychopathological lens, disregarding the individual's perspective. However, individual factors such as temperament, tantrums, diagnosis, medication compliance, follow-up, delays in accessing treatment, and maladaptive coping mechanisms significantly influence it. Additionally, social and familial

FIGURE 2.

Person-in-Situation Framework for Understanding the Context of Aggressive Behavior.



factors such as chaotic family dynamics, conflicts among family members, and expressed emotions contribute to its manifestation. Cultural factors, which are often overlooked, also play a significant role and encompass cultural norms, gender, magico-religious practices, stigma, and migration.

Our case series explicitly highlights AB's multifactorial and multidimensional nature, necessitating a multidimensional approach. The analysis underscores the importance of incorporating psychological and social interventions alongside pharmacological interventions and providing families with training to offer support and prevent conflicts. The family and society's response should aim to create a patient-friendly environment and encourage individuals to seek assistance from mental health professionals during crises while equipping them with de-escalation skills to alleviate the caregiver burden.

This model provides a comprehensive framework for understanding AB holistically. However, larger studies conducted in multicultural contexts must validate the proposed elements/factors within these models.

Conclusion

AB in individuals with SMI is influenced by many bio-psycho-social factors. The "Person-in-Situation framework" aids in comprehending the underlying contributors and facilitates the implementation of personalized multidimensional clinical interventions to improve their overall well-being and recovery.

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