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Paraphrenia - a Review of a Forgotten Diagnosis

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Keywords

Psychotic disorders; paranoid disorders; schizophrenia; psychiatry; history

Abstract

Aim: Kraepelin described and systematized the clinical criteria for paraphrenia. We aim to review the history of paraphrenia, from its first mention in 1863 by Kahlbaum to nowadays, and to report a clinical case that meets Munro's criteria for paraphrenia. **Subjects and Methods:** We conducted a non-systematic narrative review of on published scientific articles and books on the historical evolution of paraphrenia. **Results:** Kraepelin described paraphrenia as clinically placed between Schizophrenia and Delusional Disorder. Contemporarily, Ballet proposed Chronic Hallucinatory Psychosis, an entity with clinical similarities to Paraphrenia. Mayer-Gross reviewed the paraphrenic patients diagnosed by Kraepelin, concluding that 64 % had a different diagnosis. Since then, paraphrenia became a controversial diagnosis, with decreased clinical usage, being absent from the current classification systems. More recently, there has been a resurgence of clinical investigation on this topic with the formulation of new diagnostic criteria by Munro, as well as some recent anatomo-pathological findings by Casanova. **Conclusion:** Additional clinical research on paraphrenia is needed in order to clarify its validity and diagnostic stability. Munro's criteria may help to create more homogeneous and robust samples, with longer follow-up periods, allowing to elucidate the place of paraphrenia in nosological classifications.

Introduction

The scientific evolution and cultural changes throughout time conditioned numerous changes in the way that certain nosological entities were utilized and classified. Paraphrenia, in its classic conception, was mentioned by Emil Kraepelin, in 1912, with the description of this condition being published in the following year [1,2]. His description clashed with Eugen Bleuler's conception of schizophrenia, which, deriving from the concept of *dementia praecox*, seemed to engulf paraphrenia [3]. The psychopharmacological revolution standardized neuroleptics as the treatment for all these entities, veiling any less deleterious clinical evolution [4]. In the last few decades, interest in paraphrenia has resurfaced, with new diagnostic criteria being proposed by Alistair Munro, in 1991 [5].

The aim of this study is to present a clinical case of paraphrenia according to Munro's diagnostic criteria and to review the historical evolution of the concept of paraphrenia, having Kraepelin's description as reference.

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Subjects and Methods

We conducted a non-systematic narrative review of the history and evolution of the concept of paraphrenia, based on published scientific articles and books on the subject. We also present a case report that exemplifies a case of paraphrenia as defined by Munro. Written informed consent was given by the patient.

We report the case of Ana (fictitious name), an 81 years old widow, living alone in Algarve, autonomously, with one daughter living in Lisbon. She concluded the 4th grade of schooling and was retired, having worked as a textile factory worker.

The patient was brought to the emergency department by her daughter after she noticed her mother being more suspicious and mentioning hearing voices. The patient detailed that 3 years earlier, after returning from a trip to Canada, she began hearing "*strange male voices saying that they were going to take my home from me*", coming to the conclusion that these men were plotting against her *"trying to make me insane so that they can take my home for themselves. I know that they placed microphones and cameras in my house, and they follow my moves, everywhere, because I hear them when I go for a walk around the city. Even in the shower they watch me, I can't even take a bath at ease"*. The patient denied ever seeing these men or the cameras and microphones. Despite this, the patient had always maintained a normal behaviour in her everyday life, with these phenomena passing unnoticed to other people. No other psychiatric disorder was previously diagnosed.

During observation, the patient remained calm, very cooperative, with a fluent, spontaneous and organized speech. It is also worth mentioning the well-preserved affect. Even though she had no insight, she agreed to be hospitalized in the Psychiatric department. During hospitalization, Ana maintained a cordial and appropriate behaviour, with remission of the auditory hallucinations and with delusional ideas becoming less spontaneous and less dynamic as olanzapine was introduced at bedtime, with gradual increases to a daily dosage of 15 mg. It is also important to note that no cognitive impairment was present. Although she remained without insight, she accepted the treatment and follow-up in consultation.

This is a clinical case of semi-systematic persecutory delusional ideas, over a period longer than 6 months, with auditory hallucinations, accompanied by a well-preserved affect. Furthermore, there were no major behavioural or cognitive impairment associated. Thus, we may consider this to be a case of paraphrenia, meeting Munro's diagnostic criteria for this entity.

Results and Discussion

The evolution of Kraepelin's concept

In the 5th edition of his Treaty for Students and Physicians (1896) Kraepelin referred to *dementia praecox*, catatonia and paranoid dementia as separate entities, despite raising doubts about this division [6].

In the 6th edition of his Treaty (1899), Kraepelin classified paranoia as a distinct entity from *dementia praecox*. Also, Kraepelin mentioned a subgroup of patients with a coherent development of fantastic delusions and illusions, with reference to bizarre hallucinations, disturbances of thought possession and neologisms. Initially, Kraepelin considered the diagnosis of this subgroup of patients as being part of paranoia, but ended up classifying it as *dementia praecox*, admitting it to be a future individualized entity [7].

It was in 1912, at the Bavarian Congress of Alienists, that Kraepelin first used the term *paraphrenia*, referring to an entity that shared some characteristics with paranoia, mania, and *dementia praecox*, but still classifying it as part of the latter. However, he also described some features that would differentiate paraphrenia from the previous entities: restlessness, irritability, inconstancy and impulsivity not seen in paranoia; insidious beginning of a delusional construct contrary to the acute onset in mania; subjective colouring of thought, without ever reaching the incoherence of *dementia praecox*. Also, volitive and personality changes, classically observed in the latter, would not occur in paraphrenia [2].

It was in 1913, in the 8th edition of his Treaty, that Kraepelin described paraphrenia as an entity with common features with *dementia praecox*, but with a milder involvement of emotional and volitional symptoms and personality preservation. It should be noted that Kraepelin did not rule out the possibility of cognitive impairment. It is reiterated that this group of patients would find themselves between *dementia praecox* and paranoia. Kraepelin divided paraphrenia into four subtypes - systematic, expansive, confabulatory, and fantastic (based in 78 cases described) [1].

Systematic: the most common subtype. Most patients were male (60 %) and more than half were between 30 and 40 years old at onset, with 20 % between 40 and 50 years, and a few isolated cases before 25 and after 50 years. He found no hereditary transmission. Main characteristics were: insidious and progressive development of persecutory delusions (to which ideas of grandeur would later appear), without disintegration of personality.

Kraepelin described this subtype as developing systematically in stages. In a first prodromal phase, there were unspecific symptoms: slow change in patient's behaviour, becoming more silent, suspicious, with occasional bizarre or aggressive behaviours, particularly directed at those close to him. Jealousy ideas were frequent in this phase. In the next phase, the insidious evolution of paranoid delusional ideas is noted, initially with persecutory content, which gradually flourished over the years, leading to feelings of insecurity, being watched and/or threatened. Later on, the delusional ideas would take on grandiose contours, often secondary to the per-

secutory contents, with frequent claims of a higher social status, sometimes demanding large sums of money or erotic interactions from others. Despite maintaining the capacities of retention and evocation, memory became contaminated by delusional ideas, with common delusional retrospective falsifications. Hallucinations also appeared in a later stage, particularly auditory, ranging from elementary sounds and noises to voices that would address the self in the form of comments, criticism or accusations. Other sensory type hallucinations were uncommon, although somatic hallucinations could be present and interpreted as experiences of passivity. Mood was congruent with the delusional contents, but still, patients would show an adequate mobilization and resonance of affects. Also, cognition and personality would be preserved. Although with a negative impact in the patients' activity, and lack of insight, patients maintained a long-lasting work capacity and a generally affable and appropriate behaviour when out of the delusional context [1].

Expansive: rarer than systematic paraphrenia, with most patients being female, between 30 and 50 years of age (75 %). As in systematic paraphrenia, Kraepelin found no evidence of hereditability, safeguarding that the small number of cases may have limited this conclusion. Expansive paraphrenia was characterized as an exuberant megalomania with a predominance of exalted mood and mild excitement. It had an insidious (though sometimes subacute) onset of self-referential and grandiose delusions, commonly of religious and erotomanic content, which, secondarily, could lead to persecutory delusions. Spectacular oneiric visual hallucinations appeared mostly early on and would tend to confirm and set the tone of the delusions.

Usually there was mood elation, but without an invasive psychomotor acceleration (in contrast to a manic episode). Concomitantly, there was an affective inadequacy (childish laughter, jocular comments, and childlike games). These patients were inclined to easily share their story, evidencing a prolix speech. Despite lack of insight, with influence of the delusional contents in the patients' behaviour, they could go unnoticed and be reasonably active. Cognitively, there could be decline, but without progression to dementia or personality disintegration [1].

Confabulatory: infrequent, with equal representation among both sexes, and identical distribution among three decades of age (from 20 to 50 years old), with the average being slightly younger than in other subtypes.

Confabulatory paraphrenia was described as being clinically identical to expansive paraphrenia, except for the dominant existence of delusional retrospective falsifications, driven by confabulations. Confabulations progressed irrationally and incoherently, creating delusional retrospective falsifications imbued with content of persecution and grandiosity, that could go back as far as childhood, and were recounted in detail as if they were recent experiences. Memory was not shown to be greatly affected in its functions.

Behaviour was not congruent with the narrative and it was usual for them to live a life too humble for their grandiose beliefs, and not take any protective measures that one would expect in a person claiming to be persecuted. Mood tended to be slightly exalted, becoming dysphoric at times, especially when the delusional ideas would be challenged. Differently from expansive paraphrenia, hallucinations might not be present [1].

Fantastic: the rarest subtype, corresponding to 10 % of paraphrenias, with higher frequency in male patients (60 to 70 %), and half of patients with an onset between the ages of 30 and 40 years old. It was described as a luxuriant production of extraordinary, incoherent and ever-changing delusions. Initially with a predominant depressed or anxious mood, with an appearance of discourage, loss of vitality and suicidal ideation. Slowly, persecutory delusions would appear and, as time went by, also grandeur delusions. They had a bizarre and mutable character, due to the influence of confabulations of a fantastic tone, creating delusional retrospective falsifications. Invariably, auditory-verbal hallucinations occurred, expressing criticism, threats or compliments. Somatic hallucinations were not infrequent, leading to delusions of passivity that could have a sexual contour. Visual hallucinations were not common. Disorganization of thought, with associative loosening, or even derailment of thought, translating into altered speech, marked by neologisms and idiosyncratic expressions were important characteristics of this subtype. Also the cognitive decline was more evident and severe in this subtype [1].

The last time Kraepelin wrote about paraphrenia, in 1916, in the 3rd edition of the Clinical Lessons, he only referred systematic paraphrenia, affirming that it was the clearest and most consistent subtype, being completely purged of primary affective symptomatology and representing the perfect intermediate model between paranoia and *dementia praecox* [8].

The era before Kraepelin

The term *paraphrenia* makes its first appearance in psychiatric nosology through Karl Kahlbaum (1828-1899) who, in 1863, tried to group mental disorders according to their evolution and prognosis. He defined *dementia* as a psychic deficit consequent to the onset of a certain process. If it occurred during childhood, it would be named *neophrenia*, if it started in puberty or adulthood, it would be called *paraphrenia* [2,9].

Valentin Magnan (1835-1916) described, in 1895, the *chronic delusional insanity of systematic evolution*, a concept close to Kraepelin's paraphrenia, naming it as systematic for its predictable evolution in phases: incubation (non-specific symptoms), persecution (delusional ideas and auditory hallucinations), ambition (ideas of grandeur that predicted cognitive impairment) and dementia. This final stage conflicted with Kraepelin's concept, in which cognitive decline, if present, was mild [2,10].

The concept that seems closer to Kraepelin's is *chronic hallucinatory psychosis,* proposed by Gilbert Ballet (1853-1916) [2]. The term was first mentioned in 1910 by Maurice Dide (1873-1944), referring to purely hallucinatory symptoms [11]. A year later, in 1911, Ballet described this entity as prevailing in male patients and being characterized by sensory-perceptual changes, in the form of hallucinations, that lead to the formation of delusions. In his original formulation evolution to dementia was absent, something that would change later when he divided chronic hallucinatory psychosis in two types: with or without evolution to dementia. Contrary to Kraepelin, Ballet described a considerable hereditability, which he observed in half of his cases [12].

Also in 1911, Ernest Dupré (1862-1921) and Benjamin-Joseph Logre (1883-1963) proposed a type of psychosis that would start from an internal primordial fiction, naming it the *delusion of fantastic imagination*, citing spontaneous confabulations with mood elation and persecutory and grandeur delusions, sharing similar features with the fantastic and confabulatory paraphrenias of Kraepelin [13,14].

In Germany, Eugen Bleuler (1857-1939) published in 1911 his work *dementia praecox or the Schizophrenia Group* where, among other things, he used the term *Schizophrenia*, based on the concept of *dementia praecox*. He mentioned that schizophrenia did not start only at a young age and that it could have a more benign prognosis, not evolving necessarily into dementia and with preservation of affection. As an example of schizophrenia with a better prognosis, he mentioned the case of Judge Schreber which, curiously, Sigmund Freud (1856-1939) referred to as paraphrenia [2,3].

After Kraepelin

The 78 cases of paraphrenia described by Kraepelin were reviewed by W. Mayer-Gross (1889-1961), in 1921, in terms of diagnostic stability (some with follow-up of more than 10 years) [15]. It is pertinent to mention that W. Mayer-Gross is sometimes cited as W. Mayer, his birth name before adopting his mother's maiden around the time of his marriage [16]. He reported that 50 of the 78 cases (64 %) met criteria for a different diagnosis, (most commonly schizophrenia) [9,15]. These results seemed to have played a decisive role in the diagnosis' decline (although, 28 cases retained the initial diagnosis assigned by Kraepelin) [2,9].

Nevertheless, the diagnosis decayed, and was abandoned in favour of schizophrenia. Some authors still defended the validity of paraphrenia, such as Jacques Lacan (1901-1981) and G. Halberstadt, who proposed the designation *hallucinatory paraphrenia* (inspired by Ballet's concept) [2,17-18].

David Henderson (1884-1965) and Robert Gillespie (1897-1945) wrote on the subject of paraphrenia, in 1940, considering systematic paraphrenia as an individualized entity, while staying uncertain about the remaining subtypes. They mentioned, however, that despite being recognized as an entity, systematic paraphrenia did not imply a different treatment from schizophrenia, making it difficult to defend its individuality. This difficulty became enhanced with the advent of neuroleptics in the 1950s, which became the treatment for both schizophrenia and paraphrenia, diminishing, in practice, the need to differentiate them [2,19].

V.J. Durand, in 1958, emphasized the preservation of intellectual capacities and personality, regarding paraphrenia as being close to, but separate from, schizophrenia [20].

Paraphrenia was distinguished from paranoia by Carlos Rodolfo Pereyra (1903-1965), in 1965. Fantastic and polymorphic delusions and the more communicative attitude found in the first, as opposed to the systematized delusions and more reserved attitude of the latter. He also separated paraphrenia from schizophrenia, stating that paraphrenic patients lived in two worlds, a delusional and a real one, something that did not happen in schizophrenia, where the patient would sink into the psychotic world, withdrawing from reality [21].

Henri Ey (1900-1977) also addressed the construct of paraphrenia. In 1960, in the 5th edition of his Handbook of Psychiatry, he proposed the division of chronic psychoses into systematized (including paranoia), fantastic (including paraphrenia) and autistic (including schizophrenia) [22]. Ey defended that the patient's personality would undergo a transformation, because of the impact of the delusional sphere, but not a complete dissolution as in schizophrenia [23].

In the 1969's edition of Mayer-Gross' *Clinical Psychiatry*, written posthumously to the original author by Eliot Slater (1904-1983) and Martin Roth (1917-2006), the hypothesis of individualization of paraphrenia in relation to schizophrenia was presented, expressing doubts about the methodology applied in Mayer-Gross' 1921 study and even indicating some possible errors, such as the lack of a control group [24]. After this publication, several authors defended paraphrenia as an indepen-

dent entity, and remarks to it may be seen in the works of: Aubrey Lewis (1900-1975) in 1970, Lawrence Kolb (1911-2006) in 1973, and Silvano Arieti (1914-1981) in 1974 (who included paraphrenia in the paranoid states, although with a less logical delusional construct than paranoia); T. L. Brink, in 1979 (who described a preserved reality test in paraphrenia patients, except for the delusional ideas); Lanteri-Laura, in 1990 (who defended the diagnosis of paraphrenia as an entity without detrimental evolution, with delusional ideas and hallucinations and an ordinary daily life) [25-29].

Affective paraphrenia

Karl Leonard (1904-1988) proposed, in 1944, a division of psychotic disorders in three groups: the phasic psychoses (including cycloid and manic-depressive psychoses), the systematic schizophrenias and the non-systematic schizophrenias. In the latter was an entity named affective paraphrenia. He associated the term *systematic* with the presence of a structural brain disturbance, reason why he disagreed with Kraepelin's nomenclature of systematic paraphrenia, even though his affective paraphrenia displayed clinical similarities, according to himself. Affective paraphrenia had an episodic and chronic course, rather than the insidious and progressive one of systematic schizophrenias. He emphasized the link between intense affective responses and the delusions, despite the possibility of a disconnection of these in later stages. He rejected the predictable phased evolution proposed by Kraepelin. Leonard also mentioned minimal changes in psychic harmony, without evolution to dementia and the possibility of remission. Nevertheless, he stated that personality could be affected in severe cases, evolving to a form similar to fantastic paraphrenia, which he included in systematic schizophrenias [2,30].

The association with a late onset

Kraepelin stated that paraphrenias tended to occur at a later age (30 to 50 years of age) [2]. In 1931, Kurt Kolle (1898-1975) described paraphrenia as a benign delusional psychosis included in the group of schizophrenias, appearing at later ages [31]. In 1943, Manfred Bleuler (1903-1994) described late-onset schizophrenia as an entity clinically close to other schizophrenias, but with an onset after 40 years and a less deleterious evolution. He also mentioned a less affective blunting and fewer formal thought disturbances, considering some cases to be closer to paraphrenia [32].

In 1955, Martin Roth (1917-2006) proposed the term *late paraphrenia*, describing a condition with paranoid delusional ideas and hallucinations appearing after the age of 60, more frequently in women with sensory deficits (mainly auditory and visual) and greater social isolation. Schizoid and paranoid personality traits were identified in a significant proportion of patients. Roth reinforced that cognitive and personality deterioration were not frequent, differentiating late paraphrenia from schizophrenia, but also considered the possibility of it being a form of schizophrenia with a late onset [33].

Due to the heterogeneity in the usage of the term late-onset schizophrenia, with some authors using it to refer to late paraphrenia, the International Late-Onset Schizophrenia Group reached a consensus in 2000. They put aside the term late paraphrenia and defended that there was evidence to support the use of two diagnostic entities: late-onset schizophrenia (after the age of 45) and the very late-onset schizophrenia-like psychosis (after the age of 60). Both were more prevalent in females, with very late-onset schizophrenia-like psychosis being associated with sensory deficits and social isolation (similarly to Roth's late paraphrenia). Late-onset schizophrenia does not greatly differ from schizophrenia with an early onset, but it differs from very late-onset schizophrenia-like psychosis, which has a lesser degree of formal thought disorder and affective blunting, but higher prevalence of visual hallucinations. They also stated that a later onset of these entities is associated with less cognitive impairment [33,34].

The evolution of paraphrenia in official nosological classifications

Paraphrenia first appeared in official classifications in 1967, in the 8th edition of the International Classification of Diseases (ICD). The paraphrenic form of paranoid schizophrenia as well as the involutional and late paraphrenias, were included in paranoid states. The 9th edition of the ICD, in 1977, maintained it but age was no longer referenced. In 1993, ICD - 10 only mentioned late paraphrenia, including it in chronic delusional disorders. The 11th edition of the ICD, of 2019, referred no longer to paraphrenia, mentioning the paraphrenic form of schizophrenia, included (but not defined) in "6A20.Z - *schizophrenia, episode unspecified*" [35-38].

In the 2nd and 3rd edition of the DSM (Diagnostic and Statistical Manual of Mental Disorders), paraphrenia is included in the paranoid states. However, since DSM - III in 1980, the American Psychiatric Association stated that, until more clarifying results of further research, paraphrenia would remain excluded from the classification and included in schizophrenia, something that remains in the current DSM – 5 - TR [39-45].

It is worth noting a publication by Fenton and associates (1988), in which 532 patients diagnosed with schizophrenia, using the DSM-III criteria, were reviewed according to the criteria of DSM III - revised (DSM – III - R). The authors described that about 10 % of the pa-

tients were diagnosed with atypical psychosis by psychiatrists who recognized patients with conditions equivalent to the description of paraphrenia [46].

21st Century

Near the turning of the 21st century, in 1991, Alistair Munro proposed new diagnostic criteria for paraphrenia (Table 1), based on Kraepelin's original descriptions [5]. Munro described paraphrenia as a chronic disease, in which the patient may initially maintain a relatively normal behaviour, hiding the delusional ideas. Over time, the increased dynamism of the delusional ideas would lead to a higher likelihood of acting irrationally and aggressively. The onset being at middle to old age, with some cases being described at a very old age. In terms of functioning, intellectual preservation was expected, with a gradual deterioration of social life due to the impact of the delusions. He postulated that about 10 % of cases could manifest later as schizophrenia, and that the older the patient was, more likely he would be to develop dementia, even more if there was cognitive impairment or visual hallucinations accompanying the delusional ideas. Munro also described hearing impairment, social isolation, being an immigrant and other chronic stressors as risk factors. Additional risk factors described were paranoid and schizoid personality traits, albeit with little evidence to support this. Finally, he identified an equal distribution between genders at middle-age, but a predominance in females at a later age, and suggested that the prevalence of paraphrenia may be equivalent to 10% of the cases of schizophrenia, when regarding hospitalized patients [5].

A clinical study was published in 1999, the first on paraphrenia since the one by Mayer-Gross in 1921, by A. Ravindran and associates in a team that included Munro [9]. This study took place in two clinical centres, and reviewed patients diagnosed with atypical psychosis. From them, 33 patients met the new proposed criteria for paraphrenia. They were followed-up for 18 months. No link with late onset was found, but rather a relatively young age was recognized, with one third of the patients with onset before the age of 30 and more than 80 % before the age of 49. Safeguarding the fact that the study had a small number of cases, the authors did not recognize a hereditary character in their sample, but found a female predominance (24 of 33 cases - 72.7 %). They found severe stressors prior to the onset of the disease in 33 % of the cases and acknowledged a greater social isolation in more than half [47].

After the clinical research conducted by Ravindran and associates, there were some publications that took on the same subject, in regard to paraphrenia or chronic hallucinatory psychosis. In Portugal, Borja Santos and associates published in 2013 the results of a clinical research based on Munro's diagnostic criteria, which they had translated 3 years before to Portuguese [47,48]. Considering chronic hallucinatory psychosis, there were two publications based on clinical researches applying Pull and Pichot criteria: one by Dubertret C. and associates in 2004, and the other by Mauri M.C. and associates in 2006 [49,50]. Being very close to paraphrenia, as previously described, there are authors, such as Borja Santos, who defended the inclusion of patients who meet the Pull and Pichot criteria in paraphrenia according to Kraepelin's construct, on which Munro based his diagnostic criteria. Despite the small samples (16 patients in the 2013 study; 38 patients in the 2004 study and 9 patients in the 2006 study), there was some consistency regarding the findings described by A. Ravindran and associates It is worth mentioning the mean age of about 36 years among the 3 studies, being consistently younger than the age associated with late onset paraphrenia, but also higher than the most frequent age of schizophrenia's onset. Overall, all these studies ended up claiming that paraphrenia, or chronic hallucinatory psychosis, should be considered an independent nosological entity [48-51].

A review of literature on anatomopathological findings in paraphrenia was published by Casanova in 2010 [52]. It referred studies that investigated the presence

Table 1. Paraphrenia criteria by A. Munro [5]

A delusional disorder of at least 6 months' duration characterized by:
1. Preoccupation with one or more semi-systematized delusions, often accompanied by auditory hallucinations. These delusions are not encapsulated from the rest of the personality.
2. Affect notably well-preserved and appropriate.
3. None of the following: intellectual deterioration, visual hallucinations, incoherence, marked loosening of associations, flat or grossly inappropriate affect, grossly disorganized behavior.
4. Disturbance of behavior understandable in relation to the content of the delusions and hallucinations.
5. Only partly meets criterion A for schizophrenia and no significant organic disorder is present.

of *neurofibrillary tangles* (NFTs) in patients with late onset schizophrenia-like disorder, and in patients with schizophrenia or paraphrenia, dividing them by age of onset (< 40 and > 40 years) [53,54]. Regarding paraphrenia, the presence of NFTs without patent cell loss and the scarcity of amyloid deposition were deemed compatible with a diagnosis of an NFT-predominant form of senile dementia (NFT-SD). The author considered that its name could be misleading, since this entity is not exclusive to seniors and may also occur in non-demented patients. Finally, Casanova mentioned that in both paraphrenia and NFT-SD, changes are observed early in entorhinal cortex neurons, postulating that this may be a crucial location for better understanding the pathology and manifestations of paraphrenia [52]. This would be further developed in another publication where Casanova proposed that a lesion in the entorhinal cortex could result in "misreading" information directed to the limbic system, leading to the intrusion of foreign images and idea [55].

Conclusion

It is controversial to define paraphrenia as an independent entity. While there have been authors who have defended it as such, with descriptions of paraphrenia, and similar constructs, in the past, there are also those who argue that it only holds historical value, having no current clinical applicability. This is reinforced by the current nosological classifications. To further strengthen the controversy, there is still a question mark around the diagnostic stability of paraphrenia, which was raised by the influential Mayer-Gross study. However, it is important to reference that 28 patients of that study retained the diagnosis of paraphrenia initially instituted by Kraepelin, raising the question as to what diagnosis would have had these patients if paraphrenia would not be considered. This fact is in line with the 10 % of schizophrenias that were renamed atypical psychosis in the DSM-III to DSM-III-R revision, and with the 10 % of patients diagnosed with schizophrenia that Munro suggested to instead have a diagnosis of paraphrenia [2,9,46].

Ultimately, there is the need for further clinical research on paraphrenia in order to clarify its validity. To this end, Munro's criteria may help to establish a more consistent and homogeneous group of patients, creating more robust and significant samples, with longer follow-up periods. In this way, the stability of the diagnosis, its validity and clinical description may be effectively ascertained.

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Conflict of Interest

None to declare.

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