

## **Pathological jealousy from forensic psychiatric perspective**

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### **Summary**

Jealousy is defined as a complex mental state caused by a real or false – imaginary – change in a way of perception of a threat of terminating a valued partnership in favor of a real or imaginary rival. Apart from jealousy demonstrated by mentally disordered people, but without symptoms of mental illness and obsessive jealousy, there is also a psychotic jealousy. One of diagnostic difficulties is to determine when a normal jealousy about a partner acquires delusional nature and the boundary between these two can be difficult to detect, which often is a concern of forensic psychiatrists. A mistake in diagnosis can seriously affect issuing of opinions and can have legal consequences. There are accounts claiming that the emergence of delusional jealousy is a continuous process, from the so-called normal to morbid jealousy. Diagnostic assessments in this matter bring difficulties in judicial-psychiatric assessments. Delusions of marriage infidelity accompany various psychotic disorders and their foundations can be found in endogenous factors, organic changes in peripheral nervous system and addictions. People demonstrating these types of delusional disorders are extremely dangerous for the environment, not solely because of the presence of psychotic symptoms, but also because of various environmental and relationship-related factors, which contribute to the genesis of their criminal offenses. Making accurate and just forensic psychiatric assessment of this group of offenders concerns risk assessment of offenders, validity of the use of security measures and the type of therapeutic interventions.

**Key words:** pathological jealousy, aggression, psychiatric expertise

### **Introduction**

The term jealousy is not precise, however, usually refers to various experiences related to the feeling of a threat of terminating an intimate relationship, which could happen because of a third person's intervention. The threat of losing a partner is expressed cognitively, emotionally and behaviorally. At the beginning the dominant component is emotional, related to a threat of a personal loss (of a partner, relationship, plans, life stability), negative attitude towards a rival, as well as a partner, the feeling of injustice and loneliness [1].

Strongly expressed emotions can be easily raised by visual and verbal stimuli as well as by imagining partner's infidelity. Solidification of this type of anxious demeanor is caused by previous experience of infidelity or by initiating suspicions and mistrust, which fosters maintenance of jealousy and other accompanying negative emotions.

According to Żywucka-Kozłowska and Włodarczyk, jealousy is an anger, occurring in certain circumstances, based on two elements: emotions and situations. Emotions arise from the construction of human psyche, while situation arises from conditionings of the external world [2]. Jealousy understood as an emotion is based on the insecurity towards own self-worthiness as a person as well as own attractiveness (including sexual attractiveness) for the partner.

Thus, jealousy can be defined as a complex emotional state evoked by a real or false (imaginary) change in a way of perceiving a threat of losing a valued partnership (hypothesis, suspicion, interpretation) in favor of a real or imaginary rival who would enter an emotional relationship with a partner. It is accompanied by a mixture of various interpretations of the partner's behaviors as well as those of the rival, which generate anxiety and incline a jealous person to search for evidence of infidelity or to actions aiming at prevention of potential infidelity. The jealous person accumulates sorrow, anger, hatred, remorse, bitterness, which can epitomize in accusations towards an erotic partner [3].

Jealousy can be manifested by a broad spectrum of behaviors, from the so-called normal jealousy, which is incorporated in universal human experience to its extreme forms which are part of mental illnesses.

Factors often listed as contributing to evoking jealousy in men are as follows: erectile dysfunction, a feeling of inability to satisfy a partner's sexual desires, decrease of women's sexual drive, differences in attractiveness of partners, experience of an actual infidelity in the past, feeling of inefficiency to fulfill social roles, or psychopathological disorders expressed by alcohol abuse, personality disorders and delusional syndrome [4].

Erotic jealousy is not possible to arise without the contribution of interpersonal factor in which one person is impelled to the other or provoked by partner's attitude or by own vision of infidelity committed by this partner. This fear, growing insecurity, feeling of the possibility of losing a relationship leads to distancing oneself from a partner and initiates irrational behaviors towards this partner. Simultaneously, suspicion and distrust towards the partner and other people grow, then imaginary accusations and convictions appear. Consequently, these convictions intensify the fear, fury and further anxiety which additionally increases the amount of false judgments [5].

One of diagnostic difficulties is the agreement on when normal jealousy of a partner becomes delusional and the border between these two states can be difficult to

determine, and this situation is often confronted by forensic psychiatrists as mistakes in a diagnosis can affect issuing an opinion and can have legal consequences. There are accounts claiming that the emergence of delusional jealousy is a continuous process, from the so-called normal to morbid jealousy [6].

Jealousy, particularly in its pathological form has been attracting attention of forensic psychiatry because there is a connection between its emergence and criminal offenses, especially domestic violence, other forms of aggressive behaviors and homicides [7].

### **Obsessive jealousy**

Sexology comprehends pathological jealousy, one which becomes atypical in its form and substance. Most often it takes on a form of a long-lasting obsession, sometimes lasting years, and it can influence the entire psyche, fulfill all thoughts, control emotions until paranoid syndromes develop [4]. Obsessive jealousy is an unsettling phenomenon, often can remain unrecognized and not taken into account in classifications of mental disorders.

On the contrary to delusional jealousy, characterized by a presence of strong, faulty convictions about a partner's infidelity, people showing obsessive jealousy suffer from bothering, recurring, unpleasant thoughts about a partner's infidelity. Ruminations are undesired, invasive and irrational, unwanted and unknown to the personality of a jealous person. These people know that they are in possession of no evidence of infidelity, however, are not able to suppress the key psychic aspect of their jealousy, namely intrusive thoughts about infidelity, which they cannot control. Jealousy in its overvalued idea takes on a form of a dominant thought, however, a jealous person does not have assumptions of the intensity of delusions [6, 8].

This type of a disorder can be treated by a cognitive therapy and SSRI medication, which are commonly used in treatments of obsessive compulsive disorders [6].

### **Delusional jealousy**

Apart from so-called normal, obsessive or anancastic jealousy, taking on a form of an overvalued idea, there is also a jealousy of delusional nature [4, 8]. Delusions of marriage infidelity are considered with regard to various diagnostic terms, nevertheless referring to psychotic processes. The following terminology is acknowledged: delusional marriage infidelity syndrome, Othello syndrome, psychotic jealousy, syndrome of erotic jealousy, pathological jealousy or marriage paranoia [7]. This variety of terms and psychopathological states described by the above-listed terms leads to misunderstandings and ambiguity, both with regard to a diagnosis and to the assessment of sanity. Also, it can imply entirely different ways of therapeutic proceedings which

has distinctive consequences for the assessment of the validity of security measures. Moreover, it constitutes additional difficulty for the judicial organs which are supplied with several expert opinions with different terminology.

There is a view saying that delusional jealousy occurs only when a person affected by it is convinced or suspects infidelity of a partner. Another position says that merely a belief or suspicion are not sufficient to identify a pathological jealousy. It is necessary for a person to display anxiety, fear of losing a partner or his or her position in the partnership, which should evoke stress and interfere with functioning of the jealous person, both people, or partnership [9].

Typical behaviors accompanying delusional jealousy include: multiple accusations about infidelity without sufficient evidence, demands for assertions or imposing of pledging faithfulness, humiliating and controlling partner's behaviors as well as demanding information concerning thoughts, views and fantasies. The so-called delusional activity comes down to realizing powerfully expressed need of control in form of various ways of manipulating, deceiving, searching of personal belongings, listening in telephone calls, and controlling correspondences. Emotions present at that time such as anger, sorrow, pain, humiliation, fears and contradicting desires lead to increasing search for eventual evidence of infidelity, which could not be found, which in turn make neutral behavior acquire characteristics of these evidences.

Intensifying delusional judgments could be expected if a partner is more prone to submissiveness towards a jealous person or if this partner behaves in certain ways in order to fulfill expectations of a jealous person or if there is excessive closeness between them. Initially this situation is accompanied by an atmosphere of a mystery and intrigue, sharing situations like these could be exciting for partners or even create a sexual arousal or contribute to a greater integrity of a partnership, however, this lasts only until certain time. Usually there comes a moment when a partner is not able to fulfill the expectations of a jealous person because it is infeasible. Attempts at leaving the above described constellation by one of the partners turn into an embers of anxiety, fear and evoke suspicions of disloyalty, to the pathological extent.

There is no unambiguous assessment of the frequency of occurrence of these delusional disorders, mostly because of unclear diagnostic criteria [10]. Moreover, delusions of jealousy/infidelity occur as one of psychopathological elements in other mental dysfunctions [7, 11, 12], which additionally makes these assumptions more difficult.

Soyka and Schmidt [13] analyzed admissions to a psychiatric hospital in Monachium across the years 2000–2008 and stated that among more than 14,000 patients there were only 72 (0.5% of the total sample) people with verified delusions of jealousy (patients with schizophrenia, organic psychoses, paranoid psychoses, alcohol psychoses).

In another research which involved 8,000 of mentally disturbed people, Soyka et al. [14] determined the prevalence of delusions at 1.1%. These delusions were most often encountered among organic psychoses (7.0%), paranoiac disorders (6.7%), alcohol psychoses (5.65), and schizophrenia (2.5%), while they practically did not occur among affective disorders (0.1%). Women most often suffered from delusional jealousy while having schizophrenia, men while being affected by alcohol psychoses.

On the other hand, Singh et al. [8] indicated that the most common diagnoses related to morbid jealousy were schizophrenia (34%), depression (30%) and substance abuse (20%), jealousy with morbid intensity occurred also in bipolar affective disorder (6%) and other mental disorders (10% – obsessive-compulsive disorder, generalized anxiety disorder, dementia). Because delusions of jealousy are incorporated into other mental disorders, they are accompanied by other pathological judgments: religious, false identification of people, entitlement, and coincidence of delusions increase the probability of dangerous behaviors towards a partner [7].

People suffering from delusions of marriage infidelity usually experience it in their early thirties and it is presumed that older age (late adulthood) constitutes an element of increased risk. This concerns mostly men (70–90%), frequently married, but also divorced and in separation. Other factors fostering jealousy include situations in which a spouse works away from home, has frequent contacts with people of the opposite sex and is considered to be sexually attractive by a jealous person. Women – both mentally disturbed as well as partners of mentally disturbed men – are characterized by increased risk of suicides in comparison to men [7, 8].

Delusions of jealousy require primarily pharmacological treatment. It is necessary to conduct a therapy of the disorder which is accompanied by delusions of infidelity, such as schizophrenia. It is indicated that new generation neuroleptics and anticonvulsant medication have positive effects, also on impulsive behaviors and excessive emotional excitability. If delusions of jealousy occur with depressive disorders, they require a separate treatment [6, 7].

### **Background for delusions**

The causes of pathological jealousy can be varied. Sexologists most often list: traumatic early experiences and sexual encounters (incest, harassment), insecurity about sexual roles and difficulties in sexual life, own erotic experiences (large amount of partners – projection), disorders of sexual preference (masochism, sadism, candaulism), addictions, psychoses and central nervous system disorders [4].

Increasing significance in the development of jealousy and infidelity delusions is ascribed to neurobiological factors, which corresponds with a current trend of research about background of mental disorders. In this type of delusions, a special

attention is paid to organic factors. Moreover, systemic diseases are listed – lupus erythematosus, thyroid gland diseases as well as damages of the central nervous system (changes in the frontal lobes, diffuse brain atrophy). It has been noticed that morphological changes in the brain are often accompanied by clinically detectable shortages of memory, which is considered to be significant in etiology of delusional disorders of jealousy [7].

Delusional jealousy can be also caused by neurological diseases: cerebral strokes, Parkinson's disease, brain injuries, dementias, including Alzheimer-type dementia, or dementia with Lewy bodies. One of factors contributing to the occurrence of delusional system is intake of agonists of dopamine, and an evidence for this hypothesis can be found in the fact that after discontinuing of taking medication from this group, without psychoactive medication, the delusions resolve [15]. There are reports claiming that almost one third of delusional jealousy syndromes in marriages is conditioned by neurological disorders [16], especially Parkinson's disease [17], in which apart from pathological processes in a form of decrease of the grey matter in left side of the frontal lobe, there is a factor relating to treatment with dopamine agonists.

There are discrepancies in brain responses of healthy women and men concerning jealousy. In the case of men, spheres in visual cortex, amygdala and hypothalamus responsible for sexual and aggressive engagement are activated, while in the case of women jealousy stimulates brain spheres responsible for higher cognitive functions and area of superior temporal sulcus. Taking this into consideration, it can be stated that each of sexes had different brain modules liable for processing signals of sexual and emotional jealousy of a partner, however, only to a certain extent of reactions, because these differences had never been noted in functioning of the central nervous system in terms of mental disorders [18].

Furthermore, delusional jealousy has its background in alcohol or psychoactive substances, especially amphetamine, which by influencing dopaminergic management fosters generating jealousy in its pathological form. Another substance listed as contributing to these disorders are cannabinoids [7, 11, 19].

Frequency with which people addicted to alcohol experience sexual jealousy is estimated to be 35% in the case of men and 31% in the case of women. 27% of men and 15% of women display signs of morbid jealousy. It has been noticed that the increase rate of jealousy is different for each sex. In the case of men, the higher they rated the sexual satisfaction in a partnership and had a greater sense of stability of a partnership, the weaker was the intensity of their jealousy. In respect to women, intensity of jealousy negatively correlated with the length of a relationship, and positively with the intensifying symptoms of an addiction [20].

### **Pathologically motivated aggressive behaviors**

In delusional disorders focusing on a partner's infidelity, jealous people treat their false reception of various actions as real and intensify it by pathological interpretation of memories which are in turn strengthened by strong emotional charge. By doing this, quasi-logical systems of jealousy are created. They constantly accuse a partner of infidelity and stubbornly attempt to validate their suspicions by delusional activity. Sometimes "interrogations" can take a form of tortures, and inspections are not limited to checking possessions, but also involve partner himself (including genitalia). In situations when the accusations of infidelity are vividly unrealistic (acts committed with enormous amount of partners, with close family members, with animals, in public places, in unreal time, etc.), diagnosis is not troublesome. Intensified behaviors in order to proof infidelity indicate an increased risk of aggression (verbal, physical and sexual aggression), also a murder or a suicide cannot be excluded [21].

Apart from delusions, a factor increasing the risk of aggression in relation to a partner or a spouse is a presence of auditory hallucinations which exhort to attack a partner [22]. Occasionally in this group of offenders, feeling of helplessness towards a partner, a tendency to isolation from the environment, uncertainty and depression develop simultaneously and can be mitigated by alcohol, which increases mental disorders and causes the risk of aggression to increase [6]. At some point the perpetrator is left alone with his/her problem, feels misunderstood by his/her environment, unsafe, and in his/her opinion is humiliated by a partner, which makes him/her isolate even more and limits his/her abilities of finding a constructive solution for a situation, thus then the only solution is violence.

People experiencing delusions of infidelity show various forms of hostile behaviors, from lightly expressed in verbal aggression, tendency to initiate arguments with a partner to domestic violence and murder of a partner, less often of a supposed lover. Basing on research by Silva et al. [7, 23], it appears that majority of mentally ill perpetrators who murdered own spouse showed aggressive behavior towards a partner before. Despite that, majority of perpetrators showed aggressive behaviors in the past, there were also instances of homicides motivated by pathological jealousy when signals of a coming danger could had not been identified. It has been determined that usually crime tools involved firearm or knife.

Generally, various factors contribute simultaneously to a particular behavior and their negative constellation causes the perpetrator to violate the law. In this case, a so-called multimotivational act follows. Therefore, if by analyzing some distinct behaviors one motif is discovered, it must be comprehended that this motif was dominating, however, not the only one [24]. In a legal understanding, a motif is usually understood as an external factor which stimulates an individual to act in a particular

way [25]. Among most common motifs of murders, there are economic, sexual and hatred motifs as well as jealousy.

In the case of intrafamily murders committed by psychotically disordered people, usually the victims include life partners, spouses or cohabitants. In the case of cohabitants, the risk of becoming a victim as a woman is several times higher than in the case of spouses [26]. The presence of morbid disorders is not assigned a primary role in the genesis of murders of partners, while taking into consideration chronic conflicts as well as inadequate situational reactions which are responses to the difficulties encountered in relationships.

According to Majchrzyk [27], the external factors constitute an important element contributing to the occurrence of aggressive behaviors, mostly motivated by fear. This behavior becomes a result of inaccurate perception of an external situation, which happens to people suffering from syndromes of marriage infidelity delusions. The author also lists two types of factors: constant or long-term and so-called close ones which directly trigger offensive behaviors.

Taking into consideration the fact that environmental factors play a decisive role while relating to a particular person and that this person has a false way of the world's perception, it seems that in the case of people with increased levels of jealousy, situations when they feel moral pain associated with a false conviction that the environment knows about a partner's infidelity, can be especially painful. Situations in which they feel threatened, associate with a possibility of infidelity, disloyalty, embarrassment or humiliation (imaginary or real) weaken their self-control. Most often, there is a chronic situation of mental burden and increasingly growing tension [28].

Moreover, a constellation of neutral events which acquires delusional explanations can contribute to an aggressive attack. It can involve an unexpected meeting with a person considered a rival, unconventional behavior of a partner even in a neutral situation, necessity for separation from a jealous husband or wife (e.g., business trip, stay at a hospital, extra family duties outside of home), kind behavior or one showing an interest of a partner towards a supposed lover. Because of these situations, hitherto evolved schemes of behaviors attempted on controlling a partner fail, become ineffective in terms of monitoring or correcting "unfaithful" person. Perpetrators are characterized by intensified disintegration anxiety and a tendency towards accumulating emotional tensions. They are highly suspicious, which is expressed by hostility towards the environment, caution towards people, which leads to experiencing anxiety and negative attitudes towards other people [28].

Radojević et al. [29] analyzed 766 murders (autopsy results, assessment of perpetrators and victims, assessments of nature of the relation between perpetrators and victims) and divided motifs into asexual and sexual ones. Among asexual motifs, jealousy was a dominant trait which led to a murder. This group included both murders motivated

by infidelity of a sexual partner and motivated by jealousy. According to the authors, these motifs should be assigned to the so-called emotional motif murders, also when jealousy is of delusional nature. Przybyłek et al. [30] drew similar conclusions and stated that in the group of emotional-delusional murderers there are perpetrators who, apart from delusional aspect, are motivated by revenge, feeling of injustice or feelings of insecurity and fear, which additionally weakens their ability to control their actions while committing a crime.

The research conducted by Muzinić et al. [21] concluded that every fourth perpetrator of a murder in which jealousy was a significant motif, was mentally ill. Considerate majority of people showed chronic mental disorders, and only in 0.5% of cases offenses were committed at a time of a noticeable intensification of psychotic symptoms; in these situations, no provocative signs given by victims were noted. All perpetrators with psychotic jealousy were diagnosed as insane. It was concluded that there was a risk of repeating these acts by majority of the offenders, hence they were assigned psychiatric treatment.

### **Recapitulation**

Etiology of offenses committed by pathologically jealous people is multifactorial and the assessment of motivational background can be troublesome and at times even controversial. This arises from various forms of expressed jealousy, its varying intensity as well as its destructive consequences for a relationship. Additional difficulty in the assessment of contribution of jealousy to criminal offenses is the presence of other elements sometimes unrelated to the perpetrator, such as a partner, dyadic factors, nature of the relationship as well as environmental factors influencing behavior of a perpetrator.

Sometimes the assessment of a perpetrator's mental state, particular psychopathological disorders, personality predispositions, involvement of addictions – and consequently the assessment of sanity in relation to charges, is entirely different in expert reports prepared by different groups of psychiatrists and psychologists. An expertise should be precise and just not only because of case requirements, but also because of the need to determine potential threats caused by offenders and in order to undertake adequate preventive actions.

Pathologically jealous women usually suffer from schizophrenia spectrum disorders. Aggressive behaviors motivated by jealousy are more often ascribed to men and most often their occurrence is associated with chronic alcohol abuse. The significance of alcohol (as well as other psychoactive substances) is increasing for intensification of the so-called normal jealousy and its transformation to the level of mental disorders. For this reason alcohol becomes a significant factor in the genesis of jealousy on every

level of its emergence and development. Usually crimes motivated by jealousy are associated with a chronic psychotic process which is concentrated on a partner, a supposed rival or other people who “assist” infidelity. People with delusional jealousy have also a very low level of criticism towards own convictions [21]. A lowered level of illness insight is a well-known factor of aggression risk, which should cause expert witnesses to balanced assessment in terms of the necessity of using security measures.

According to Gierowski [28], mechanisms of creating pathological needs and motifs can be very similar to mechanisms in healthy people. Differences between healthy and pathological behaviors are often expressed only in terms of quantity; pathological phenomena, i.e. delusions, activate mental mechanisms which are not very different from those of healthy people. For issuing forensic psychiatric opinions, in the cases of people with morbid jealousy, it is necessary not to be content with psychopathological assessment, but also to take environmental factors into consideration, because they play a significant role in the genesis of offensive acts.

Similar views were articulated by Muzinić et al. [21], in their multi-faceted analysis of perpetrators of crimes motivated by jealousy and they concluded that there is no clear difference between so-called normal and pathological jealousy. They suggested considering jealousy on three basic levels. Apart from so-called common jealousy (without pathology of mental life) and abnormal jealousy (mental disorders present, however, without the involvement of morbid factor: personality disorders, organic symptoms, psychogenic reactions, alcohol and drugs abuse), they differentiated a psychotic (pathological, morbid) jealousy with clearly defined delusional dimension of convictions relating to a partner. According to the authors, this differentiation is useful not only in terms of diagnostics, but also in terms of prevention, because while it is highly improbable for healthy people to commit crimes motivated by jealousy (especially if they receive psychotherapy or get substance abuse treatment), mentally ill people are exposed to the high risk of occurrence of pathological motif as a condition of a crime. This group of mentally ill offenders is associated with the highest risk of aggression and requires exceptionally intensive and complex therapeutic actions.

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