

NON CLASSÉ

Crazy salt

PAR BENOIT MAJERUS · PUBLIÉ 15/05/2024 · MIS À JOUR 16/05/2024



For many centuries, salt has occupied an ambiguous position in human well-being. It is considered both therapeutic and harmful. Jakob Vogel has added many facets to the history of salt in his study. These include its role in the history of medicine.¹ Many spas operate with waters that have an unusual salt content, which is believed to bring relief from various ailments such as rheumatism, osteoarthritis, and inflammation. Salt was also used early on to remedy mental imbalances. In the late 19th century,

water from a well in Mineral Wells, Texas, was reputed to cure mania. Named the “Crazy Well”, it was located in a large spa with dozens of wells and a bottling plant. Thousands of annual visitors hoped to be cured by this “crazy water.”² Even today, many salts continue to be prescribed, prescriptions that remain locked in a double questioning: the one mentioned above and the one that taints drug therapy in general in contemporary psychiatry.

Lithium salt is still widely used in psychiatry today. The German Wikipedia page advocates a particularly broad nosology, stating that “[i]n affective disorders such as bipolar disorder or depression, lithium therapy is the only drug treatment for which a suicide-preventive effect has been clearly proven”³, a statement that is also found with some variations on the French and English pages dedicated to the same substance. However, as a recent controversy in the prestigious Journal of the American Medical Association has shown, the scientific consensus is less stable than the virtual encyclopedia suggests.⁴ This ambiguity has characterized lithium therapy from its very origins.



Among the numerous refreshing drinks enriched with medicinal ingredients that were introduced to the market from the late 19th to the early 20th century, Coca-Cola is the most famous. Until the 1950s, 7 Up, a lemon-lime soft drink, contained lithium citrate. @The Saturday Evening Post

In the last third of the 19th century, Lithium salt began to appear in European psychiatric journals. In 1894, the British Journal of Psychiatry reported on the experiments of the American psychiatrist Silas Weir Mitchell with lithium as a sedative for patients who had difficulty falling asleep. Administered three times during the day – at noon, 6pm and 9pm – lithium was presented as the most suitable therapy for “severe insomnia.”⁵ However, even at this time, academic journals were already reporting discussions about the dangers of lithium. In 1891, the bulletin of the Belgian Society of Mental Medicine reported the results of experiments on rabbits to determine the toxicity levels of different

bromides. Lithium bromide was considered less harmful than other bromides, but still should be used with caution.⁶

Although references to lithium were beginning to appear in psychiatric literature, salt was not yet considered “psychiatric” enough to be included in textbooks in the late 19th century. Thus in the numerous editions of the *Manuel pratique de médecine mentale et précis de psychiatrie* published by the French psychiatrist Emmanuel Régis between 1885 and 1923, lithium was not mentioned. And in the most important French psychiatric journal, the *Annales Médico-Psychologiques*, there was no mention of lithium. The peripheral place of lithium still in the early 1950s is clear from the fact that at the First World Congress of Psychiatry in Paris and the Second World Congress of Psychiatry in Zurich – the latter being devoted exclusively to schizophrenia – the substance was hardly mentioned in the nonetheless very voluminous proceedings of these two congresses.⁷

It was in the late 1950s and early 1960s that lithium was configured as a central drug in the psychiatric pharmaceutical arsenal. The 1950s were a unique moment as the introduction of the first neuroleptics was seen as a revolution by some.⁸ Pharmaceutical companies, in collaboration with psychiatrists, began to re-enter the psychiatric market by conducting experiments with existing substances. It is in this context that Lithium is rediscovered as a therapeutic tool. This “open-mindedness” that explains, for example, why an article published in 1949 by an unknown Australian psychiatrist, John F. Cade which reported positive results for chronic manic patients, was given a second life.⁹

Published in a country that does not occupy a central place in the psychiatric academic world, in a journal that does not have a large circulation outside Australia, at a time when pharmacology was still considered a lesser field in psychiatry, the article was at first little cited and only within its country of origin. In 1956, it left Australia's borders for the first time by being cited in the prestigious *Journal of Mental Science*. But citations remained very low until the early 1970s when research on lithium took off (see table 1) and the field sought an ‘ancient’ origin to legitimize itself. Cade's role as discoverer was then invented.¹⁰ In 1999, the 50th anniversary of the article was widely commemorated, overlooking the lack of real influence in practice of the article that would have launched this “revolutionary drug.”¹¹

In the mid-1950s, another psychiatrist who was also came from a peripheral country, the Dane Mogens Schou, published encouraging results for manic patients treated with lithium. But like Cade's article, this paper did not circulate widely. The neuroleptic revolution had not yet broken through and in many influential countries such as France and the United States, psychoanalysis was at its peak, not biological psychiatry. It was not until the late 1960s that lithium began to be increasingly defined as a psychiatric drug. Indeed, it was only when countries such as Germany and France began to take an interest that the drug became established. A quantitative analysis of the *British Journal of Psychiatry* reveals that Lithium first appeared in an article in 1892 and then had an intermittent presence in the journal's pages for 60 years before becoming a ubiquitous substance in the 1970s. A similar chronology can also be observed in other countries.

Table 1 – Mentions of the term 'lithium' in the *British Journal of Psychiatry*

This overview from the perspective of an academic journal is also corroborated by an on-the-ground perspective, albeit with a certain time lag. At the Institute of Psychiatry of the Brugmann Hospital, which is the university psychiatry department in Brussels, Lithium was initially used cautiously in 1961 before becoming a more commonly prescribed drug from the 1970s onwards.

Table 2 – Number of patients prescribed lithium at the Institute of Psychiatry of the Brugmann Hospital

In the 1960s, this salt was hailed as a miracle product due to its "natural" composition, which was often contrasted positively with the "synthesized" neuroleptics or antidepressants. However, this also explains why various pharmaceutical agencies were slow to approve the substance. For instance, in the United States, lithium was already being widely used in several large psychiatric hospitals, especially in New York, before the Food and Drug Administration (FDA) approved it as a drug in 1970 and large pharmaceutical companies such as Smith Kline or Pfizer entered the market.¹²

The inability to patent the metal salt and, therefore, profit significantly from the drug may be one reason why the pharmaceutical industry initially did not invest in it. From the 1970s onwards, the field of lithium treatment began to organize around associations and congresses such as the British Lithium Congress, which was first held in 1977. These organizations received support from pharmaceutical and mining companies such as the Lithium Corporation of America. Additionally, lithium likely benefited from the fact that depression became an epidemic in the late 20th century.¹³

As Lithium gains recognition in both theoretical discussions and practical applications, it also raises some questions. Regular articles in medical press reported on epidemics of lithium toxicity. For example, in 1949, the same year as Cade's article, the widely read *Journal of the American Medical Association* published an article that reports several cases where persons who had consumed low sodium diets had medical problems when lithium was used as a salt substitute for flavoring the food.¹⁴ And Cade did not mention that Patient O died of lithium intoxication.¹⁵ In the Belgian journal *Psychiatrie en Verpleging*, intended for the nursing staff of the Congregation of the Brothers of Charity, which runs several psychiatric hospitals in Belgium, Lithium was presented as particularly effective, but the author also emphasizes its dangerous and time-consuming use.¹⁶ From the 1970s onwards, psychiatric textbooks regularly discussed the toxicity of Lithium. Its rather difficult administration probably explains why non-psychiatrists prescribed it less frequently. Although toxicity is still addressed as a specific concern in most publications today, it is no longer seen as an obstacle, but rather as a controllable variable. Lithium has managed to remain competitive with new generations of neuroleptics such as asymptomatic antipsychotics.

This salt was discovered in the first half of the 19th century and has undergone a long process to become one of the most recognized therapies in the psychiatric pharmacopoeia today, even though it has a certain disadvantage due to its "narrow therapeutic margin." Non-academic knowledge has attributed therapeutic effects on the mind to it since the second half of the 19th century, but lithium has been slow to enter the modern pharmacopoeia. Despite being discovered as a psychiatric drug at the end of the 1940s, it took another twenty years to be recognized as an effective thymoregulator.

Benoît Majerus

[1] For example, spas come to mind: Jakob Vogel, "Locality and Circulation in the Habsburg Empire: Disputing the Carlsbad Medical Salt, 1763-1784," *The British Journal for the History of Science* 43, no. 4 (2010): 589–606.

[2] G. Fowler, *Crazy Water: The Story of Mineral Wells and Other Texas Health Resort* (Fort Worth: Texas Christian University, 1991).

[3] "Bei affektiven Störungen wie der bipolaren Erkrankung oder Depressionen ist die Lithiumtherapie die einzige medikamentöse Behandlung, für die eine suizidverhütende Wirkung eindeutig nachgewiesen ist." "Lithiumtherapie," in *Wikipedia*, July 12, 2022, <https://de.wikipedia.org/w/index.php?title=Lithiumtherapie&oldid=224450340>.

- [4] Ross J. Baldessarini and Leonardo Tondo, "Testing for Antisuicidal Effects of Lithium Treatment," *JAMA Psychiatry* 79, no. 1 (January 1, 2022): 9–10, <https://doi.org/10.1001/jamapsychiatry.2021.2992>.
- [5] "Psychological Retrospect," *British Journal of Psychiatry* 40, no. 168–171 (March 15, 1894): 136.
- [6] "Revue Des Journaux", *Bulletin de La Société de Médecine Mentale de Belgique*, no. 60–63 (December 7, 1891): 501.
- [7] Une seule mention a été retrouvée: D. Nieto, "Cerebral Lesions in Schizophrenia," in *2nd International Congress for Psychiatry – Congress Report*, vol. 2 (Zurich: 1959): 131–34.
- [8] Benoît Majerus, "A Chemical Revolution as Seen from below. The 'Discovery' of Neuroleptics in the Paris of the 1950s", *Social History of Medicine* 32, no. 2 (2019): 395–413.
- [9] John FJ Cade, "Lithium Salts in the Treatment of Psychotic Excitement", *Medical Journal of Australia*, 1949.
- [10] Eric Hobsbawm and Terence Ranger, eds., *The Invention of Tradition* (Cambridge: CUP, 1983).
- [11] Ronald R. Fieve, "Lithium Therapy at the Millennium: A Revolutionary Drug Used for 50 Years Faces Competing Options and Possible Demise," *Bipolar Disorders* 1, no. 2 (1999): 67–70.
- [12] Edward Shorter, "The History of Lithium Therapy", *Bipolar Disorders* 11, no. s2 (2009): 6.
- [13] Jonathan Sadowsky, *The Empire of Depression : A New History* (Cambridge: Polity, 2020).
- [14] A. C. Corcoran, R. D. Taylor, and Irvine H. Page, "Lithium Poisoning from the Use of Salt Substitutes", *Journal of the American Medical Association* 139, no. 11 (March 12, 1949): 685–88, <https://doi.org/10.1001/jama.1949.02900280001001>; Peter Roger Breggin, *Toxic Psychiatry: Why Therapy, Empathy, and Love Must Replace the Drugs, Electroshock, and Biochemical Theories of the "New Psychiatry"* (New York: St. Martin's Press, 1991).
- [15] Frederick Neil Johnson, *The History of Lithium Therapy* (Springer, 1984), 39.
- [16] Broeder Deodatus, "Over Speciale Psychiatrische Diensten", *Psychiatrie En Verpleging* 1 (December 1974): 29–32.



Citer ce billet

Benoit Majerus (2024, 15 mai). Crazy salt. *Du franco-allemand à l'âge global*. Consulté le 6 juin 2024, à l'adresse <https://doi.org/10.58079/11ohg>



Rechercher dans OpenEdition Search

Vous allez être redirigé vers OpenEdition Search

Dans tout OpenEdition

Dans Du franco-allemand à l'âge global