

# The Creation of Psychopharmacology

by David Healy

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A major proportion of medicines now used in the developed world have been created for the mind. Psychopharmacology is here to stay, making books about the subject useful. While this book is informative, it informs mostly the gossip behind the science. There is, however, a thesis: David Healy does not think psychiatric drugs were discovered but, rather, that the need for them was *created* by the pharmaceutical industry.

Healy is often sarcastic, and it is not always clear when he is serious. "There is ...a growing body of evidence that indicates a success rate and quota of therapeutic rationality per physician 50 years ago that are higher than those that characterize many current practices." This seems an odd opinion, since psychiatric drugs have alleviated pain and distress, changed the nature of psychiatric institutions, shortened psychiatric hospital admissions, kept patients in their own communities and probably increased their productivity. They have certainly reduced the distress of families of the mentally ill. To intimate otherwise is to mislead.

Healy continues: "The key question is whether we have set myth aside and become more scientific...". He does not think ours is a more scientific age than the one that preceded it, at least not when it comes to psychopharmacology.

He claims "rationality" for the hypothesis that the dopamine D2 receptor is the basis of antipsychotic action. However, he asserts that prior use of methylene blue for nervous disorders, on the grounds that it stains nervous tissues, was equally rational.

The book starts with the various approaches to madness. "Madness (from infections)...is not socially created," he states, but one could argue that the madness caused by syphilis is, in fact, socially created. These are complex topics, and Healy is too superficial in his writing to do justice to such discussions. Although the antipsychotic dopamine D2 receptor was discovered in Toronto in 1974-1975 using radiohaloperidol made in Belgium, the book gets this wrong and then blithely moves on to gossipy anecdotes.

Healy's approach is reminiscent of a TV documentary that compresses a millennium into 40 minutes. He does not pause long enough to capture the reader's attention, although there are colorful exceptions. For example, "In 1874, Kahlbaum described ...catatonia...which

...has to be seen to be believed.... in more severe forms, they (the patients) often lie or stand motionless in odd, impossible postures for hours or days on end...".

The discovery of chlorpromazine is well described, and it is a good story. A Rhône Poulenc compound, promethazine, was used as a sedative in sleep therapy

of schizophrenia in 1950. A nurse needing an operation on her nose could not be given an anesthetic mask, so her anesthetist used a cocktail of promethazine and pethidine. During surgery, he found the nurse to be relaxed and "almost totally indifferent". He told this to Laborit, a military surgeon, who used this same cocktail for his surgical procedures, and was struck by the indifference exhibited by his patients.

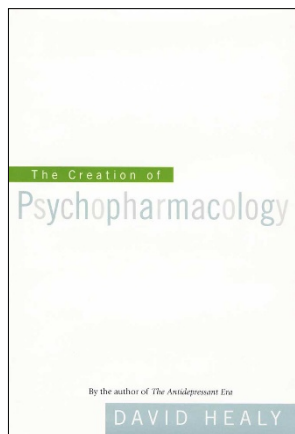
Additional compounds were made, of which RP4.560 or chlorpromazine was one. Pierre Deniker, an assistant to the head of the Department of Psychiatry, Jean Delay, turned out to be Laborit's brother-in-law. When Deniker and Delay heard about chlorpromazine, they tried it, with ice, as artificial hibernation for treating mania. A nurse administering the therapy omitted the ice and the patient improved just the same. The rest is history.

These are interesting anecdotes. They illustrate Healy's style: breezy, gossipy, lighting first on one little story, buzzing off to another, returning perhaps, and buzzing off again. And Healy knows a lot of gossip. Another example: at McGill University in 1971, Herbert Marcuse and F. Qunes debated Heinz Lehmann (psychoanalysis versus chlorpromazine), and Qunes threw a cream pie at Lehmann's face while Lehmann kept right on speaking.

Healy appropriately downplays the paper by Carlsson and Lindqvist (1963) often incorrectly cited as the origin of the dopamine hypothesis of schizophrenia. In fact, these authors did not show that antipsychotics selectively blocked dopamine receptors; their paper speculated that chlorpromazine and haloperidol blocked monoamine receptors for serotonin, norepinephrine and dopamine, and no mention was made of selectively blocked dopamine receptors.

Healy addresses the issue of dopamine D2 receptor elevation in schizophrenia by stating that the initial patients were medicated and that "...subsequent studies that controlled for medication... failed to support their claims." This is not correct, because the first to report these findings, Wong *et al.*, used drug-naive patients. The fact is that radio-methylspiperone (labeling D2 monomers) shows elevation of D2 in schizophrenia but radio-raclopride (labeling D2 monomers and dimers) does not.

I suspect there may be other errors in the book. Nevertheless, this book is recommended for those who enjoy the human stories and the gossip and who are prepared to check the facts elsewhere.



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