

## Prevista Colombiana de A



www.elsevier.es/rcp

## Original article

# The Psychopathology of Delusion of Control According to Subjective Experience



Marco Fierro a,\*, Ana María Hernández a, John Malcolm b

- <sup>a</sup> Fundación Universitaria Sanitas, Bogotá, Colombia
- <sup>b</sup> York University, Toronto, Canadá

#### ARTICLE INFO

#### Article history:

Received 5 November 2016 Accepted 20 February 2017

## Keywords:

Delusion

Delusion of control

Alien control

Thought insertion

Schizophrenia

Phenomenology

Subjective experience

#### ABSTRACT

*Background*: Delusion of control, including thought insertion, occurs in 20% of patients with schizophrenia. However little is known of its psychopathology, and studies involving patients are scarce.

Aims: To explore the subjective experience of patients with delusion of control and to propose a psychopathological explanation based on empirical evidence.

Methods: Qualitative exploratory study of 7 patients (6 with schizophrenia and 1 with schizophreniform disorder). A phenomenologically-oriented semi-structured interview was

Results: Delusion of control is not an isolated and pure symptom; it is always immersed in the context of a persecutory delusion and other psychiatric symptoms. The patient experiences partial control, i.e. the control is never complete. In all cases, it is possible to trace the history of the narrative formation of delusion of control from its origins in persecutory delusions and other concomitant symptoms.

Conclusions: The delusion of control is a narrative resulting from the joint presence of a persecutory delusion and other psychiatric symptoms. For the patient, the delusion of control is the narrative of the elaborate expression of the meaning of the anomalous experience. Delusion of control is a narrative variety of persecutory delusion.

© 2017 Asociación Colombiana de Psiquiatría. Published by Elsevier España, S.L.U. All rights reserved.

## La psicopatología del delirio de control según la experiencia subjetiva

RESUMEN

Palabras clave: Delirio Delirio de control Introducción: El delirio de control, incluida la inserción de pensamientos, se presenta en el 20% de los pacientes con esquizofrenia. Sin embargo, se conoce poco de su psicopatología y los estudios que implican a pacientes son escasos.

<sup>\*</sup> Corresponding author. E-mail address: Marcofierro2222@yahoo.com (M. Fierro).

Control alienígena Inserción de pensamientos Esquizofrenia Fenomenología Experiencia subjetiva Objetivo: A partir de una serie de casos clínicos, explorar la experiencia subjetiva de pacientes con delirio de control y proponer una explicación psicopatológica con base en elementos empíricos.

Métodos: Estudio exploratorio de tipo cualitativo con 7 pacientes (6 con esquizofrenia y 1 con trastorno esquizofreniforme). Se utilizó una entrevista semiestructurada de orientación fenomenológica.

Resultados: El delirio de control no se presenta como síntoma aislado y puro, siempre está inmerso en el contexto de un delirio persecutorio y otros síntomas psiquiátricos. El control vivido por el paciente es parcial, nunca total. En todos los casos fue posible rastrear la historia de la constitución narrativa del delirio de control a partir del delirio persecutorio y los otros síntomas concomitantes. El delirio de control es la narrativa que expresa de manera más elaborada el sentido que la experiencia tiene para el paciente.

Conclusiones: El delirio de control es una narrativa derivada de la concomitancia de un delirio persecutorio y otros síntomas psiquiátricos. Es la narrativa que expresa de manera más elaborada el sentido que tiene la experiencia anómala para el paciente. El delirio de control es una variedad narrativa del delirio persecutorio.

© 2017 Asociación Colombiana de Psiquiatría. Publicado por Elsevier España, S.L.U.

Todos los derechos reservados.

#### Introduction

Delusion of control has different names, including delusion of passivity, passivity experience, and passivity phenomenon. According to the patient's narrative, his thoughts, emotions, perceptions or actions are under the control of a different agent: either another person, a spirit, a machine, or unknown forces. Sometimes the patient states that the operator of control is installed inside his body, which leads to the narrative of being possessed.

At other times, the patient is convinced that his thoughts and some other mental phenomena are not his own, but inserted by someone else, which is known as "thought insertion."

This type of delusion has been considered characteristic of schizophrenia, but not exclusive or specific of it. <sup>1,2</sup> Although it occurs in 1 in 5 patients with the disease, little is known of its psychopathology. Research about it is scarce, <sup>3</sup> and explanation of its origin and permanence are unsatisfactory. <sup>4</sup>

The conviction expressed in the delusion of control is contrary to common sense. It is very difficult to imagine what it is like to be in that state. Thought insertion has raised interest in philosophers who have tried to explain it in various ways, offering different answers to the following questions: Do people with thought insertion own the alien thoughts? Do they experience a sense of agency towards the alien thoughts? Do they endorse the content of the alien thoughts?

There are several theories about delusion of control. The best known theory suggests that the brain normally monitors 3 aspects of actions: *a*) the action in response to current external stimulation; *b*) the voluntary action appropriate to current goals (willed intention), and *c*) the action which was actually executed. In delusion of control, there is a disruption of cognitive systems in charge of monitoring voluntary action and its execution. This discrepancy gives rise to the experience of voluntary actions as if they were not the patient's own but

produced by someone else.<sup>6–8</sup> The model has been revised and expanded, but has not changed substantially.<sup>9</sup>

The agency theory identifies the main problem as an altered sense of agency. This sense is defined as the experience, or the pre-reflective sense, that I am the cause or agent of the movements of my body, or that it is I who is executing bodily movements.<sup>10</sup>

The concept of agency has been extended to thoughts, perceptions, emotions, but has faced serious conceptual and pragmatic problems when applied to these mental phenomena. After all, it is common to experience emotions difficult to control, uncomfortable memories that one would like to forget return over and over again, and it is not unusual for unwanted intrusive thoughts to continue popping into consciousness. 13

Another theory postulates that the patient finds certain mental contents much too repulsive. By not tolerating them as his own, he externalizes them and feels as if they were inserted. In this way, he copes with this negative charge.<sup>3</sup> It has also been argued that delusion of control originates in an alteration in the intentionality of thought, feeling and action, which can be traced back to the prodromal stage of schizophrenia.<sup>14</sup>

It has been proposed that delusions constitute an explanation of certain experiences. They are rational responses to anomalous experiences. The subject suffering from a delusion develops his beliefs in the same way that the non-delusional subject does, but he has strange and unusual experiences that do not occur in daily life. 15–18 In the delusion of control, there is an anomalous experience that is explained by the patient with the belief that his thoughts and actions are not his own but originate from someone else.

A variation of the last explanation states that the process begins with an anomalous experience leading to cognitive processing in order to make sense of that experience, but under conditions where prefrontal control and monitoring mechanisms are reduced. The attenuation of usual constraints exercised by prefrontal cortex leads to explanations that do not conform to conventional beliefs, but are seen as plausible to the patient.<sup>19</sup>

A phenomenologically-oriented theory, called "theory of anomalous affective experience", <sup>20,21</sup> proposes that the narratives identified as delusions by the psychiatrist correspond to linguistic elaborations that give meaning and make comprehensible to himself and others the underlying anomalous affective or somatic experiences. Based on the predominant subjective experience, it is possible to identify five types of delusion: persecutory, grandiose, nihilistic, mystical, and somatic. <sup>22</sup>

According to this theory, delusions are constituted in 3 stages. This is not a voluntary, circumscribed to thought, and explicitly reflective process. Instead, it is rather involuntary, implicit, and affective at first. The stages are:

- 1. Irruption of an anomalous affective experience.
- 2. Implementation of a specific cognitive style.
- 3. Formation of a narrative that gives meaning to the experience

The first stage corresponds to the irruption of a specific experience that constitutes the generative nucleus of delusion and yields to a cognitive style and a narrative. That underlying anomalous experience is affective (a mood), and it is specific for each kind of delusion, as follows:

- Persecutory delusion: intense fear and distrust of an imminent danger coming from other subjects.
- Grandiose delusion: huge self-confidence and self-reliance.
- Nihilistic delusion: deep emotional and bodily dampening.
- Mystical delusion: extraordinary serenity and mental lucidity.
- Somatic delusion: anomalous perceptual experience of a specific part of or the whole body (somatic hallucination).

The second stage is the implementation of a particular style of cognitive processing (cognitive style), yielded from the anomalous experience, and aimed at specific goals, as follows:

- Persecutory delusion: processing aimed at detecting, avoiding and/or dealing with the danger.
- Grandiose delusion: processing aimed at displaying and showing the great skills, talents, qualities, wealth, and power possessed.
- Nihilistic delusion: processing aimed at knowing the implications of the current insolvable situation and preventing worse consequences.
- Mystical delusion: processing aimed at enjoying the new state, understanding its scope and sometimes trying to share it with others.
- Somatic delusion: processing aimed at identifying what is wrong in one's own body.

In the third and final stage, a narrative is formed, which confers a more elaborated sense to what is experienced, making it understandable for oneself and others. This narrative makes it possible to express in words, or put in a communicable format, the lived experience. The themes of the narrative are linked with the anomalous original experience, and for that reason the following predominate:

- Persecutory delusion: 'they are persecuting me', 'they are doing witchery to me', 'they know my thoughts'.
- Grandiose delusion: 'I am rich', 'I am the president', 'I am famous', 'I am beautiful', 'I am god'.
- Nihilist delusion: 'I am dead', 'everyone else is dead', 'the world ended'. 'I am rotten inside'.
- Mystical delusion: 'I've found the human ideal state', 'I've found wisdom', 'I want to share this state of enlightenment with humanity'.
- Somatic delusion: 'I have a vacuum inside my head', 'an electric stream goes up and down all over my body'.

According to the theory of the anomalous affective experience, delusion of control emerges in the context of a persecutory delusion, but the concurrent presence of alterations in the experience of self and/or somatic hallucinations are also necessary. Amid the deep fear and distrustful characteristics of persecutory delusion, the subject feels different, as if he were not the same, as another person, or with something strange inside. The meaning that emerges and allows the patient to understand his experience is that of being possessed or controlled by someone else.

Regardless of the diversity of explanations, the need of a conceptual framework and a phenomenological method for comprehending the anomalous experiences underlying the delusion is increasingly being recognized.<sup>23</sup>. The goal is to place oneself in another's way of thinking, feeling, and perceiving in order to understand his actions. It is an experiential exercise aimed at being in the world like the delusional individual.<sup>24</sup>

There are few empirical studies focused on the clinical aspects of delusion of control, and the same examples are used again and again in the literature on this topic. In the absence of detailed first-person descriptions, some studies have used material from mental health web forums with all the limitations that this entails.<sup>25</sup> This research seeks to explore the subjective experience of the patient and proposes a phenomenologically-oriented psychopathology of delusion of control from empirical evidence.

#### **Methods**

The present work is a qualitative exploratory study of the conscious experience of a group of patients suffering from delusion of control. A phenomenologically-oriented semi-structured clinical interview was applied to all participants, followed by the evaluation of the phenomenological clinical findings. The protocol was approved by the university's ethics committee on human research.

The focus is phenomenological because the goal is to understand and describe the subjective experience and the way it is constituted, starting from the pre-predicative to become a narrative. A semi-structured interview is used because it offers the following advantages: It systematically orders the questions, is well tolerated by the patients, facilitates the expression of the subjective experience, and allows the use open and closed questions.

The questions were drafted as an interview script, so that they always followed the same order without omitting the evaluation of any domain. Left open was the possibility to introduce changes in the order of the questions if any of the answers given covered a domain about to be explored. <sup>26</sup> These adaptations were introduced so that the process of makingsense was not dictated by the theoretical interests of the interviewer, <sup>27</sup> but rather by the patient's subjective experience. Therefore, the method sought consistency of sense more than statistical significance.

All interviews were conducted entirely by the psychiatrist researcher and recorded on video. The factors taken into account in understanding the patient experience and the steps in the process of comprehension of sense were:

- 1. The patient's narrative.
- Observation of pre-predicative aspects (non-verbal), specifically the affective state, facial expression, gestures, and movements.
- 3. Exploration of the role played in the development of the symptom by: *a*) the affective, perceptual, cognitive, and somatic domains, and *b*) the cognitive style.
- 4. Integration of the previous findings in order to comprehend subjective experience as a whole, and describe its specific characteristics in each patient.
- 5. Discussion of all cases in order to identify similarities and differences between them and thus describe the subjective experience of delusion of control. This work was done by the two researchers based on observation of the patient's interview videos.

Seven patients were included (6 men and 1 woman), all over 18 years old, who met the following inclusion criteria: *a*) to have a delusion of control during the evaluation; *b*) to have been diagnosed with schizophrenia or schizophreniform disorder, according to the DSM-5 criteria; *c*) to accept and sign the informed consent, and *d*) to be in clinical condition for an ambulatory protocol. The exclusion criteria were: *a*) death or suicidal ideation, and *b*) diagnosis of neurocognitive disorder, intellectual disability, substance abuse-related disorders, posttraumatic stress disorder, bipolar disorder, personality disorder or obsessive-compulsive disorder.

In total, 6 patients with schizophrenia and one with schizophreniform disorder (DSM-5) were interviewed. The interview took place in an empathic atmosphere, where the patient was motivated to talk without restrictions about his or her experience. To accomplish this, the patients were instructed to describe their subjective experiences as clearly as possible, and to ask the interviewer for clarification if they didn't understand something.

## Results

### Case 1

40-year-old man with diagnosis of schizophrenia from the age of 21. He had had an annual acute episode with persecutory delusions and auditory hallucinations, which disappeared with pharmacological treatment. Between episodes, he remained with a chronic persecutory delusion in which his stepfather was the main enemy. The patient stated that his stepfather criticized him, was against his endeavors and

plans, and wanted to inflict harm on him. In the previous 2 months, he had presented with dyskinetic movements in the upper limbs due to antipsychotic medication. The patient claimed that his stepfather controlled his body and caused the abnormal movements so that everyone would see him as grotesque. Although the psychiatrist informed him of the neurological origin of the abnormal movements, the delusional belief remained unchanged.

The phenomenological interview uncovered that when the patient noticed his involuntary dyskinetic movements he looked for an explanation. Inasmuch as for many years, according to his persecutory narrative, he had attributed to his stepfather all the negative events of his daily life, he thought his stepfather had taken control of his body. He was so certain of this that he discarded the medical explanation, and denied any connection between antipsychotics and abnormal movements.

#### Case 2

20-year-old man with first-episode psychosis during a one month period. The patient had persecutory delusions, threatening auditory hallucinations and depersonalization, which made him feel strange and different from his usual self. He expressed that he felt possessed by his cousin, who had been killed 2 months ago. To obtain the desired relief he had resorted to different types of rituals, included an exorcism. With the pharmacological treatment, the patient achieved full recovery from the episode.

In the phenomenological interview, it was clear that the intense fear and distrust characteristic of the persecutory delusion, together with depersonalization, led the patient to consider the threat as being internal. He started thinking someone else had invaded his body, and the recent memory of his cousin's death convinced him it was his cousin's spirit who possessed him. In trying to make the experience comprehensible to himself and others, especially the odd character of depersonalization, the patient concluded that he was possessed by his cousin, who intended to harm him.

#### Case 3

27-year-old man diagnosed with schizophrenia since he was 21, who dedicated a considerable amount of time to a Christian church. He had been hospitalized twice. Two months before the second hospitalization, he felt wind bursts entering through his right ear into his head, staying there from minutes to hours, and then slowly going out through his left ear. That sensation filled him with fear; he tried to bow and shake his head, cough, hold his breath, and expel the intruded air. He also suffered insomnia, restlessness, auditory hallucinations and persecutory delusions. As he stated in his own words: "The devil got into my body. He came like air, entering through an ear and staying inside the head. During that time, he did me so much harm because he tried to steal my soul and control me. It took me a lot of effort to expel him, although sometimes he left by himself. I used plugs in my ears to prevent him from entering, but it did not work. I couldn't fight someone so powerful."

Most of the symptoms were controlled efficiently with antipsychotics, but the sensation of air entering his ear persisted: "Now I don't hear voices, and I don't feel persecuted. I have a healthy sleep. Two or three times per week I feel the wind entering through one of my ears, I dislike it because I know that the devil is trying to come back and control me, but I'm not afraid of it as much as before. I keep calm, I pray and I say to myself that no wrong can befall me if I cling to God. Sometimes I think that the air and the devil are part of the disease, as my psychiatrist says."

The phenomenological interview was conducted at 2 different times. Both times the somatic experience (hallucination) of air entering through an ear and staying inside the head was present. The first time, the somatic hallucination was present in the midst of other symptoms, such as persecutory delusions and auditory hallucinations. The patient felt fearful and struggled to expel the devil from his body. The second time, the hallucination appeared isolated from other symptoms, it was not as frightening, and the patient doubted its authenticity.

To understand this case, bear in mind that the patient had solid religious beliefs, which included the possibility of bodily invasion by the devil. The first time, experiencing the fear and mistrust characteristic of the persecutory delusion, and feeling a strange sensation of air entering his head, led him to conclude that he was possessed and controlled by the devil.

The second time, when only the somatic hallucination was experienced and its intensity was significantly diminished, the patient's narrative changed. Although he still believed that the devil was trying to get into his head, he did not experience the same intense fear, and thus considered it was just a symptom as his psychiatrist had told him.

#### Case 4

41-year-old woman diagnosed with schizophrenia since she was 23. Since the beginning of her illness, she had suffered almost constantly from auditory hallucinations and persecutory delusions. She interacted with the voices most of the time and requested they leave her alone. A few years later, she began to attribute some hostile thoughts to the hallucinatory voices she heard. Gradually over time, a big part of her thoughts, actions, and emotions were attributed to these hallucinations. "The voices give me orders, they got completely into my life, they determine what I do, say, and think. In the past it wasn't that way, now they don't leave me alone. They criticize and insult me, fill me with dark thoughts and pornographic things, and they make me feel upset."

The phenomenological interview showed that the patient started attributing some of her own thoughts to the persons that —according to her— talked to her through the hallucinations. They were hostile thoughts about beating, damaging, and even killing those persons. Then, considering the hallucinations and persecutory delusions remained, the attribution extended to a big part of her thoughts, emotions, and actions. Involuntarily, she adopted a cognitive style of attribution that was reinforced throughout the years and became her way of making sense of life.

#### Case 5

64-year-old man, diagnosed with schizophrenia since his youth. He had continuously experienced auditory hallucinations that criticized and insulted him. The patient interacted with the voices, responded to them, discussed, and insulted them back. The voice that he most frequently heard was similar to the one of a woman he had met in his youth. He had also a chronic persecutory delusion where the main persecutor was the same woman. The patient claimed that when he had aggressive thoughts, especially toward those who made fun of him, those thoughts were not his own, but introduced into his mind by this woman.

In the phenomenological interview, the findings were similar to those of case 4. The difference was that among the multiple hallucinatory voices, this man identified one of them as belonging to a woman with whom he had had a romantic relationship in his youth, and according to his narrative, she controlled and inserted hostile thoughts.

#### Case 6

35-year-old engineer, with a diagnosis of schizophrenia since the age of 23. He had a chronic persecutory delusion with temporary exacerbations and permanent negative symptoms. In the persecutory narrative, he said that when he went to Europe they implanted a monitoring device in his brain, through which they kept an eye on him, stole his energy, and inserted thoughts into his mind. That was the reason why he remained boring, sad, and exhausted in his work.

In the phenomenological interview, it was found that when he suffered his first psychotic episode, he lived in Europe and worked for a technology company. At first, he attributed the intense fear and distrust, characteristic of persecutory delusion, to a supposedly discriminatory policy of the company. Some days later, the persistence of the symptoms led him to believe that a monitoring device had been implanted into his brain to control him. After recovering, he came back to Colombia, where the depressive and residual negative symptoms seriously affected his functioning. He felt sad, anhedonic and energy drained, he couldn't get a job and his social life was restricted to his family. From his perspective, the brain monitoring device continued affecting him, draining his energy, destroying his endeavors, and generating suicidal thoughts.

In this patient, since his first psychotic episode, a narrative was formed concerning a brain monitoring device that controlled and harmed him. To the extent that the negative symptoms of the schizophrenia solidified (due to the development of the disease), the narrative consolidated, becoming the frame of reference through which his life made sense. It is worth noting that cases in which machines and contemporary technology like the internet or lasers perform the role of controlling agents are becoming more frequent.<sup>28</sup>

#### Case 7

24-year-old man diagnosed with schizophrenia since he was 21. In his last episode, he expressed the delusional belief that some of his thoughts were not his own, but someone else's. He also had unmotivated laughter, persecutory delusions,

auditory hallucinations, feeling of a presence, and obsessive thoughts of aggression and robbery. He had a good insight about his own symptoms, which made it easier for him to talk about the cognitive processing that led him to the conclusion that someone else was inside him and controlling his thoughts. "I was frightened and distrusted people. Involuntarily, I laughed when alone. It was very awkward for me to laugh without feeling like laughing. The only explanation I had was that I was possessed by someone else. I heard two voices, one aggressive and insulting, the other was less hostile. I didn't have any doubt that the aggressive one was from someone who controlled me. Additionally, I had sudden evil thoughts of stealing and beating up people. I'm not like that, those thoughts were not mine. With all those weird things happening, I didn't have any doubt that some being was possessing me and making me have thoughts that were not mine and controlled me. At that time, I also felt a presence near me, and therefore I thought that that being had entered my body."

## Discussion

Each patient expressed in his or her narrative the irrefutable conviction of being possessed or controlled by the devil, a spirit, a technological device or another human being, that something or someone else was the cause of their thoughts, emotions, movements, and actions. Therefore, all patients satisfied the diagnostic criteria for delusion of control.

The other relevant symptoms were auditory hallucinations, somatic hallucinations, depersonalization, the feeling of a presence, obsessive thoughts, negative symptoms, and dyskinetic movements.

In all cases, delusion of control was accompanied by an acute or chronic persecutory delusion and other neurological and psychiatric symptoms. Delusion of control was not found as a pure, isolated symptom in any of these cases. This cannot be overlooked when the delusion of control is approached from philosophy or any other discipline, or when a study aimed at elucidating its neurobiological correlates is performed.<sup>29,30</sup>

According to the patients' narrative, the control exercised by the agent is partial, never total. Some thoughts, emotions, desires, and actions are caused or inserted by the controller agent, but the majority are still under the patients' control. In patient 1, the foreign control was limited to dyskinetic movements. As reported by patients 5 and 6, only the aggressive and suicidal thoughts are alien, but not the rest of the mental phenomena. Conforming to patient 7, only the intentions and ideas of stealing and being aggressive are inserted, and in terms of actions, only the unmotivated laughter. This presents a significant problem for the theories of agency and of disconnection of the monitoring process, as it is difficult to explain why this dissociation takes place.

In every case, it was possible to trace back a history that accounted for the steps ranging from the conjunction of persecutory delusions plus other symptoms to the narrative that attributed to others the agency of some mental phenomena. In patient 7, the reasoning chain that led him to the conclusion of being possessed is evident. In patient 3, the background of his religious beliefs was fundamental in understanding

the somatic hallucinations experienced as possession. In patient 6, the belief of having an inserted technological monitoring device consolidates as he faces difficulties at work, and the negative symptoms persist. In patient 2, the recent violent death of his cousin was the key element in making sense of his experienced depersonalization and fear. In light of the above, it is clear that the delusion of control is not a primary symptom but derived from others; it does not originate as a specific anomalous experience of its own.

In cases 4 and 5, the chronicity of auditory hallucinations, lasting for years, has expanded and strengthened the scope of control from some thoughts to a great many mental phenomena. There are reports of this type of condition in chronic schizophrenia patients.<sup>31</sup> This finding is compatible with the results of a study, where simulations based on Bayesian inference was used to comprehend the patterns of formation of delusions. That study claimed that if the delusional explanation is only slightly better than the non-delusional one, the repetition of the same experience results in a firm belief in the delusion.<sup>32</sup>

The different narratives identified as delusion of control are formed using the background of the patient's knowledge and beliefs, and their cognitive and emotional states at the time. According to patient 2, a dead person can possess a living body. According to the religious beliefs of patient 3, the devil is powerful and can get into his head and destroy him. From the point of view of patient 6, the company where he worked had the capability to use high-technology devices to harm others. Patient 7 was skeptical, but the oddness of his experiences supported no other explanation than that of being possessed.

The narrative of delusion of control always is persecutory in nature. In no case did the control, possession or thought insertion seek to help the patients in coping with their difficulties, making them more intelligent or endowing them with some special quality. The goal of the controlling agent is always hostile because it seeks to harm the patients, make them uncomfortable and/or disrupting their plans. To patient 3, the devil wanted to take his soul. To patient 6, the device saddened and exhausted him. According to patient 1, his stepfather wanted to make him look grotesque to others. The relationship between the persecutory and control themes is so strong that they become indistinguishable. Therefore, it can be stated that delusion of control is a narrative variety of persecutory delusion.

It was not noted in any of the patients an explicit intention or desire to form the narrative of being controlled or possessed. It is not voluntary, deliberate, or reflexive. Like all human beings, the narratives of these patients are produced as a result of cognitive processes directed to comprehend and express what is experienced. They confer order and an elaborated linguistic sense to the experience. After they are formed, the narratives fuel the expectation that certain events occur, which in turn reinforce them. In patient 6, the narration of having an intracerebral device controlling and affecting adversely his plans led him to expect negative results in what he did. The difficulties in getting work and socializing were attributed to the persecution of the technological company, confirming and reinforcing his conviction of being persecuted.

There is no difference between the processes of narrative formation in the delusional and the non-delusional. The delusional makes use of the linguistic resources to express, in the best possible way, lived experiences, either routine or anomalous. These lived experiences are transformed into a linguistic framework, making them comprehensible and communicable to the patient and to others. The result is not the pure description of experience, but a narrative elaboration of it. The delusional individual is not interested in accurately capturing the experience as it is lived, but rather in personally comprehending it and making others comprehend it in order to receive empathy, help, protection, etc. 22

The process of delusional narrative formation shows that delusions are not a bunch of disorganized verbal fragments, and regarding the delusion of control, it is not about meaningless thoughts experienced as if they were alien.<sup>34</sup>

The fact that the delusion of control is a narrative derived from persecutory delusion and other concurrent symptoms, defies the hypothesis of a primary alteration of the sense of agency, or a disruption of the action monitoring system.<sup>35</sup> The explanation proposed by this last theory has focused on movements and actions, but only a minority of the delusions of control are on these topics.<sup>36</sup>

In summary, in none of these cases is there an anomalous specific primary experience of the delusion of control. Instead, there are narratives derived from the conjunction of a persecutory delusion with other psychiatric and neurological symptoms.

Without the phenomenologically-oriented clinical interview, it would not be possible to obtain the discussed findings. It is very difficult to trace back the formation of any symptom through a check-list. In contrast, by the application of this type of interview, it is possible to comprehend the way in which the symptoms interact with each other, reinforce one another and lead, in this case, to the emergence of the delusion of control narrative.

#### **Conclusions**

Delusion of control is the narrative that expresses in an elaborate way the meaning that the lived experience has for the patient. This narrative enables the patient to comprehend and explain to him or herself and to others the lived experience.

Delusion of control does not present itself as an isolated pure symptom. It is immersed in the context of a persecutory delusion and other psychiatric symptoms.

In delusion of control, it is possible to trace back the history of its configuration from its origins as a persecutory delusion plus other psychiatric symptoms.

Delusion of control can be considered a narrative variety of persecutory delusion.

## Ethical disclosures

**Protection of human and animal subjects.** The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors declare that no patient data appear in this article.

#### Conflicts of interest

The authors have no conflicts of interest to declare.

#### REFERENCES

- Kimhy D, Gotz R, Yale S, Corcoran C, Malaspina D. Delusions in individuals with schizophrenia: factor structure, clinical correlates, and putative neurobiology. Psychopathology. 2005;38, 338-334.
- Waters FAV, Badcock JC. First-rank symptoms in schizophrenia: reexamining mechanisms of self-recognition. Schizophr Bull. 2010;36:510-7.
- Mullins S, Spence S. Re-examining thought insertion. Br J Psychiatry. 2003;182:293–8.
- Thornton T. Thought insertion, cognitivism, and inner space. Cogn Neuropsychiatry. 2002;7:237–49.
- 5. Bortolotti L, Miyazono K. Are Alien thoughts beliefs? Teorema. 2015;34:135–48.
- Area R, Garcia-Caballero A, Gómez I, et al. Conscious compensations for thought insertion. Psychopathology. 2003;36:129–31.
- Frith CD. The positive and negative symptoms of schizophrenia reflect impairments in the perception and initiation of action. Psychol Med. 1987;17:631–48.
- 8. Frith CD, Done DJ. Experiences of alien control in schizophrenia reflect a disorder in the central monitoring of action. Psychol Med. 1989;19:359–63.
- 9. Frith C. Explaining delusions of control: the comparator model 20 years on. Conscious Cogn. 2012;21:52–4.
- Gallagher S. The natural philosophy of agency. Philosophy Compass. 2007;2:347–57.
- Langland-Hassan P. Fractured phenomenologies: thought insertion, inner speech, and the puzzle of extraneity. Mind Language. 2008;23:369–401.
- 12. Gibbs P. Thought insertion and the inseparability thesis. Philos Psychiatr Psychol. 2000;7:195–202.
- Fierro M. Semiología del psiquismo: los signos y los síntomas de las enfermedades mentales. Bogotá: Marco Fierro; 2015.
- **14.** Fuchs T. From self-disorders to ego disorders. Psychopathology. 2015;48:324–31.
- Maher BA. Delusional thinking and perceptual disorder. J Individ Psychol. 1974;30:98–113.
- 16. Maher BA. Anomalous experience and delusions thinking: The logical of explanations. In: Oltmanns TF, Maher BA, editors. Delusional beliefs. Chichester: Wiley; 1988. p. 15–33.
- 17. Frith CD. The cognitive neuropsychology of schizophrenia. Hove: Erlbaum; 1992.
- Garety PA, Kuipers F, Fowler D, Freeman D, Bebbington PE. A cognitive model of positive symptoms of psychosis. Psychol Med. 2001;31:189–95.
- Carr VJ, Beauty and belief: William James. the aesthetics of delusions in schizophrenia. Cogn Neuropsychiatry. 2010;15:181–201.
- Fierro M, Molina C, Giraldo L. La teoría de los delirios como falsas creencias y la convicción e incorregibilidad de los fenómenos psíquicos. Rev Colomb Psiquiatr. 2009;38:338–57.
- 21. Fierro M. Los delirios no son alteraciones primarias del pensamiento. Rev Colomb Psiquiatr. 2009;38:761–76.
- 22. Fierro M. Delirios: cómo entenderlos. Bogotá: Marco Fierro;

- 23. Martin B. The concept of psychosis: historical and phenomenological aspects. Schizophr Bull. 2008;34:1200–10.
- López-Silva P. La relevancia filosófica del estudio de la esquizofrenia. Cuestiones metodológicas y conceptuales. Rev Colomb Psiquiatr. 2014;43:168–74.
- 25. Gunn R. On thought insertion. Rev Phil Psychol. 2016;7:559-75.
- Valles M. Técnicas cualitativas de investigación social. Madrid: Síntesis; 2003.
- 27. Nordgaard J, Sass LA, Parnas J. The psychiatric interview: validity, structure, and subjectivity. Eur Arch Psychiatry Clin Neurosci. 2013;263:353–64.
- 28. Hirjak D, Fuchs T. Delusions of technical alien control: a phenomenological description of three cases. Psychopathology. 2010;43:96–103.
- 29. Maruff P, Wood SJ, Velakoulis D, et al. Reduced volume of parietal and frontal association areas in patients with schizophrenia characterized by passivity delusions. Psychol Med. 2005;35:783–9.

- Brüne M, Lissek S, Fuchs N, et al. An fMRI study of theory of mind in schizophrenic patients with passivity symptoms. Neuropsychologia. 2008;46:1992–2001.
- Goff DC, Brotman AW, Kindlon D, Waites M, Amico E. The delusion of possession in chronically psychotic patients. J Nerv Ment Dis. 1991;179:567–71.
- **32.** Park JS, Kang UG. How delusion is formed? *Med Hypotheses*. 2016;87:61–5.
- 33. Bruner J. Acts of meaning. Cambridge: Harvard University Press; 1990.
- 34. Martin JR, Pacherie E. Out of nowhere: thought insertion, ownership and context-integration. Consc Cogn. 2013;22:111–22.
- Sousa P, Swiney L. Thought insertion: abnormal sense of thought agency or thought endorsement? Phenom Cogn Sci. 2013;12:637–54.
- **36.** Spence SA. Alien motor phenomena: a window on to agency. Cogn Neuropsychiatry. 2002;7:211–20.