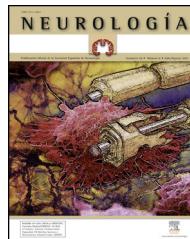




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## REVIEW ARTICLE

### Epilepsy in the process of artistic creation of Dostoevsky<sup>☆</sup>

I. Iniesta

Epilepsy Department, Division of Neurology, The Walton Centre for Neurology & Neurosurgery, Liverpool, UK

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#### KEYWORDS

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#### Abstract

**Introduction:** Fyodor M. Dostoevsky (Moscow, 1821-Saint Petersburg, 1881) suffered epilepsy throughout his full literary career. The aim here is to understand his condition in light of his novels, correspondence and his contemporaries' accounts as well as by later generations of neurologists.

**Development:** From Murin and Ordynov (*The landlady*, 1847) to Smerdyakov (*The brothers Karamazov*, 1879-1880), Dostoevsky portrayed up to six characters with epilepsy in his literature. Apart from making an intelligent use of the disease by incorporating it into his novels, his seminal idea –that a moment of happiness is worth a lifetime— was probably inspired by his epileptic aura. Through epilepsy, Dostoevsky also found a way to freedom from perpetual military servitude. The first symptoms of the epilepsy presented in early adulthood (late 1830s to early 1840s), but he was only diagnosed a decade later. In 1863 he went abroad seeking expert advice from Romberg and Rousseau. In the first retrospective study of Dostoevsky's literary epilepsy, Stephenson and Isotoff noticed the influence of Carus' *Psyche* (1848) in the preparation of his characters, whilst his epilepsy has inspired later generations of epileptologists.

**Conclusions:** Dostoevsky offers an insight into the natural history of an epilepsy, which in contemporary scientific terms would be classified as cryptogenic localisation-related epilepsy of probable temporal lobe origin. Above all, Dostoevsky's case illustrates the good use of a common neurological disorder by a remarkable writer who transformed suffering into art and a disadvantage into an advantage.

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#### PALABRAS CLAVE

Dostoevski;  
Epilepsia;  
Historia de la  
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Humanidades  
médicas;

#### La epilepsia en la gestación artística de Dostoievski

#### Resumen

**Introducción:** Durante toda su carrera literaria, Fiódor M. Dostoevski (Moscú, 1821-San Petersburgo, 1881) padeció epilepsia. En el presente artículo se abordará la enfermedad del escritor partiendo de su obra literaria, su correspondencia y los testimonios de sus contemporáneos, complementada con una revisión de la literatura médica relacionada.

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E-mail addresses: [ivan.iniesta@thewaltoncentre.nhs.uk](mailto:ivan.iniesta@thewaltoncentre.nhs.uk), [iniesta.ivan@gmail.com](mailto:iniesta.ivan@gmail.com)

Literatura;  
Medicina basada en la  
narrativa

**Desarrollo:** Desde Murin y Ordínov (*La patrona*, 1847) hasta Smerdiákov (*Los hermanos Karamazov*, 1879-1880) Dostoievski atribuyó epilepsia a seis personajes a lo largo de su obra. La idea (vertebradora en su literatura) de que un instante de felicidad puede valer por una vida nace probablemente del aura epiléptica con que se iniciaban los ataques. Además de utilizar la enfermedad inteligentemente en sus novelas, la epilepsia le valió también para librarse de una condena vitalicia a servir en el ejército siberiano. En 1863 viajó a Europa Central con intención de consultar a los neurólogos Romberg y Troussseau. En el primer análisis retrospectivo acerca de la epilepsia en su literatura, Stephenson e Isotoff apuntaron la probable influencia de la *Psique* de Carus (1848) en la construcción de sus personajes, mientras que su epilepsia ha inspirado a sucesivas generaciones de epileptólogos.

**Conclusiones:** La de Dostoievski es la historia natural de una epilepsia que en terminología científica contemporánea se clasificaría como criptogénica focal de probable origen temporal. Por encima de todo, el caso de Dostoievski muestra el buen uso de un trastorno neurológico ordinario por un genio literario extraordinario, que supo transformar la adversidad en oportunidad.

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## Introduction

Russian novelist Fyodor Mikhailovich Dostoevsky (Moscow 1821-St. Petersburg 1881, Fig. 1) experienced epileptic seizures throughout his literary life. However, rather than regarding himself as a victim of ill fortune, and despite the hardships caused by his disease, he used epilepsy to his advantage by working it into his writings and creating his best works towards the end of his career.

The historical time frame in which his disease came to light (the mid-19th century) coincides with the rise of scientific medicine in general and the neurosciences in particular. The first effective drugs for preventing epileptic seizures were introduced in 1857. In the first hospital dedicated to neurological diseases (National Hospital for the Paralysed and Epileptic in Queen Square, London, inaugurated in 1861), Hughlings Jackson established the pathophysiological basis of epilepsy and compiled a series of clinical observations that would later be corroborated scientifically. The first journal of the neurosciences (*Brain*) was launched in 1878; Jackson and Ferrier were among its founding members. Meanwhile, the first chair of neurology was created in Paris in recognition of Charcot's stellar work, and this step would make an impact on other European countries and Russia.

Against this backdrop, Dostoevsky's existing biographical and medical data will allow us to explore his own disease. By relying on a massive body of literature about epilepsy, volumes of correspondence with multiple references to the disease, and numerous eyewitness accounts by the author's contemporaries including a chronological list of medical opinions and assessments, we can examine his condition and fill in the gaps using modern medical literature. As a paradigm of scientific divulgation through narrative writing, Dostoevsky's literary works constitute a major contribution to general knowledge about a stigmatised neurological disorder in which symptoms are heterogeneous, but periodic excessive neuronal discharges are the feature common to all cases. However, beyond the interest that may be awakened by the medical history of one specific case of epilepsy, in Dostoevsky's works we find how an ordinary neurological disorder was put to good use by an extraordinary artist.

## Procedure

### Dostoevsky's medical history

As we glean from Dostoevsky's letters and medical reports, the disease which tormented the author throughout his career did not in fact develop during his exile in Siberia, when he was about thirty years old. We can find no evidence of onset in childhood, and nothing suggests that his epilepsy would have resulted from childhood trauma, as some have attempted to argue from a psychoanalytical perspective.

Dostoevsky was born in the Hospital for the Poor in Moscow on 30 October 1821 (Julian calendar), where his father was employed as a surgeon. In 1838, he moved to St. Petersburg with his older brother Mikhail to study at the Nikolayev Military Engineering Institute. According to contemporary accounts, Dostoevsky would have experienced his first reported epileptic seizures during his student years between 1838 and 1843. His classmate Grigorovich, another writer, describes what was probably a generalised tonic-clonic (grand mal) seizure in 1844, and remarks that he had suffered similar events previously: "He had fits of illness several times, when we were out walking. Once, when we were walking along Troitsky street, we met a funeral procession. Dostoevsky quickly turned aside; he wanted to return home, but, as soon as he walked several steps, he had a strong attack of the illness. It was so strong that I had to ask passers-by to take him to the nearest drugstore, and we could hardly revive him. Usually, after such fits, he experienced a depression which lasted for two or three days."<sup>1</sup>

Several years after experiencing his first epileptic seizures, Dostoevsky describes certain sudden and unanticipated psychological states characterised by vivid memories and *déjà vu*. These states were sometimes accompanied by a feeling of angst and at other times, by a pleasant sensation of near ecstasy. Such events are now known to be simple partial seizures, but at the time they were known as 'dreamy states' or 'intellectual auras'. These symptoms increased in frequency and intensity until becoming the immediate precursors to a grand mal seizure. From the age of 22 or 23, he experienced epileptic seizures that generally appeared at night or in the early hours of the morning. As



**Figure 1** Portrait of Fyodor M. Dostoevsky (1821-1881) by Vasili G. Perov (1833-1882); completed in 1872.

the novelist himself recognised, lack of sleep, alcohol, and overwork were unmistakeable triggers of his episodes. At the best of times, the seizures would remit for several months only to return with a vengeance; he then would experience multiple seizures in the same week. Accounts by some of his contemporaries (the mathematician Sofia Kovalevskaya or the poet Nikolai Strakhov<sup>1</sup>), and Dostoevsky's descriptions in *The Idiot* and *Demons*, suggest that his daytime seizures were preceded by the sensation of peace and harmony that the writer would recall once he regained consciousness.

The first medical reports to document Dostoevsky's epilepsy were prepared by his friend Dr Ivanovsky. His memoirs include a description of one of the times he cared for the author in July 1847, just after a seizure: "As soon as I approached the Hay Market Square, I saw Fyodor Mikhailovich. He was bareheaded, his coat was unbuttoned, and his tie was loosened. Some officer in a military uniform was supporting him by the elbow".<sup>1</sup> On 23 April 1849, after having been under close surveillance for several months, Dostoevsky was arrested alongside a number of socialist intellectuals belonging to the so-called Petrashevsky Circle. The writer attended their meetings in secret, as did others who disseminated the critic Belinsky's condemnation of slavery. This movement echoed the frustrated attempts of an earlier generation (the Decembrists) whose members were condemned to a wide variety of harsh sentences following

the revolt of 1825. Dostoevsky was accused of the criminal offence of distributing printed works directed against the government<sup>1</sup> and sentenced to death by firing squad in the Peter and Paul Fortress. However, minutes before the execution was to take place, the Tsar gave Dostoevsky a carefully orchestrated pardon and commuted the sentence to four years of forced labour in a Siberian prison in Omsk. After that, Dostoevsky would serve the rest of his life in the Russian army in the remote outpost of Semipalatinsk.

He was formally diagnosed with epilepsy shortly after being taken to Siberia; the report by Troitsky, the doctor at the prison camp in Omsk, is the first document certifying his condition.<sup>2</sup> Dostoevsky himself put forth the version of the story that his illness began in 1850 and not earlier (which Grigorovich's and Ivanovsky's accounts both suggest) so that the date would coincide with that of his imprisonment; he may have been planning an exit strategy. After several failed attempts, Dostoevsky managed to convince the new Tsar of the risks involved in retaining an army officer with epilepsy, and he was granted a full reprieve on 8 May 1859. The influence of his friendship with Baron Wrangel, and the evidence in reports issued by prison doctors and medical officers alike contributed greatly to the decision to discharge him. According to the report by Dr Ermakov of the Seventh Siberian Infantry Battalion, "Dostoevsky had his first serious seizure of epilepsy in 1850... In 1853 he had another seizure, and now he has seizures each month. His present state of health is very weak... For several years he suffered from epilepsy, and now, as he is deteriorating from the disease, he cannot stay in the service of Your Majesty any longer."<sup>1</sup>

Everything seems to indicate that, despite his doctors' repeated advice, Dostoevsky was not assiduous in taking the emerging and poorly-tolerated antiepileptic drugs of his time (potassium iodide and potassium bromide). Dostoevsky's most effective caregiver was his second wife, Anna Grigorievna, whom he had hired in 1866 as a stenographer to help him meet his deadlines for the novel *The Gambler*. In her memoirs, Anna recalls "very often I ran from my room to his room and held him standing in the middle of his room with his face contorted by convulsions, his body shaking all over. I embraced him from the back, and then we went down on the floor together. Usually the catastrophe happened at night... Therefore, he used to sleep on a wide and low sofa, in case he regained his consciousness [...] I tried to calm him down. After the seizures, he fell asleep, but he could be awakened by the slightest noise – for example, a sheet of paper falling from the table. Then he jumped up and uttered some words which nobody could understand. You know, one could not cure this illness. All I could do was to loosen the upper button of his shirt and take his head into my hands."<sup>1</sup>

In another family event that should be mentioned, Dostoevsky's 3-year-old son Alexei suffered a seizure two weeks after having recovered from what seemed to be febrile convulsions. The seizure degenerated into a prolonged convulsive state and the child died, after more than 12 hours of uninterrupted epileptic activity, on 16 May 1878. This was confirmed by a "specialist in nervous system disorders" on his arrival.<sup>3</sup>

Although his seizures increased in intensity and frequency over a period spanning two-thirds of his life, sapping his psychological abilities and creating other sequelae associated

with the disease, Dostoevsky was still able to complete his masterpiece *The Brothers Karamazov*. He died a year later, in early 1881, due to multiple bouts of haemoptysis.<sup>4</sup>

### Neurology in Dostoevsky's time

In the second half of the 19th century, the definitions of the concepts 'epileptic seizure' and 'epilepsy' were very similar to those used today. In 1870, Hughlings Jackson defined a convulsion as "but a symptom, and implies only that there is an occasional, an excessive and a disorderly discharge of nerve tissue on muscles".<sup>5</sup> According to that doctor, the term 'epilepsy' would be more appropriately used to refer to a neurological disorder in which the brain tends to generate excessive nervous discharges that will occasionally produce "temporary disorders of functions of many kinds, sensory as well as motor and mental as well as physical".<sup>5,6</sup>

In Moscow and St. Petersburg, knowledge of neurology at the time was comparable to that in other leading European countries. Most of all, this was due to the considerable influence of France and Germany. Proof of the neurological advances in Russia can be found in the pioneering neurophysiological studies by Ivan Sechenov (1829-1905). Specialists in nervous system disorders, including Armand Trousseau (1801-1867) in France, Moritz H. Romberg (1795-1873) in Germany (Fig. 2), and John Hughlings Jackson (1835-1911) in England,<sup>7</sup> began to prescribe the first drugs to effectively prevent epileptic seizures. The antiepileptic effect of the drugs mentioned previously, potassium iodide and potassium bromide, was discovered incidentally by Wilks and Locock in 1857. However, empirical use of these drugs for epilepsy was still not unanimously supported by the scientific



**Figure 2** Moritz H. Romberg (1795-1873) with whom Dostoevsky sought a consultation in 1863.

community. Outspoken opponents of these treatments include Sir Edward Henry Sieveking,<sup>8</sup> and even Rousseau was hesitant to employ them. Regarding Dostoevsky's case, as mentioned before,<sup>9</sup> the evidence is more likely to refute than support his acceptance of long-term treatment, regardless of his intentions of seeking the medical advice of Romberg and Trousseau.<sup>4</sup>

### Epilepsy in Dostoevsky's literature

The recent completion of direct Russian-to-Spanish translations of *The Landlady* and *A Writer's Diary* means that we now have access to all of Dostoevsky's literary works mentioning epilepsy. These works include such characters as Murin and Ordynov (*The Landlady*, 1847), Nelly (*Oppressed and Humiliated*, 1861), Myshkin (*The Idiot*, 1868), Kirillov (*Demons*, 1872), and Smerdyakov (*The Brothers Karamazov*, 1879-1880). More subtle references to the disease may also be found in *Crime and Punishment* (1866), *Notes from the Underground* (1865), and in comments and allusions to epilepsy in *A Writer's Diary* (1873-1881). The last book is an ambitious and eclectic volume written constantly throughout the last decade of the author's life. It contains a wide variety of texts ranging from opinion pieces and articles to short masterpieces such as *Vlas* or *Bobok*. We can also find references to his precarious state of health as well as numerous apologies to his readers for the lateness of his instalments due to his seizures and subsequent pulmonary condition.<sup>10</sup>

#### **The Landlady (1847)**

The first mention of epilepsy in Dostoevsky's writings appears in *The Landlady*, published in autumn 1847. Anticipating the scene between Rogozhin and Myshkin in *The Idiot*, and the murderous Smerdyakov in *The Brothers Karamazov*, old Murin experiences an epileptic seizure when he attacks the protagonist Ordynov (who the narrator informs us has the same disease as Murin). "There was the sound of a shot, then a wild, almost unhuman, scream, and when the smoke parted, a terrible sight met Ordynov's eyes. Trembling all over, he bent over the old man. Murin was lying on the floor; he was writhing in convulsions, his face was contorted in agony, and there was foam upon his working lips. Ordynov guessed that the unhappy man was in a severe epileptic fit."<sup>12</sup>

Readers of *The Landlady* discover a trait that would come to be a constant presence in Dostoevsky's literary offerings, and which goes beyond a mere description of seizures including sudden transformation of the face, the cry caused by laryngospasm, falling, foaming at the mouth, and the appearance of spontaneous death and resurrection. Dostoevsky informs us of what happens a moment before the seizure: a premonition that something will happen or has already happened, or a fleeting illusion or moment of happiness which, recalled time and again, may last a lifetime. This idea was most likely inspired by the ecstatic aura preceding seizures, and this is one of the underlying themes in his works: "At times he had moments of insufferable, devastating happiness, when the life force quickens convulsively in the whole organism, when the past shines clear, when the present glad moment resounds with triumph and

one dreams, awake, of a future beyond all ken".<sup>11</sup> His following book, *White Nights* (1848) concludes with the same idea that one moment of happiness is sufficient to fuel an entire lifetime.<sup>12</sup>

### Oppressed and Humiliated (1861)

*Oppressed and Humiliated* followed soon after his successful literary recreation of his experience in the Siberian prison camp in Omsk (*The House of the Dead*, 1860) and his comedy *The Village of Stepanchikovo* (1861). The latter was presented as a stage play by the influential director Konstantin Stanislavsky in 1891, who managed to slip it past the censorship office that had been reinstated after the deaths of Dostoevsky and Tsar Alexander II. Thirteen years after *The Landlady* was published, and 11 years after the appearance of Dostoevsky's preceding and unfinished story *Netochka Nezvanova*, *Oppressed and Humiliated* was published as a serial story in *Vremya* (Time) throughout 1861. The protagonist is an abused orphan girl whose epilepsy Dostoevsky depicts in a scene evoking an event from his own life that was faithfully recorded by his friend A. G. Shile.<sup>13</sup> "At last something like a thought was apparent in her face. After a violent epileptic fit she was usually for some time unable to collect her thoughts or to articulate distinctly. And so it was now. [...] It was clear that she had had a fit in my absence, and it had taken place at the moment when she had been standing at the door. Probably on recovery she had been for a long time unable to come to herself. [...] She was pale; her lips were parched with fever and stained with blood."<sup>13</sup>

In his memoirs, Nikolai Strakhov recalls the devastating consequences of Dostoevsky's epileptic seizures, as well as his doctor's recommendation that he stop writing to focus on getting well: "In the first issue he published his novel *Oppressed and Humiliated* [...] Fyodor Mikhailovich could not stand such hard work, and he fell ill after this third month [...] The editor wrote about the author's illness. This illness was a terrible fit of epilepsy, after which he remained unconscious for three days [...] Further on, I found out that doctors told him that he could be cured from epilepsy if he stopped writing".<sup>14</sup>

Luckily, the writer ignored this advice, as if heeding the quote attributed to Christian Friedrich Hebbel (1813-1863): "When a man is himself an open wound, curing it will kill him".<sup>14</sup> In fact, as Dostoevsky recalled on numerous occasions, the mere act of writing had a beneficial effect on his mental health.

### The Idiot (1868)

*The Idiot*, written during the author's journeys through Germany, Switzerland, and Italy, appeared in its eighth and final version in 1868. The protagonist, Prince Myshkin, is a paradigm of goodness inspired by Jesus Christ and Don Quixote. Myshkin, who has the same disease as his creator, believes epilepsy to be a gift and a means of reaching salvation in return for his sufferings.<sup>15</sup> *The Idiot* presents each of the phases of the disease, as previously explained in "Neurology and Literature".<sup>16</sup>

### Demons (1872)

Dostoevsky's idea of writing another novel about a character tormented by epilepsy to the point of economic and

mental ruin underwent a major shift when the young revolutionary I. Ivanov was murdered in Moscow towards the end of 1869. The trial of the group led by the anarchist Nekhayev, and the historical and social context in which the terrorist act occurred, provided inspiration for the plot of *Demons*. Although epilepsy plays a less prominent part in this novel, the warning signs preceding major seizures are addressed in a dialogue between Kirillov, who commits suicide, and Shatov. Kirillov describes states of ecstasy similar to those affecting Prince Myshkin in *The Idiot*. This passage displays Dostoevsky's characteristic irony and sense of humour: "There are seconds—they come five or six at a time—when you suddenly feel the presence of the eternal harmony perfectly attained. It's something not earthly [...] This feeling is clear and unmistakeable; it's as though you apprehend all nature and suddenly say, 'Yes, that's right [...]'. " "Kirillov, does this often happen?" "Once in three days, or once a week." "Don't you have fits, perhaps?" "No." "Well, you will. Be careful, Kirillov. I've heard that's just how fits begin. An epileptic described exactly that sensation before a fit, word for word as you've done."<sup>17</sup>

### The Brothers Karamazov (1879-1880)

Today, Dostoevsky's final novel may well be considered a treatise on legal medicine and forensic psychiatry.<sup>18</sup> Presented in four parts and an epilogue, *The Brothers Karamazov* (Fig. 3) tells the story of the murder of Fyodor Pavlovich Karamazov at the hands of his servant and illegitimate son Smerdyakov. Smerdyakov kills himself after committing the perfect crime and framing his detested half-brother Dimitri.

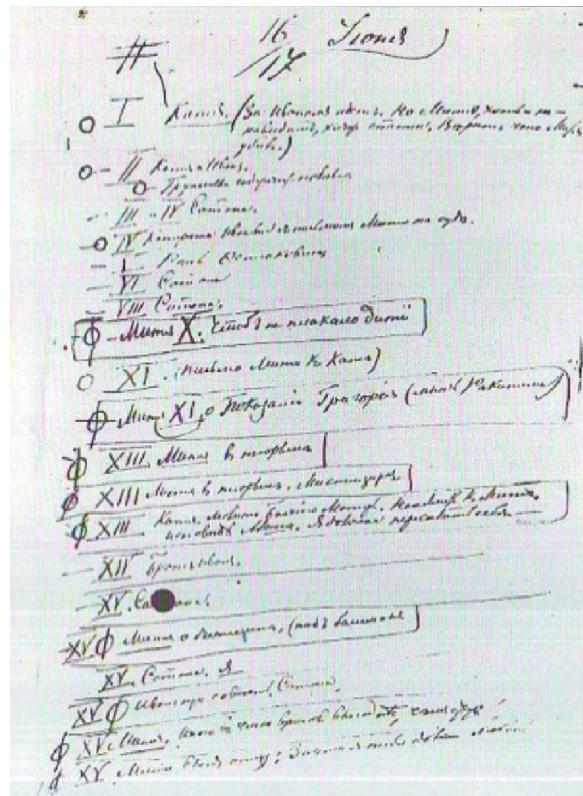


Figure 3 Dostoevsky's draft of *The Brothers Karamazov* (1879-1880).

Epileptic from an early age, Smerdyakov uses his disease as an alibi; he fakes a series of seizures on the night of the murder, and manages to dupe 3 doctors in the forensic investigation. Outside the courtroom, in different conversations with his other half-brother Ivan, the unscrupulous Smerdyakov takes great pride in confessing to the murder.

The main character in the novel is the third brother, Alexei, a good-hearted man inspired by Prince Myshkin and Dostoevsky's son who had died of status epilepticus two years before. *The Brothers Karamazov* includes all of the author's fixations: conflicting beliefs, the origins of love and hate, suicide, salvation through suffering, the significance of a single moment and recollection of that moment, inter-generational conflict, and free will.

The novel also hints at scientific determinism, the brain-child of the great experimental physiologist Claude Bernard (1813-1878): "Imagine: inside, in the nerves, in the head—that is, these nerves are there in the brain [...] there are sort of little tails, the little tails of those nerves, and as soon as they begin quivering [...] then an image appears [...] That's why I see and then think, because of those tails, not at all because I've got a soul, and that I am some sort of image and likeness. All that is nonsense!"<sup>19</sup>

Dostoevsky's scepticism of medical science can be summed up by a scathing comment in *The Brothers Karamazov* on the differing criteria and therapeutic impotence which once dominated our practice: "I've tried all the medical faculty: they can diagnose beautifully, they have the whole of your disease at their finger-tips, but they've no idea how to cure you."<sup>19</sup> Shortly thereafter, he offers a scornful view of increasing and excessive specialisation in medicine: "[...] I don't cure the left nostril, that's not my speciality, but go to Vienna, there there's a specialist who will cure your left nostril."<sup>19</sup>

### Dostoevsky's epilepsy in medical literature

Throughout history, the various attempts at providing scientific explanations for art have yielded no results. Recent examples of scientific reductionism giving rise to such fruitless investigations include the theory that Picasso's cubism was a migraine aura<sup>20</sup> and the attempt to link Polish composer Chopin's hallucinations to a highly speculative case of temporal lobe epilepsy.<sup>21</sup>

Without so much reductionist zeal, Dostoevsky's epileptic aura sparked an interesting scientific debate among doctors and scholars after the author's death. Segalov in 1907 was the first doctor to retrospectively analyse Dostoevsky's epilepsy.<sup>22</sup> In the 1920s, Freud and Zweig maintained positions founded on their respective interpretations of the author's disease. In 1935, Stephenson and Isotoff were the first to examine epileptic characters in Dostoevsky's works (they omitted *The Landlady*, written before his Siberian exile). These authors, who distance themselves from theories that point to Dostoevsky as the father of psychoanalysis, cite *Psyche* by Carl Gustav Carus (1848) as a source of inspiration for the way Dostoevsky developed his characters.<sup>23</sup>

On the centenary of the writer's death, Joseph Frank recalled that Professor Henri Gastaut had partially reworked his earlier theory about the origin of Dostoevsky's epilepsy.<sup>24</sup>

The conclusions from his lecture (that Dostoevsky's epilepsy originated from a temporal lobe dysfunction in an individual with a genetic predisposition to generalised seizures) were published three years later in *Epilepsia*.<sup>25</sup> Theodore Alajouanine was the first neurologist to publish his impressions of Dostoevsky's epilepsy in a scientific journal. Based on the description of Dostoevsky's aura (which the French doctor called 'ecstatic'), Alajouanine proposed a retrospective diagnosis of temporal lobe epilepsy.<sup>26</sup> In 1978, Gastaut published the first article in which he refuted his countryman's arguments. Instead, he proposed primary generalised epilepsy as the most likely retrospective diagnosis,<sup>27</sup> but he would later refine his diagnosis, as mentioned above. In 1980, Cirignotta et al. published the case of a patient whose symptoms resembled those described in Dostoevsky's works. Electroclinical findings confirmed the diagnosis of temporal lobe epilepsy with ecstatic auras, and the team named this atypical variant 'Dostoevsky epilepsy'.<sup>28</sup> Different hypotheses for a retrospective diagnosis, with varying degrees of precision and popularity, have been advanced since then. Almost all of them, however, have more in common with Alajouanine's initial proposal than with Gastaut's.<sup>29</sup> The year 2000 saw the publication of the first study in Spanish on Dostoevsky's epilepsy,<sup>30</sup> and that project was later expanded into a doctoral thesis.<sup>31</sup> In 2001, Siegel and Dorn completed another study of the interplay between Dostoevsky's epilepsy and his literature.<sup>32</sup>

However, the first attempt at a retrospective diagnosis of Dostoevsky's condition was made by Sigmund Freud in 1926, in an essay responding to the impressions published in 1920 by his countryman Stefan Zweig.<sup>33</sup> Freud's argument in *Dostoevsky and Parricide*, influenced by the plot of *The Brothers Karamazov*, is that the author suffered not from a true, organic form of epilepsy, but rather from an emotional disorder created by his relationship with his father. This disorder was characterised by non-epileptic psychogenic seizures, a condition then known as hystero-epilepsy or grand hysterical attacks. According to Freud, "Dostoevsky called himself an epileptic, and was regarded as such by other people, on account of his severe attacks, which were accompanied by loss of consciousness, muscular convulsions, and subsequent depression. Now it is highly probable that this so-called epilepsy was only a symptom of his neurosis".<sup>34</sup> Freud was perhaps misled by Smerdyakov's feigned seizures in the novel, and by his own psychoanalytic theories, which may be valid under some circumstances. Also, like his contemporaries and many later generations of scientists, he was convinced that an individual with frequent epileptic seizures would never have been able to attain Dostoevsky's intellectual stature. In any case, we find that Freud, like the expert witnesses in the Fyodor Pavlovich murder trial in *The Brothers Karamazov*, diagnosed the writer's seizures incorrectly. On the other hand, Freud's interesting essay provides a clear example of the difficulties that arise in diagnosing epilepsy, whether retrospectively or prospectively.

Outside the scientific debate, from a writer's perspective, Zweig offers a penetrating analysis of Dostoevsky's personal reality as he lived with the disease: "He is able to convert his sickness, the greatest menace to his life and reason, into the sublimest secret of his art: he [...] allows us to savour with him the wonderful moments immediately preceding the attacks. Death in the midst of life is then, he

tells us, presented in a quintessential form; 'pure being' [...] is felt to be something rapturous and sublime; life is quickened to become a 'consciousness of self' stretched to such a point of tension as to be morbid in its vehemence."<sup>33</sup>

## On the proper use of sickness: towards a new (old) paradigm?

"And thus / now diagnosed with epilepsy / he taught mankind / to forge art from suffering"<sup>35</sup>

Shortly before Dostoevsky's birth, the German Romantic poet Novalis wrote, "Of all the knowledge man has acquired, he has yet to learn how to make good use of his disease."<sup>36</sup> Three centuries earlier, in *Prayer, to Ask of God the Proper Use of Sickness*, French philosopher Blaise Pascal, who led a religious community, asked God to show man that the true meaning of bodily sickness is the decline of the soul, which can only be cured through divine grace.<sup>37</sup> From a more pragmatic and earthly (but also Christian) perspective, Dostoevsky showed an extraordinary ability to overcome adversity and transform it into opportunity. Dostoevsky was placed at a marked disadvantage by the seizures which he experienced during at least two thirds of his life. However, in addition to relying on his disease to escape the perpetual military service to which Tsar Nicholas I sentenced him in 1849, he also used it to enrich his writings. He created at least 6 characters with epilepsy (Murin, Ordynov, Nelly, Myshkin, Kirillov, and Smerdyakov), all from different walks of life; Dostoevsky understood that the disease presented in a heterogeneous population and was as likely to affect a poor orphan girl as a benevolent prince or a parricide lacking all moral conscience.

Regarding the aura or sensation that announces the onset of a seizure, Dostoevsky wrote the following words for Prince Myshkin: "What matter though it be only disease, an abnormal tension of the brain, if when I recall and analyse the moment, it seems to have been one of harmony and beauty in the highest degree—an instant of deepest sensation, overflowing with unbounded joy and rapture, ecstatic devotion, and completest life?"<sup>38</sup>

In his letters, however, he shows the other side of the illness: "The thing is that, for twenty-five years now, I have been suffering from epilepsy, which I contracted in Siberia. This illness has gradually deprived me of the ability to remember faces and events, to such an extent that I have (literally) even forgotten all the themes and details of my novels and, since some of them have never been reprinted since they were first published, I actually have no idea of what they are about."<sup>4</sup>

Perhaps at this point, I should use a quote from the second act of Hamlet to provide a better understanding of the master of Petersburg's conflicting emotions: "there is nothing either good or bad, but thinking makes it so."<sup>39</sup>

## Conclusions

Dostoevsky's story provides the natural history of a case of epilepsy that modern science would classify as focal cryptogenic epilepsy of probable temporal lobe origin. However,

beyond the interest we may feel for a case of a heterogeneous neurological disease that was well-understood and correctly diagnosed in the author's lifetime, we should also note that Dostoevsky provides a lesson for life. He was able to make intelligent use of his condition in his writings and thereby contribute to the eradication of the sociocultural stigmas associated with this disease. On the other hand, one of the main ideas in his book (that one moment of happiness, remembered and relived, may create a lifetime of happiness) is closely related to the ecstatic aura the writer often experienced. The marvellous narratives inspired by his epilepsy are outstanding examples of the long-standing and fruitful symbiotic relationship between medicine and literature. Dostoevsky's particular case illustrates how a literary genius puts a common illness to good use by transforming suffering into art and adversity into opportunity.

## Conflicts of interest

The author has no conflicts of interest to declare and has received no funding for this article.

## Presentations

This article is the culmination of a project that began with the oral presentation *El papel de la epilepsia en el proceso de creación artística: el caso de Fiódor M. Dostoevski*, given with Dr José María López Agreda at the 52nd Annual Meeting of the SEN in 2000. It is also an extended version of the lecture given at Réplika Teatro (Madrid) on 26 March 2011, during the *Noche de los Teatros* event.

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