Neuropsychiatric disease in the Nietzsche family: the poiesis of Dionysus

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ABSTRACT

Introduction. Friedrich Nietzsche is one of the greatest thinkers in history. His original style and vision of the transformation of Western culture were not born of a purely rational mind, but rather of one that much of the time was grappling with health issues, mainly neuropsychiatric problems. Numerous members of his family also struggled with mental illness. Were their conditions in some way linked? How did this influence Nietzsche's thought?

Development. Nietzsche's health problems began at an early age. Other members of his family, and particularly his father, had previously presented similar mental illnesses. He suffered with early migraines and myopia verging on blindness, periods of extreme mood swings and personality changes, and finally the neurosyphilis that eventually caused his death. This was the backdrop against which Nietzsche lived his life and in which the full force of his philosophy was admirably developed. This philosophy would shape nearly every aspect of 20th-century thought.

Conclusions. Contrary to the nearly axiomatic pejorative connotations attached to illness, Nietzsche teaches us that disease does not necessarily entail the destructive force with which it is associated; rather, in some individuals it may constitute part of the impetus driving the creation of some of the greatest works of their lives.

KEYWORDS

Friedrich Nietzsche, philosophy, neurosyphilis, migraine, dementia, neuropsychiatry

Whatever does not kill me makes me stronger Friedrich Nietzsche – Twilight of the idols

Introduction

In April 1869, aged just 24 years, Friedrich Nietzsche (1844-1900; Figure 1) was awarded the Chair of Classical Philology at the University of Basel (Switzerland). His students described his classes not as the dry, paed-agogic lectures typical of the discipline, but rather as a jump through time, speaking of Greek philosophers, playwrights, poets, and gods as though they were con-

temporary figures.¹ It was there that he discovered a passion for teaching that, together with his vast knowledge of classical Greece, meant that his lecture theatre was always crowded.²

This activity was only restricted by the growing instability of the professor's health.³ Between his early myopia, bordering on blindness, and the neurological sequelae of syphilis, the interruptions to his "good" spells led him to prematurely end his teaching career (at least in the university setting); in the latter years of his life, his thought was clouded by the increasing fragility of his mind.

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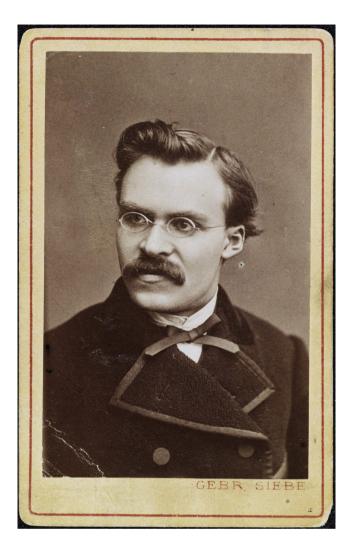


Figure 1. Friedrich Nietzsche in 1869, in his early days as professor of philology in Basel. In this period he enjoyed relatively good health. Image: Nietzsche Porträt 1868/1869. Klassik Stiftung Weimar. GSA 101/11.

Though evidence is available on most of Nietzsche's diseases, more emphasis has been placed on the possible familial nature of some of them, given the high prevalence of mental illness in his family.⁴⁻⁶ Some authors have been eager to scrutinise any hint of madness in him with a view to explaining the provocative nature of most of his writings.⁷ In any case, there is merit in analysing the journey of Nietzsche's mind through his numerous illnesses because, just as any work is the product of time and circumstance, it is also the product of the frailties of the brain that perceives and interprets it. However, Nietzsche's thought is not the product of a sick mind, nor even "despite" a sick mind. Going a step further, as Nietzsche himself described in his autobiography *Ecce Homo*,⁸ his philosophy was forged from his "will to health." And, in perfect harmony with his philosophy, his illness was the purest of Dionysian phenomena, a "yes" to life.

Have we not already learnt enough from Nietzsche? Has he not already given humankind his greatest gift with *Thus spoke Zarathustra*?⁸ Now, from a different perspective, that of the history of his disease, perhaps there may be more days ahead for this philosopher of the future.

Development

The birth of tragedy

At least two insults have been suggested as the origin of Nietzsche's unusual ideas: first, a response to his orthodox home and childhood in a family of Lutherans; another, less benevolent theory highlights the history of mental illness in his family, as if the stigma of mental illness had touched Nietzsche himself. In any case, both assertions are false, and through detailed study of his life and work we may observe how it stands up in and of itself.^{9,10} However, his poor health did feed into his philosophy. He was aware of his frailty and, knowing that he would lose his will if he allowed his ailments to consume him, he delivered himself to the creative maelstrom whenever possible, impregnating it with ambrosia.

Due to the limitations of psychiatry and neurology at the time, it is difficult to identify the diseases that affected Nietzsche and his family. The hereditary nature of the disease is at best imprecise, and most conjecture on the subject has sought to vilify his work from his earliest writings.⁷ Therefore, the connection between Nietzsche's illness and that of his family members is somewhat questionable.

The familial origin of neurological disorders in the Nietzsche family can be traced back to the generation of his paternal grandmother, Erdmuthe Krause. One of Erdmuthe's sisters was diagnosed with "madness"; another committed suicide, and a brother spent part of his life receiving psychiatric care. Similarly, on the other side of the family, several siblings of Nietzsche's mother Franziska Oehler (1826-1897) had mental illness. One of her sisters committed suicide; another presented "madness," and a brother was placed in isolation in a psychiatric hospital, where he eventually died.¹¹

Nietzsche's paternal aunts, Auguste and Rosalie, were diagnosed with the great ailment of the day, neurosis. They depended on numerous drugs that never cured them, with declining health and constant fear of potential hazards to their nerves. Auguste and Erdmuthe died in quick succession in 1855; several years later, Rosalie also died due to a disease that "had destroyed half her lungs."¹¹ This, together with the disease that had caused his father's death, is suggestive of an outbreak of cerebral tuberculosis in the family.^{9,11}

The philosopher's father Karl Ludwig Nietzsche (1813-1849), a pastor by occupation, suffered with epileptic seizures. Sometimes he would fall silent halfway through a sentence and stare for several seconds at a fixed point, before regaining consciousness with no memory of what had happened. As his disease progressed, he had to abandon his parish duties. In 1848, he fell into a deep depression, accompanied by severe headaches and vomiting.11 The young Friedrich described his father's situation with the term "Gemütskrank" ("melancholy"). Dr Opolcer, a prestigious local physician, diagnosed Karl Nietzsche with "softening of the brain." Shortly thereafter, the pastor became completely blind, and finally died the following year, aged 35.7 The prominent neurologist Paul Julius Möbius (1853-1907) performed the autopsy study. The report describes "Gehirnerweichung" ("softening of the brain"),⁴ a common term in 19th-century medicine that in the light of today's neurological knowledge would correspond to neurodegenerative disease.¹² Some researchers have focused on the conditions in which Nietzsche's father died, as his son fell into similar circumstances years later.13

Later, in 1850, aged just two years, Friedrich's younger brother Joseph Nietzsche died suddenly; his mother attributed the death to "teething cramps." Nietzsche describes severe spasms that led to his brother's death over a matter of hours. The question of whether they were simple febrile seizures or whether Joseph, like his father, was epileptic, remains unanswered.^{7,11} The notorious Elisabeth Nietzsche (1846-1935), Friedrich's sister, seems to have enjoyed good health (apart from her antisemitism).¹⁴

Human, all too human

The hypotheses on Friedrich Nietzsche's neurological diseases include more evident and widely accepted diagnoses, such as his early migraines and the neurosyphilis that consumed him in the last years of his life, and potential alternatives asserting greater space and protagonism in his life, such as basal frontal meningioma, present since childhood, or bipolar disorder manifesting during his more productive periods.¹⁵⁻¹⁸ Nietzsche himself attributes his poor health to listening too much to the music of Richard Wagner (1813-1883).¹⁹ Wagner, in turn, blamed "excessive masturbation" for Nietzsche's ills.13 Nietzsche underwent his first ophthalmic examination at the age of six. He already had myopia of six dioptres and an abnormal pupillary light reflex in the right eye. His mother had noticed his near-sightedness when he was younger, and this finding was always reported in the remaining neurological examinations he underwent over his lifetime.²⁰

His myopia was more than evident by the time he reached 14 years of age; his diary from his student years at the strict, prestigious Pforta school in Saxony recounts the frequent headaches he suffered, which sometimes lasted a whole week. Over his 6 years at the school, at least 18 episodes were recorded in which he had to stay at the infirmary due to headaches. From that time, though this was a prelude to his health status for the rest of his life, Nietzsche was a brilliant intellect. He had dominated a principle that he called "Selbstüberwindung" ("self-overcoming"), going to sleep at midnight and awaking at five o'clock to discharge his duties.^{2,11} Initially, he did this with the idea of making the most of his moments of total health, but later he developed the principle as part of his philosophy.

Nietzsche was no stranger to worldly pleasures, and there has been speculation as to how he contracted syphilis. In 1865, aged 21 years, during his stay in Cologne, he found himself in a brothel (the visit was not planned, according to Nietzsche). Surrounded by expectant onlookers, he sat at a piano, seeking refuge from their opprobrium. As well as a brilliant thinker, he was also an excellent musician; however, by all accounts he limited himself to playing a few chords.⁷ The majority of his biographers agree that this event coincides with the origin of the disease.^{2,7,9,11} The writer Walter Brann (1903-1978) ventured

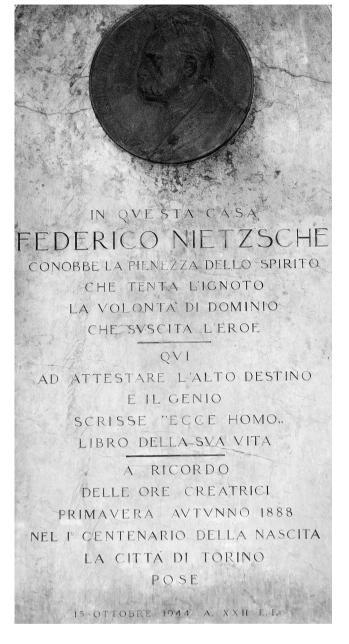


Figure 2. A plaque dedicated to Nietzsche in Turin. The text reads: "In this house, Friedrich Nietzsche knew the fullness of spirit that tempts the unknown; the will to power that drives the hero. / Here, as attests his high destiny and genius, he wrote "Ecce homo", the book of his life. / In memory of the Spring/Autumn hours of 1888."

to say that the poem "Die Wüste wächst" in the chapter "Among daughters of the desert" in part 4 of *Thus spoke Zarathustra* is a reminiscence on that anecdote.^{21,22} According to Nietzsche's records at the clinic in Basel, these visits to the brothel occurred on more than one occasion. In 1867, two physicians in Leipzig were treating him for syphilis infection, for which there was no cure at the time.⁷ Management of the disease was precarious, and prognosis was ominous.²³

During his time as a professor of philology at the University of Basel, which spanned the period 1869-1879, he fluctuated between health and illness. Headaches, vomiting, and vision problems became more frequent.²⁴ Strikingly, he only used his left eye as, by the time he was 30 years old, his right eye had completely lost its function. He was also unable to use his left hand. Headaches were frontal, typically affecting the right hemicranium.⁹ Until then, he had not suffered any severe sequelae, but in 1871, after a bout of diphtheria and worsening of his migraines, he had to take a lengthy leave from the university⁷; he never again felt completely well.

Most of his work, and therefore of his philosophy, appeared after this period, from *Human, all too human* to *The Antichrist*. Furthermore, the debate about his disorder began during this period, although the object of this discussion was more to explain the supposedly chaotic and suggestive nature of his writings.⁷ And, further fore-telling what was to come, Nietzsche wrote in his book *Twilight of the idols* that "Whatever does not kill me makes me stronger,"²⁵ and this was how he lived the rest of his days.

Dionysian dithyrambs

Due to his increasingly prolonged spells of ill health, Nietzsche was forced to renounce his chair at the University of Basel in 1879. He spent his life wandering Western Europe, leaving behind philology to dedicate himself completely to philosophy.^{2,7}

His ill health had become something of a guide, from which his philosophical precepts emanated. In 1883, he wrote in a letter to his friend Franz Overbeck (1837-1905) that "unless I discover the alchemical trick of turning this – muck into gold, I am lost."¹⁹ He did discover the trick. In just ten days, he was able to transmute his pain into the first chapter of his most distinguished work, *Thus spoke Zarathustra*.⁹

Between 1882 and 1887, his mood fluctuated between total exaltation and megalomania and depression, which nearly drove him to suicide in 1887. Lou Andreas-Salomé (1861-1937), one of the few women with whom he formed a sentimental connection, described Nietzsche's propensity for violent mood swings.⁹ These outbursts of grandeur have been cited as evidence that a psychiatric disorder may explain the progressive exaltation of his personality with each new book he wrote.²⁶

Despite his near-complete vision loss, increasingly violent headaches, and night-time vomiting, he was able to make more productive use of his time, and many of the most important concepts of his philosophy were born: the death of God, the eternal return, the will to power, and the superman.²⁴ He had turned his disease into a manifestation of *amor fati*, viewing it in the same way the Greeks had seen tragedy centuries before, as a part of life and even as a creative impulse.

Ecce homo

In late 1888, like a chimera issuing a final burst of flame before being completely extinguished, he completed four books (*Twilight of the idols, Nietzsche* contra *Wagner, The Antichrist*, and *Ecce homo*), reaching the pinnacle of his creativity.^{27,28} *Ecce homo*, whose chapters feature such provocative titles as "Why I am so wise," "Why I am a fatality," and "Why I write such excellent books," reveals the grandiloquent sublimity of his spirit (Figure 2).⁸

One morning in January 1889, after leaving his apartment in Turin, Nietzsche saw a driver flogging a horse. He burst into tears and ran to the animal, throwing his arms around its neck, then suddenly lost consciousness. He remained unconscious for a prolonged time, and was never the same after awaking.²⁸ Back in his room, he began singing, screaming, and striking the piano. His mind ruined, he finally went mad; a series of letters to friends and even to the king of Italy are signed "Dionysus," "the Crucified," "Caesar Nietzsche," or "God." His friend Overbeck came to his aid. When he entered the room, Nietzsche recognised him, embraced him, and burst into tears.7 Days later, he was diagnosed with "general paralysis of the insane" by Dr Ludwig Wille (1834-1912) at the Basel psychiatric hospital, and was admitted to the psychiatric clinic of Jena. He went through stages in which he suffered visual and auditory hallucinations, paranoia, and confusion, alternating with periods in which he was able to read, walk, and play the piano.²⁹ From 1890, he was cared for by his mother and sister (Figure 3). His mental capacity deteriorated, as did his motor function, and he was unable to leave bed or his wheelchair. Disoriented and delirious, he gradually slipped into dementia. Two strokes in 1898 and 1899, respectively, left him

hemiplegic; the finishing blow was a pulmonary infection in 1900. Nietzsche had died at the age of 55 years. Unlike in the case of his father, no autopsy study was conducted.²⁸

The most widely accepted hypothesis for Nietzsche's disease in his final years is syphilis infection involving the central nervous system.³⁰ Dr Otto Binswanger (1852-1929), and later Dr Paul Julius Möbius, both agreed on this diagnosis.^{4,31} In the late 19th century, syphilis was the most frequent cause of dementia in middle-aged men.^{9,23} Subsequent studies citing Nietzsche's clinical records have proposed other explanations: basal frontal meningioma,¹⁵ bipolar disorder,²⁶ frontotemporal dementia,³⁰ cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL),^{32,33} and mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes (MELAS).³⁴ There is evidence for and against each of these diagnoses.

At the time, the average life expectancy after diagnosis of neurosyphilis was two to three years. Nietzsche lived longer than ten. He never presented Argyll Robertson pupil, slurred speech, or hyperreflexia, nor did he develop tabetic gait. However, in the light of his history of headaches, the changes in personality, subacute deterioration, and his early sexual contact, this is the most likely hypothesis.^{5,29,35,36}

Due to the right predominance of Nietzsche's headaches and the ocular deficits on the same side, it has been suggested that he presented an expansive right frontotemporal mass (meningioma), which would also explain his mood swings and personality changes.^{15,37,38} However, presence of meningioma since childhood is rare, and would not explain the abnormal pupillary light reflex in the absence of oculomotor damage (ptosis and strabismus are not observed in any photograph of Nietzsche).¹⁶ The delusions of grandeur giving rise to messianism, coinciding with his periods of extreme productivity, and limited sleep, are consistent with bipolar disorder. This would not explain the onset of dementia or other more constant symptoms, such as headache.³⁹ The hypothesis of frontotemporal dementia takes a similar approach, but adding the same deficits to the other manifestations observed in Nietzsche.30

More extravagant hypotheses, which even account for Nietzsche's family history, include CADASIL, MELAS, and rare hereditary diseases with numerous clinical manifestations.^{33,34} However, the available data on his



Figure 3. Nietzsche in his last years (1889). By this time, he presented advanced dementia. We also observe hemiplegia, with dystonia in the left arm. His sister Elisabeth is shown caring for him. Image: Nietzsche Porträt von Hans Olde. Klassik Stiftung Weimar. GSA 101/37

family history are limited, and exhuming his body to extract DNA is wholly implausible.

Conclusion

To understand the oeuvre of this self-proclaimed "posthumous philosopher," we must study him from the perspective of his life and illness. He himself cites his Dionysian nature, a life force that is not subjected to order, as the creative impetus for his work.⁸ The short periods of lucidity alternating with increasingly disabling disease penetrated deep into the genius that created a subversive moral, artistic, philosophical, and social system that reached every corner of the 20th century.

In the same way that Nietzsche had already glimpsed the "superman" in great historical figures (Leonardo da Vinci, Socrates, Christ), his other great philosophical concept, the will to power, transmuted into a "will to health," has already been achieved by others: epilepsy in Dostoevsky (1821-1881),^{40,41} depression in Goethe (1849-1832),⁴² amyotrophic lateral sclerosis in Hawking (1942-2018),⁴³ bipolar disorder in Poe (1809-1849),⁴⁴ Alzheimer disease in Utermohlen (1933-2007),⁴⁵ and whatever happened to the mind of Alfred Kubin (1877-1959),⁴⁶ to name just a few. Might disease contribute to creative stimulus or to the will to power in the works of certain individuals? Should we view disease as a purely destructive entity?⁴⁷⁻⁵⁰ Thomas Mann (1875-1955) had already seen Nietzsche's genius in his illness.⁵¹ Sigmund Freud (1856-1939) gave similar praise, asserting that "the degree of introspection attained by Nietzsche had never been attained by anyone before him, and doubtless will never be again."⁵²

He and his disease would be an example of the overwhelming reality of the 20th century. Thus, not everything is subject to order and reason (the Apollonian), but rather to the indomitable, the random, and the irrational (the Dionysian). We must seek to accept these circumstances and make of them an instrument to achieve the best possible destiny.⁵³ "Become who you are."⁵⁴

The life of the Nietzsche family played out as the tragic outcome of a life in which one misfortune followed the last without hope of compensatory justice. The same may be said of the existence of Friedrich Nietzsche, which was largely characterised by solitude, illness, and barely any external recognition during his lifetime. However, without his knowing it, the life and work that were met with pure indifference in his own day came to shape a considerable part of the 20th century. To rethink disease in the same manner as Nietzsche and others is perhaps an aphorism for another day.

Conflicts of interest

The author has no conflicts of interest to declare.

References

- 1. Bernoulli CA. Franz Overbeck und Friedrich Nietzsche. Vol. 1. Jena (DE): Diederichs; 1908.
- 2. Prideaux S. I am dynamite!: a life of Friedrich Nietzsche. London: Faber & Faber; 2018.
- 3. Gilman SL. Conversations with Nietzsche: a life in the words of his contemporaries. New York: Oxford University Press on Demand; 1991.
- 4. Möbius PJ. Über das Pathologische bei Nietzsche. Wiesbaden (DE): Bergmann; 1902.
- 5. Schain R. The legend of Nietzsche's syphilis. Westport (CT): Greenwood Press; 2001.
- 6. Schain R. Nietzsche's will to madness. The Agonist. 2019;12:42-52.
- 7. Hollingdale RJ. Nietzsche: The man and his philosophy. Cambridge: Cambridge University Press; 2001.
- 8. Nietzsche F. Ecce homo. Cómo se llega a ser lo que se es. Madrid: Alianza Editorial; 2022.
- 9. Young J. Friedrich Nietzsche: a philosophical biography. New York: Cambridge University Press; 2010.
- Sax L. What was the cause of Nietzsche's dementia? J Med Biogr. 2003;11:47-54.
- 11. Janz CP. Friedrich Nietzsche. Vol. 1, Infancia y juventud. Madrid: Alianza Editorial; 1981.
- 12. Fazio C. Red softening of the brain. J Neuropathol Exp Neurol. 1949;8:43-60.
- 13. Hayman R. Nietzsche, a critical life. London: Weidenfeld and Nicolson; 1980.
- 14. Diethe C. Nietzsche's sister and the will to power: a biography of Elisabeth Förster-Nietzsche. Urbana (IL): University of Illinois Press; 2003.
- Owen CM, Schaller C, Binder DK. The madness of Dionysus: a neurosurgical perspective on Friedrich Nietzsche. Neurosurgery. 2007;61:626-32.
- 16. Danesh-Meyer HV, Young J. Friedrich Nietzsche and the seduction of Occam's razor. J Clin Neurosci. 2010;17:966-9.
- 17. Tényi T. The madness of Dionysus -- six hypotheses on the illness of Nietzsche. Psychiatr Hung. 2012;27:420-5.

- Charles A, Rangel Rios A. Furious Frederich: Nietzsche's neurosyphilis diagnosis and new hypotheses. Arq Neuropsiquiatr. 2015;73:1041-3.
- 19. Middleton C. Selected letters of Friedrich Nietzsche. Chicago: University of Chicago Press; 1969.
- 20. Fuchs J. Friedrich Nietzsches Augenleiden. MMW Munch Med Wochenschr. 1978;120:631.
- 21. Brann H. Nietzsche und die Frauen. Tijdschr Filos. 1982;44:362-3.
- 22. Nietzsche F. Así habló Zaratustra. Un libro para todos y para nadie. Madrid: Alianza Editorial; 2012.
- 23. Hayden D. Pox: genius, madness, and the mysteries of syphilis. New York: Basic Books; 2003.
- 24. Janz CP. Friedrich Nietzsche. Vol. 2, Los diez años de Basilea: 1869/1879. Madrid: Alianza Editorial; 1981.
- 25. Nietzsche F. Crepúsculo de los ídolos o cómo se filosofa con el martillo. Madrid: Alianza Editorial; 1973. [Nietzsche F. Twilight of the idols or how to philosophize with a hammer. Large D, tr. Oxford: Oxford University Press; 1998].
- Perogamvros L, Perrig S, Bogousslavsky J, Giannakopoulos P. Friedrich Nietzsche and his illness: a neurophilosophical approach to introspection. J Hist Neurosci. 2013;22:174-82.
- 27. Janz CP. Friedrich Nietzsche. Vol. 3, Los diez años del filósofo errante. Madrid: Alianza Editorial; 1981.
- 28. Janz CP. Friedrich Nietzsche. Vol. 4, Los años de hundimiento: 1889/1900. Madrid: Alianza Editorial; 1981.
- 29. Podach E. The madness of Nietzsche. Voigt FA, tr. New York: Putnam; 1931.
- Orth M, Trimble MR. Friedrich Nietzsche's mental illness—General paralysis of the insane vs. frontotemporal dementia. Acta Psychiatr Scand. 2006;114:439-45.
- Cybulska EM. The madness of Nietzsche: a misdiagnosis of the millennium? Hosp Med. 2000;61:571-5.
- 32. Hemelsoet D, Hemelsoet K, Devreese D. The neurological illness of Friedrich Nietzsche. Acta Neurol Belg. 2008;108:9-16.
- Butler PM. A stroke of bad luck: CADASIL and Friedrich Nietzsche's "dementia" or madness. In: McNamara P, ed. Dementia, Vol. 1. Santa Barbara (CA): Praeger; 2011.
- 34. Koszka C. Friedrich Nietzsche (1844-1900): a classical case of mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes (MELAS) syndrome? J Med Biogr. 2009;17:161-4.
- Thompson HS, Kardon RH. The Argyll Robertson pupil. J Neuroophthalmol. 2006;26:134-8.
- Berrios G. "Depressive pseudodementia" or "Melancholic dementia": a 19th century view. J Neurol Neurosurg Psychiatry. 1985;48:393-400.
- Filley CM, Kleinschmidt-DeMasters BK. Neurobehavioral presentations of brain neoplasms. West J Med. 1995;163:19-25.
- Moise D, Madhusoodanan S. Psychiatric symptoms associated with brain tumors: a clinical enigma. CNS Spectr. 2006;11:28-31.

- Bosch OG, Höfer FXE. La Gaya Dementia Nietzsche als Patient. Weimar-Jena: Die Grosse Stadt. Das kulturhistorische Archiv. 2010;4:6-17.
- 40. Juva K. [Epilepsy in 'Fyodor Dostoevsky's works]. Duodecim. 1993;109:2082-6.
- 41. Wolf P. Epilepsy and metaphors in literature. Epilepsy Behav. 2016;57:243-6.
- Holm-Hadulla RM, Roussel M, Hofmann FH. Depression and creativity - the case of the German poet, scientist and statesman J. W. v. Goethe. J Affect Disord. 2010;127:43-9.
- Hawking S. Breve historia de mi vida. Barcelona: Planeta; 2014.
- 44. Teive HA, Paola Ld, Munhoz RP. Edgar Allan Poe and neurology. Arq Neuropsiquiatr. 2014;72:466-8.
- 45. Harrison EM. Understanding suffering: Utermohlen's selfportraits and Alzheimer's disease. Nurse educ. 2013;38:20-5.
- 46. Esman AH. Alfred Kubin, 1877-1959. Am J psychiatry. 2009;166:529.

- 47. Bogousslavsky J. Artistic creativity, style and brain disorders. Eur Neurol. 2005;54:103-1.
- 48. Flaherty AW. Brain illness and creativity: mechanisms and treatment risks. Can J Psychiatry. 2011;56:132-43.
- 49. Jamison KR. Mood disorders and patterns of creativity in British writers and artists. Psychiatry. 1989;52:125-34.
- Johnson SL, Murray G, Fredrickson B, Youngstrom EA, Hinshaw S, Bass JM, et al. Creativity and bipolar disorder: touched by fire or burning with questions? Clin Psychol Rev. 2012;32:1-12.
- 51. Mann T. Schopenhauer, Nietzsche, Freud. Madrid: Alianza Editorial; 2002.
- Nunberg H. Minutes of the Vienna Psychoanalytic Society (1908–1910). New York: International Universities Press; 1967.
- 53. Sedgwick PR. Nietzsche, illness and the body's quest for narrative. Health Care Anal. 2013;21:306-22.
- 54. Píndaro. Odas: Olímpicas, Píticas, Nemeas, Ístmicas, Fragmentos. Madrid: Gredos; 1984.