

FORENSIC CONSIDERATIONS ON VIOLENT PARASOMNIAS DURING LIFESPAN

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ABSTRACT

Nocturnal parasomnias are a group of sleep complex manifestation that don't alter the sleep macrostructure, but when persistent during adulthood may be assume violent aspects with relevant forensic implications about the guiltiness.

Keywords: NREM parasomnias, sleep, consciousness, guiltiness.

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Clinical background

Presently, to the attention of forensic science and jurisprudence there arises a problem of considerable legislative difficulty, although long known, such as violent parasomnias, which can now be subjected to sophisticated neurophysiological studies such as to allow its definition.

Parasomnias represent a heterogeneous group of motor manifestations, autonomic and behavioral, occurring in the nocturnal sleep united by not causing daytime sleepiness or insomnia. It is, therefore, episodic nocturnal events that do not alter the normal architecture of sleep, configuring itself as dysfunctions associated with sleep, its phases or partial awakenings (arousal), benign evolution and tendency

to spontaneous resolution. Some parasomnias, especially in adulthood, can easily provoke the implementation of violent or frankly criminal behavior, with significant legal problems in determining the *mens rea* or in the guilty mental state that allows the attribution of a criminal responsibility⁽¹⁻¹⁷⁾.

In most cases these are parasomnias belonging to the group of NREM arousal disorders (confusional awakenings, sleepwalking, night terrors), REM behavior disorder and nocturnal epileptic seizures. Each of the mentioned events is well known and defined also from the polysomnographic point of view. The NREM arousal disorders are frequent during pediatric age and can persist also in adolescence and adulthood⁽¹⁸⁻¹⁹⁾, also as comorbid conditions of sleep-related breathing disorders, primary headaches, learning disorders, epilepsy and genetic syndromes⁽¹⁸⁻²⁹⁾.

The prevalence of adult sleep-related violence is 0.5-1.6%. Because it may have severe medico-legal consequences including sexual abuse, unintended suicides and homicides identifying and differentiating its potential causes is vitally important. The known risk factors are the age below 35 years, male gender, sleep apneas syndrome (OSAS), early awakening, daytime sleepiness, hypnagogic hallucinations, nightmares, depressed mood, sleep paralysis and arousal parasomnias⁽¹⁻¹⁷⁾. On the other hand, the parasomniac manifestations may be exacerbated and/or evoked by substance abuse or hormonal therapy with relevant systemic effects⁽³⁰⁻³²⁾, although also the intensive workout, nutritional factors and surgical intervention may be considered as risk factors, probably for the direct impact on orexin-A plasmatic levels⁽³³⁻⁵⁸⁾.

Moreover, we have also to consider the nocturnal epileptic manifestation as differential diagnosis with the violent parasomnias and consequently if the subject can be considered guilty or not.

Nighttime epileptic seizures are pathological manifestations known since time immemorial in order to provoke ictal and postictal confusional states, in particular forms such as temporal lobe epilepsy (the best known clinical form for the behavioral bizarreness that accompanies it) and nocturnal epilepsy of the frontal lobe (ADFNL, the last in order of time to be defined from the instrumental and genetic point of view), characterized by nocturnal wandering, walking episodes arising from sleep associated with bizarre behavior lasting a few minutes, which can also be associated with violent behavior.

According to some authors, they would represent a clinical variant of sleepwalking⁽¹⁻¹⁶⁾.

Other manifestations that fall into the category of disorders of the arousal, are the confusional awakenings (sleep drunkenness or Syndrome of Elpenor) are characterized by a confused state of variable duration up to a few minutes, upon awakening from a slow wave sleep phase (stage 3) -4), during which the subjects may exhibit inadequate and sometimes aggressive behavior.

Moreover an interesting clinical manifestation is the so called Elpenor syndrome in reference to an accident experienced by a character in Homer's epic *The Odyssey* in particular when entailing defenestration. The Elpenor's syndrome was painted by Marc Chagall in 1975 and this syndrome has been described in adults and adolescents; and consist in a particular persistent crepuscular state of consciousness after the awakening⁽¹⁻¹⁶⁾.

REM behavior disorder syndrome (RBD) is characterized by the lack of inhibition of muscle tone in the REM phase, which leads the subject to "represent" their dreams (usually with violent content and / or aggressive), with behaviors and gestures especially of a violent type. RBD seems to be prevalent among males and occurs between 50 and 65 years (range 20-80 years) and is closely related to the presence of neurodegenerative diseases such as Parkinson's disease, multisystem atrophy, dementia to bodies of Lewy or the diseases known as sinucleinopathies, with an advance on the time of diagnosis and clear clinical signs even for 15-20 years. Even more relative recent is parasomnia called sleepsex or sexsomnia, dominated by sexual behaviors implemented in a twilight state similar to sleepwalking⁽¹⁻¹⁶⁾.

Since these diseases have been known for centuries, the modern scientific research has tried to identify the factors responsible for the genesis of violent behavior in sleep, but has managed only to hypothesize triggering or facilitating as gross alterations of the macrostructure of sleep (circadian rhythm abnormalities, sleep deprivation, instability and sleep fragmentation), but also cognitive and hallucinatory disorders, alcohol, stressors, OSAS, brain injuries, psychotic states, neurodevelopmental disorders⁽³³⁻⁵⁸⁾ (Figure 1).

Forensic aspects

The demonstration of absence of mental activity and full consciousness during the nocturnal violent behavior related to a parasomnia is not a prob-

lem easy to solve. However, it is now established that the boundaries between the states of our existence, waking, NREM sleep and REM sleep can sometimes lose the normal definition, overlap, mingle, giving rise to bizarre and complex behavior whose extreme expression are violent acts of which the subject is not conscious or responsible. From what has been briefly explained, it emerges that the human being can commit violent actions or crimes even in sleep, as already highlighted in previous centuries by illustrious jurists of the past. In the fourteenth century Bartolo from Sassoferrato (1314-1357) in his book titled *De tyranno* did not exclude the punishment of the crime committed in the state of sleep as a guilt, as “aut iste talis sciebat hoc evenire sibi, et nunc sibi debet providere ut iacet solus vel ut nemo sit in camera sua”, if instead he was not aware of its dangers in sleep and committed a crime “dormiens aequiparatur furiosus”.

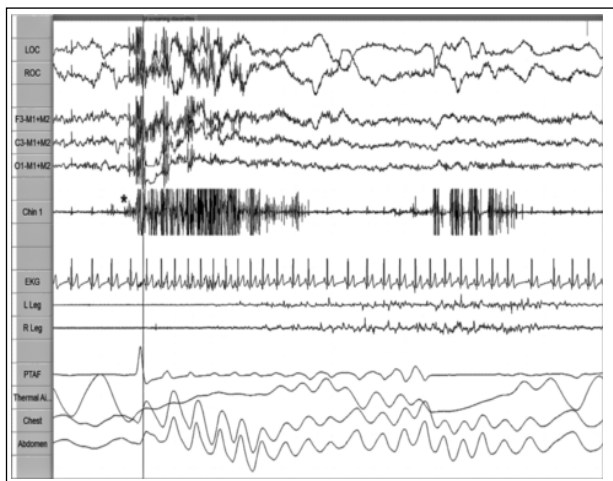


Figure 1: shows an 30 seconds of REM sleep stage without atonia, typically characteristic of REM behavior disorder (RBD).

Again, in the sixteenth century, Ludovico Carerio (1550) pushed even further the examination of these positions arguing that the dormiens delinquens aware of his illness (*sciens suum vitium*) and cause sleep to kill, he will have to respond with the ordinary punishment of the malicious crime, distinguishing before time the imputability from punishment. The solution given by the jurists in order to the murders committed in the sleep state directed on the non-punishment of the author (“*si dormiens aliquem occidat aut aliquo modo delinquat non punitur*”) unless guilt profiles were found to his conduct, evidenced by his knowledge of this morbid state and the absence of precautions to avoid the commission of crimes and always that, aware of his evil, he had not

preordained to commit a crime, as the person who to find the courage to kill is intoxicated. The listing of these guidelines highlights an alternation between responsibility and irresponsibility for these behaviors, sometimes focusing on the pathological aspect (*vitium*), sometimes on the qualification of the patient (*furiosus*), not analyzing, at the time, its imputability nor is the penalty to be imposed⁽⁵⁹⁻⁷⁰⁾.

It is important to note the need for the jurist, pushed by medical science, to examine more deeply the link between the act and the criminal responsibility or between the author of the act and the application of a penalty and focuses on art. 34 of the Tuscan Penal Code, therefore in pre-unification legislation, which opened in this way a groove stating that “the violations of the penal law are not imputable when the perpetrators were not aware of his actions and freedom of action”. It appears evident behind this expression, the presence of the current of thought on the existence of free will and on freedom of choice and are confronted, with the first scientific approaches, the pathologies of mind that such freedom either exclude or mitigate. Processing over time, the unitary law of the Kingdom, raises the question of the responsibility of Man and his actions, to modulate the ordinance answers to them.

here is a need to define the field of guilt, thus identifying the boundaries of free will; thus appears in negative, the infirmity of mind which, if it exists, excludes imputability. The expression infirmity of goals was preferred by the Reform Commission to the one proposed by Zanardelli himself as “a state of deficiency or morbid alteration of the mind”, since it was believed that in the deficiency “the state of sleep”, as lack of the will of the acts carried out by the asleep person was to be traced back to the subjective element of the crime”. There is therefore a precise differentiation between known pathological states, which give rise to a disability of the real mind that excludes imputability and states of deficiency that can not or be framed in specific mental pathologies, as happens to the delinquens dormiens that would have acted without the will to offend. It is only with the current Code of 1930 that the concept of imputability finds its place as an ability to act in criminal law and, therefore, also the capacity to be the object of a penalty. Each individual, having reached mental maturity, has natural qualities that enable him to consciously and freely regulate his actions according to the principle of free will. The possession of this psychic quality is necessary for a person to be held to be imputable.

Imputability is the suitability to be accused of a crime, the backbone of the penal system, represents a way of being proper to each individual, characterized by the psychic ability, linked to the development appropriate to age and mental health, on which the character depends free and conscious of human actions in the sphere of law. The legal doctrine, however, is not unanimous of views on the legal nature of imputability, closely linked to the capacity of criminal law (the suitability of the individual to be the holder of criminal law or to be judged and convicted of a crime committed), to the point consider the capacity of criminal law to be the assumption of imputability itself. The Compilers of the current code have opted for the naturalistic criterion of the voluntariness of human action with respect to the crime, on the assumption that normal man (the person who conforms to social rules) can act freely; this criterion is the sufficient condition for affirming the principle of personal responsibility and for rationally justifying the punishment of the offender. The Code after having fixed the principle that “no one can be punished for a fact foreseen by the law as a crime if, at the time he committed it, it was not imputable” explains that “it is imputable who has the ability to understand and want”(Article 85).

This capacity does not exist in those who are found by mental illness, incapable of understanding or wanting, and which, if considered dangerous, must be the object of a particular and different attention, indicated by the legal system as a measure of security. The latter, unlike the penalty, which must be imposed in a certain way, is linked to the subject and to the verification of the existence of social danger, and therefore to a totally uncertain and modifiable datum. Where does the existence of a mental illness occur, such as in the case of violent parasomnias, and when the action carried out by those in this state constitutes a crime in itself, as the ordinamet answers? Excluding the presence of an illness in medical sense, since there is no psychic disorder that accompanies the neurological injury and motivates the defect of the ability to understand or want, the action taken by those who pay in this state constitutes a healthy automatism⁽⁵⁹⁻⁷⁰⁾.

This is the point of view of scientific knowledge, which, however, in the field of forensic medicine, must be the subject of careful and deserving caution in order to fix as precisely as possible the boundaries between the normal and the pathological, between the punishable, the preventable and the treatable; also in order not to excessively widen irre-

sponsibility, making you fall into behavior without organic base with the presence of the ability to understand and to want. The hypothesis of the partial defect of goals that, moreover, according to the opinion that seems preferable and which is reflected in the systematic collocation of the norm, still has to obey the above psychiatric criteria. The legal position of the behaviors assumed in case of automatism healthy in violent parasomnia should therefore be sought elsewhere. Although it may seem strange to those unfamiliar with the legal system, the standard takes into account - with its general and abstract formulation - the multiple aspects of daily life, as it must adapt to an infinite number of cases. Responsibility for the actions of Man must be conscious responsibility, therefore linked to the person, therefore responsibility for the *actus humanus*, not for the *actus hominis*. The act is human, of man, of that man who has done a particular action, only when he is supported by the characteristic of human action, that is, by his thought, therefore by conscience and will (Article 42 of the Criminal Code) Article 42 of the Criminal Code sets an essential dogmatic rule because it places the person and his thoughts at the center of the positive criminal law. Consciousness and will is a different concept from the ability of the whole and the will and, therefore, from the imputability⁽⁵⁹⁻⁷⁰⁾.

The latter consists of a status of man, while the single action must meet specific requirements, verifiable from time to time in the light of the traceability of the person-behavior. Therefore there can be imputability but not punishable if the action can be accomplished and is evidence of the necessary psychic causality. Therefore, responsibility rests not so much on having to act or not acting, but on being able to act or not to act. The healthy automatisms of violent parasomnias are not punishable, therefore, due to the defect of the typical elements of responsible action, that is, of consciousness and will.

Moreover, if, knowing to be in a situation of potential danger to others, the person does not take the appropriate measures in order to avoid harmful consequences of his, he will have to respond to the crime that may have been committed. In this hypothesis, in fact, there is a conscious and voluntary behavior that precedes the criminal act, with tacit acceptance but full acceptance of the risk of the event itself. Since the elements of responsibility and the primary element of the typical fact are conscience and will, the relative formula of absolution must be that the “fact does not exist” and not because

“it does not constitute a crime”. In this way the irrevocable sentence of acquittal will be able to make state in the civil judgment for the compensation of the damage. In practice, the acceptance of the defensive thesis based on the presence of violent parasomnias with healthy automatisms in the agent presents, currently, considerable difficulties due to the absence of knowledge of the phenomenon by non-professionals and the poor dissemination of his study⁽⁵⁹⁻⁷⁷⁾.

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