Aggression as a psychopathologic dimension: two case reports

L'aggressività come dimensione psicopatologica: due casi clinici

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Summary

Herein, two case studies are presented in patients who were admitted to hospital for violent behaviour with the objective was determining whether risk factors of hetero-aggressive behavior in psychiatric patients, as outlined in the international literature, were present in these two cases. After initial presentation of the clinical situation of these two patients, risk factors were identified. Thereafter, we attempted to outline the motivations and context that had driven the violent behavior. We conclude that accurate knowledge of the history and life of the patient and the evolution of the condition over time is indispensable for cure, both in order to develop a treatment intervention strategy that is integrated and focused on the patient's needs, and to prevent future incidents of aggression.

Key words

Aggression • Violent behaviour • Psychiatric patient

Douglas and Skeem [1] stated the difference between "risk status" and "risk state", indicating the former as the inter-individual level of risk largely based on "static" risk factors – i.e., gender, history of violence, childhood abuse and psychopathy – and the latter as the intra-individual level of risk widely determined by "dynamic" risk factors such as stress, emotional responsiveness, hostile rumination, impulsiveness, substance abuse and lack of insight. According to the authors, focus must be on dynamic risk factors because of their capacity for transformation and development. It is essential to keep in mind that risk factors do not act as a single cause in an event; they always interact with each other [2] and their interactions can be direct, indirect or mediated by a third variable. Aggressive behaviour, in fact, is multifactorial: it is a transactional process that reflects a multiplicity of causal risk factors. Nowadays, when evaluating risk factors of violent behaviour, four dimensions are considered: individual and demographical, clinical, biological and contextual [2 3]. With regard to demographic factors, some authors [4] assert that the association between violent behaviour and psychiatric diagnosis cannot be represented by these variables. As James et al. [5] observed, age is a purposeful variable in predicting the risk of violence: young patients (≤ 25 years) are at higher risk than others. Similar results have been reported in numerous others studies [6-11]. Pearson [11] and Tardiff [12] observed that the peak in violent crimes was reached in 20-year-old individuals. In a study by Waldheter [13], the correlations suggest that individuals with a lower level of education are more likely to be implicated in violent episodes inside the psychiatric unit, and that men commit more violent acts than women. Bjorkly [14] affirms that psychotic men are more violent than women with the same disorder. Allen identifies belonging to the male gender as a violent behavior risk factor in psychiatric population. This study agrees with the MacArthur's Risk Assessment Study [16] in that a history of violence and abuse increases the risk of violent behaviour and confirms the empirical connection between a past of violence with a future of violence.

Caprara, Barbanelli and Zimbardo [15] investigated the multidimensionality of aggression, focusing on the different processes and mechanisms that form its different expressions; they consider that comprehension of the interactions between interpersonal and personality aspects will prevention and identification of points for intervention. They classified a triad of factors that appear frequently in data collected in different countries: irritability, hostile rumination and tolerance for violence. Two other factors emerged from second order factor analysis, namely "emotive responsiveness" (a temperamental factor) and "positive valuation of violence" (a specious type of aggression). The presence of emotional responsiveness and hostility creates what the authors define as the "dangerous zone of violence", a concept also sustained by other authors [1 10 18]. Another important aspect regarding aggression is impulsivity: Barratt et al. [17] iden-

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tified two different types of aggression: "impulsive" and "proactive". The first one is described as a "reaction of hair-trigger" to a provocation that leads to an abnormous aggressive reaction, while the second is described as an act accompanied by a poor quality emotive response. Subjects belonging to the first group have a better therapeutic response when treated with mood stabilisers. Those with a high level of impulsivity exhibit multiple neurocognitive deficits characterised by reduced flexibility, poor planning capacities and poor verbal learning. Some researches focused on the influence that some social factors may have on aggressive behavior. Ferguson et al. [18] observed that social isolation, associated with depression, is a potential risk factor. Silver [19] suggested that the use of theories from the forensic field may allow for a more complete approach to the study of violence in people with mental disorders. For example, the theory of social learning [20] focuses on the effects that behaviour, learning habits and beliefs have on aggressive behaviour. This supports the importance of Lazarus' stress theory [21], according to which highly stressed individuals are more likely to experiment negative feelings such as anger, fear or frustration. A constant involvement in conflictive relationships may represent a type of chronic stress: people with serious mental disorders – especially those who experience delirium or hallucination, or those who use drugs – probably introduce negative elements in their relationships. In their study, Swartz et al. [22] observed that non-compliance with medical treatment and concomitant substance abuse in patients with major mental disorder is associated with serious violent acts. In several studies, substance abuse is also considered to be a strong predictive factor for the non-psychiatric population, but comorbidity with mental disorder, substance and alcohol abuse increments the risk of violence [1 10 11 14 16 25 26]. Lack of awareness of the disease and need for medical care have been associated with non-compliance to treatment and relapse. These results are also reinforced by Elbogen et al. [27]. In their study, it was observed that the perceived necessity for treatment was associated with a reduction in the level of violence in patients with a mental disorder. Nevertheless, more recent research has not found a direct correlation between a lack of insight and violence. MacArthur's Risk Assessment Study underlines the effects that substance abuse and mental disorder have on aggressive behaviour:

- substance abuse is correlated with a diagnosis of major mental disorder only in 40-50% of cases;
- substance abuse increases the frequency of both serious violence and other aggressive acts;
- there are no differences in violent behaviour between the clinical group with substance abuse and the control group without substance abuse;
- the clinical group has symptoms of substance abuse more often than the control group.

Until today, research on violence has not produced an unequivocal image of variables connected to mental health that are associated with the risk of violent behaviour. Regarding specific clinical factors, it has been thought that depression is associated with aggression, especially within parent-children relationships. Mammen et al. have observed that aggressive behaviours in this clinical group seemed to be impulsive and guided by a reaction to negative situations. Furthermore, Berkowitz suggests that depression may contribute to aggression from the moment that it carries negative emotions and thoughts. It is then probable that in some people depression may increment sensations of anger, principally towards the source that generated them. Ferguson's study, on another hand, asserts that this pathology is not significantly associated with aggression, at least inside psychiatric units.

Several studies have examined the correlation between disorders such as schizophrenia and bipolar disorder and violent behaviour. Persistent aggressive behaviour interferes with treatment and increases the burden of disease for both the caregivers and society. A problematic point is the complexity of violence. In fact, studies on violent behaviour in patients with schizophrenia have not discriminated between different types of violence. It has not been considered that violent acts may originate from different motivations, nor that for this reason different types of treatment may be considered. Results show that the incidence of violence is higher in psychotic patients, but only in comorbidity with alcohol or substance abuse [11 15]. Patients with mental disorders who also use substances or alcohol are more likely to be involved in violent behaviours than those who do not suffer from a mental disorder, but who abuse substances or alcohol [28]. Mac Arthur's Risk Assessment Study underlines how a diagnosis of major mental disorder is associated with a lower level of violence than a diagnosis of personality disorder or a diagnosis of adjustment disorder. In that study, the presence of delirium, regardless of its contents, is not associated with violence: neither hallucinations in general, nor those imperative in itself, have been shown to increase the risk of violence. Nevertheless, if the 'voices' specifically order a violent act the probability of an aggression will increment. Nolan et al. [29] found that, even if 20% of the sample group reported the presence of florid specific symptoms (for example, auditory hallucinations) in the moment of aggression, even when these florid symptoms were not present, the disorganisation and confusion may have brought them to misunderstand their victim's actions and, for this reason, to respond with aggression. Moreover, an Italian study supports the idea that aggressive behaviour correlates positively with paranoid schizophrenia and maniacal disorder [30]. Binder and McNeil observed an increase in risk for hostile and suspicious patients and for those who have thought disorders. Steadman consid-

ers the nature of delirium and hallucinations as potential areas when assessing risk factors.
Link et al. [4] identified a concept they termed "threat control override" (TCO) to explain the possible effects of some psychotic symptoms that lead to violence. They sustained that when a person feels threatened and when his inner control is compromised, violence will be the primary response. Their study shows that the presence of "TCO" symptoms is significantly associated with aggressive acts not only in the psychiatric population. The study by Swanson, Borum et al. [31] supports Link's results. They also observed that people who feel threatened and, at the same time, incapable of controlling their impulses, are involved twice as often in violent behaviour. Beck observes that the presence of delusions correlated to violence is rare, but, when it happens, seems to steer violence; therefore, in more than half of the cases, delusions are of the "TCO" type. In their study, Teasdale et al. [32] observed that this group of symptoms increases violence in male patients, but not in female patients.
According to Jungiger [33], hallucinations that instigate delusions are the most obvious source of violent behaviour in patients with schizophrenia. Zisook et al. [34], on the other hand, observed that patients with imperative hallucinations are not more violent than those without these types of hallucinations [31]. In a recent review [35], the association between schizophrenia and violence was summarised in the following points:

- the risk of violence increases in individuals with schizophrenia and other psychoses;
- comorbidity with alcohol or substance abuse increases risk;
- there are no significant differences in risk estimates with respect to some variables such as the type of disorder (schizophrenia versus psychosis) or the place where the study was carried out;

the increased risk of violence in patients with schizophrenia and comorbid substance abuse is the same as that in individuals not suffering from schizophrenia, but with substance abuse problems. Another study [36] observed that the relation between schizophrenia and violence is minimal unless it is not related to substance abuse. These suthors also investigated the risk of violence in schizophrenic patients, underlining the importance of factors such as criminal history, sociodemographic and clinical characteristics and substance abuse. Neuro-cognitive factors, not often included in research investigations, are also of the utmost importance. Serper and Reinhart identified three groups of biological-cognitive factors associated with violent acts in schizophrenic patients: neurocognitive skills, neurocognitive consciousness and attitudinal cognition (e.g. hostile attribution biases, attribution of benevolence or malevolence to voices, the impression of being controlled by others). A person with an executive dysfunction may not possess the abilities of behavioural inhibition necessary to cope with the presence of symptoms and other stressful events that accompany acute psychosis and hospitalisation: this can lead to an increase in aggressive manifestations. However, some authors do not agree with these conclusions [42]. In Italy, Raja et al. [37] assessed the relationship between hostility and violence in psychiatric patients in psychiatric units, reporting that violent behaviour is lower than in other countries. Risk factors associated with hostile and violent behavior include: young age at onset of the disorder, being single, not having children, a lower score in global operation (GAF) and a high BPRS (brief psychiatric valuation scale) score. In addition, patients have a wide range of psychotic symptoms (suspiciousness, hostility, hallucinations, thought disorder) and a lower capability of insight in the control of aggressive impulses than non-violent patients. However, these results refer to the risk of violence in psychiatric patients in psychiatric units. Berti and Maberino [38] carried out research with the purpose to highlight the risks and hypothesise improvements in the treatment and prevention of hetero-aggressive acts. Psychiatrists, nurses and psychologists were administered a questionnaire that investigated whether they had suffered attacks or personal injuries. The results showed that the principal risk factors that need to be taken into account to prevent violence are those both related to the acute and chronic aspects of the patient's disease, both factors related to the therapist.

Case reports

Two case reports are presented and then interpreted using data available in literature.

Case #1

Name: Angelo.
Age: 42.
Pathology: Paranoid schizophrenia (DSM IV-TR) Angelo is 42 years old and has been living in a Therapeutic Community for a few years. He is an only child and his parents divorced when he was 1 year old. They apparently divorced because his father was epileptic and could neither work nor take care of his family, so the wife achieved a dissolution of marriage. In spite of this, Angelo continued to have a regular relationship with his father until he was 18. At this time, he started having psychotic symptoms.
Angelo lived with his grandparents until he was 6 years old. When he started primary school, he moved back with his mother. His mother says he was lazy, that he had many learning difficulties and didn't socialize easily. She says he was dramatically lonely, to the point of seeming retarded. In fact, Angel had to repeat the fifth year; how-

ever, his scholastic situation improved and he managed to attend a professional high school. Nevertheless, he never established any strong relationships and continued to be extremely lonely.
When he turned 18 an intensification of these peculiar features of his character defined a psychopathologic beginning that resulted in an acute outbreak at the age of 22. At this time, he had just returned from a long journey in India that he had undertaken to improve his knowledge of martial arts and oriental philosophy. He was hospitalised because of poorly constructed delusional ideas and deep behavioural disorganisation (e.g., he believed to be in a strong relationship with the Indian embassy and to have rescued the Pope, Gandhi and Kabir Bebi). He was discharged 8 months later.
The Local Mental Health Centre was responsible for his care, but he was a difficult patient. He was not able to understand the pathologic nature of his thoughts and he often avoided taking his medicines and going to doctors. He spent a lot of time at home with his mother, living in a sort of symbiosis with her; apparently, they didn't even open the door to healthcare operators.
During the next years, he was frequently hospitalised for his delusional disease, the last time in 2004. At that time, he had manifested aggressive behaviour towards his mother. After this episode, the attending psychiatrist, considering the complexity of the situation, disposed his recovery in a Family Home.
At first Angelo seemed to adapt well to life within the Family Home, attending his normal activities and becoming a reference point for other guests thanks to his skills in computers and technology. He was still reserved and uncommunicative, but he continued to dedicate himself to his main interest, Ninja philosophy, studying it on the internet.
During these years, everything went fairly well even if he was often admonished to respect the rules of living together. He took his medicines and regularly went for visits home. He was then again admitted to Psychiatry because of an aggression towards an operator motivated by an insignificant reason: he had only been asked him turn down the television volume.
He was admitted as "Involuntary Psychiatric Treatment". A strong delusional idea related to his identity came up. He thought he was a black Ninja, a strong hero with special powers. Having taken that into account, we asked him to examine in depth the meaning of what he is saying and also to tell us what happened in the Family House. Angelo's behaviours and relational modes are those of a black ninja: his sentences are frequent but very short, combined with typical ninja mimicry. Our meetings often take place in his room, in the infirmary or in the hall. He focuses mainly on particular themes, such as explanations on his medical therapy, changes in his blood pressure or heart rate, or on why he cannot get out of the division or go to his mother's. The tone used with the patient reveals an understanding of his situation, contained by the physical and relational bounds of the division: the operators create a constant emotional containment environment around the patient, never leaving him by himself. The feedback of the security of the division and his experimentation of the "security" of his borders, combined with an increment of neuroleptic therapy, helped the patient to progressively take distance from his delusional disease, eventually leading to him talking about this character in the third person and referring to himself as a victim of a strong possession, impossible to outflank. He is presently in a Therapeutic Community, and delusional ideas are no more prosperous or strongly invasive. Finally, the patient seems to be cooperating in implementing a new treatment plan.

Case #2

Roberto is the fifth of seven children. Both his parents are still alive. He attended secondary school and did not continue his studies. Psychiatric anamnesis is positive: according to what the patient refers, his father was depressed and violent. One of Roberto's sisters suffers from depression. We do not have access to much information on Roberto's family and he speaks very little about them. His psychiatrist does not consider psychotherapy a useful approach because of his lack of capacity for insight. Roberto is married and has two children: a teenage girl and a boy who just turned 18; both are being followed by a speech therapist from the children's neuropsychiatry local service. His wife has undertaken psychotherapeutic treatment. Roberto worked in a factory and in 2004 he was managed by the Local Mental Health Center. At the time, he told the psychiatrist he felt tired and stressed because of his work: he was waiting to receive a disability leave because of partial deafness. He also said that he often quarrelled with his employer. Later on, he was offered a pre-retirement settlement that he accepted. From that moment on he has worked in a market at an acquaintance's fruit stand. Roberto's family is thus supported by his wife's salary (she works as a cleaner in a cleaning company), by his invalidity pension and by the subsidies the family receives for the children. Roberto referred symptoms of nervousness, mood deflection, tiredness, irritability and reactivity to his psychiatrist. He said he felt as if someone was calling him and to "turn and see a shadow", or "see some spider on the wall". He refers periodic and frequent quarrels with his wife, all of which without any striking expressions of violence, until the day Roberto threatens his family with a hammer. His wife, frightened, called the police. This episode was apparently triggered by the relationship with his children, and in particular by the fact

that he felt he was starting to lose control over them. After the incident, he was hospitalised in a Psychiatric Unit where it emerged that the tension inside the family had been building up for a considerable time, caused by their economic situation: Roberto felt incompetent and a failure. Roberto's sister has always played the role of a mediator between the couple. After the incident, Roberto's wife moved in with Roberto's sister. After being discharged, the patient went for some time to the local day hospital. The treatment has helped Roberto to improve and to control impulsivity. The team that follows him, along with his psychiatrist, after thoughtful considerations, have reached the conclusion that the patient reacts with violent and impulsive modalities in stressful situations. The event that led to the hospitalisation seems to be more related to the fact that his son had reached legal age and that Roberto felt his paternal authority was threatened leading to persecutory delusional symptoms. The assumption is that Roberto's story is the story of a victim of abuse who becomes an abuser: social relational modality learnt in the past and reintroduced in the present.

Conclusion

In both the present cases, the risk factors that have emerged are: male gender, low socio-economic status and earlier violent episodes (even if Roberto, in contrast to Angelo, has only threatened violent behaviour). Regarding dynamic risk factors, we find the presence of a stressful context: this element supports Silver's theory [19] according to which highly stressed individuals experience major negative effects such as anger, fear and frustration, and that these may induce them to exhibit violent behaviour. Impulsiveness was also a risk factor in both cases: referring to Barratt's article [17] it would be an impulsive type of aggression, defined by the authors as a "reaction of hair-trigger" to a provocation. They put into light how this type of patient is characterised by impulsive aggressiveness and seem to show multiple neurocognitive deficits: poor cognitive flexibility, poor planning skills and poor verbal learning. Regarding the presence of suspiciousness and hostility, both patients have a clinical diagnosis that falls in the paranoid spectrum, even if with different severity. Angelo, in fact, has a diagnosis of paranoid schizophrenia, while Roberto has a diagnosis of paranoid personality disorder. The relationship between these two diagnoses and violent behaviour has been studied by many authors, and Searles will be discussed first. This author in "Scritti sulla Schizofrenia" [39] examining the causes of anxiety in paranoid Sshizophrenia. Searles explains how in psychotic patients, threatening feelings present themselves modified by a series of ego defences, that although intended to protect the patient, at the same time distort his experience in a strange and frightening manner. The patient, in fact, does not experience anguish as such, but confusedly feels that several elements of the environment possess a sinister meaning, a malicious charge against him. For the patient, the persecutory figure represents the person that is part of his living environment, and that more easily lends itself to personify those attributes that the patient feels he must repudiate in himself and project into the outside world. Therefore, the patient cannot give up taking care of that person because:

- it would mean losing important components of his personality;
- that person is necessary for him as a receptacle for these negative emotions;
- he cannot reconcile with that person because that would mean to accept in his self-image certain qualities that he repudiates.

The patient then lives under a constant threat of not only external persecutors, but also of "introjects" that he carries within himself, mostly without knowing it. These "introjects" are distorted representations of people who belong to the outside world, perceived as invasions of one's self. It can be argued that the patient lacks an authentic experience in the form of fantasy: in fact, whenever he experiences a new combination of thoughts or mental images, he immediately believes that it is a representation of external reality. He is suspicious because suspicion is the only means to develop and evaluate the data that come from a world staggering in its complexity. By studying the relationship between paranoid schizophrenia and aggression and referring to the theory of mind (ToM), Giovanbattista et al. [40] suggested that these patients have difficulty in accurately monitoring the intentions of other people. Their undermining in the use of contextual information would lead them to make incorrect inferences about the intentions of others. Studies have shown that patients with paranoid schizophrenia are more prone to violence than other groups of schizophrenics [41 45]. In agreement with the studies of Dietz & Rada [42], Kennedy [44] found that sudden aggressions are carried out by apparently compensated patients suffering from paranoid delusions. In fact, Angelo, in a moment of apparent psychic compensation, had suddenly attacked a nocturnal operator in the throes of a persecutory delusion. In the forensic field, Esbec et al. analysed the relationship between paranoid personality disorders and aggression, and observed that these subjects are permanently suspicious and hypersensitive to shame, with a tendency to attribute malevolent intentions to others. A paranoid personality commits an aggression often due to misinterpretations and overreactions to daily situations, especially when the possible victims put in place physical or verbal actions that are interpreted as a personal aggression. In this regard, we think

that the fact that Roberto's son turned legal age and manifested actions of independence, and defended his mother against his father, may have led the patient to experience an intense feeling of shame accompanied by strong anger due to the fact that his teenage daughter came home wearing makeup. It is assumed that the feeling of losing control over his children, experienced as a personal attack, may have led Roberto to act aggressively towards his wife and family. In agreement with the idea of the importance of thorough knowledge of the patient's personal and family history, beyond the presence of individual risk factors, it is useful, in retrospect, to trace the presence of factors and circumstances that induced the aggressive actions in these two patients. In Angelo's situation, the conjunction of his mother's illness (who was progressively going towards dementia) and the renovation of the house where he had always lived may have favoured psychic disintegration accompanied by a deep sense of anguish for which the delirium becomes a channel for its containment. As for Roberto, the climate of violence (especially from his father) in which he grew up could have led to learning attitudes and violent behaviours as the only answer to feelings of anger and frustration that characterised the exact period in which the patient acted aggressive behaviour. It is assumed that what made the patient lose control, rather than delusional persecutory symptoms, was the coming of age of the child and the consequent perception of his paternal authority becoming less. The assumption then is that the story of Roberto is a story of an "abused" person who becomes "abusive": a historical-social-relational mode learnt in the past and re-launched in the present. We conclude that accurate knowledge of the history and life of the patient and evolution of the condition over time is an indispensable key to cure, both to develop treatment strategy that is integrated as much as possible and focused on the patient's real needs and prevent future incidents of aggression.

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