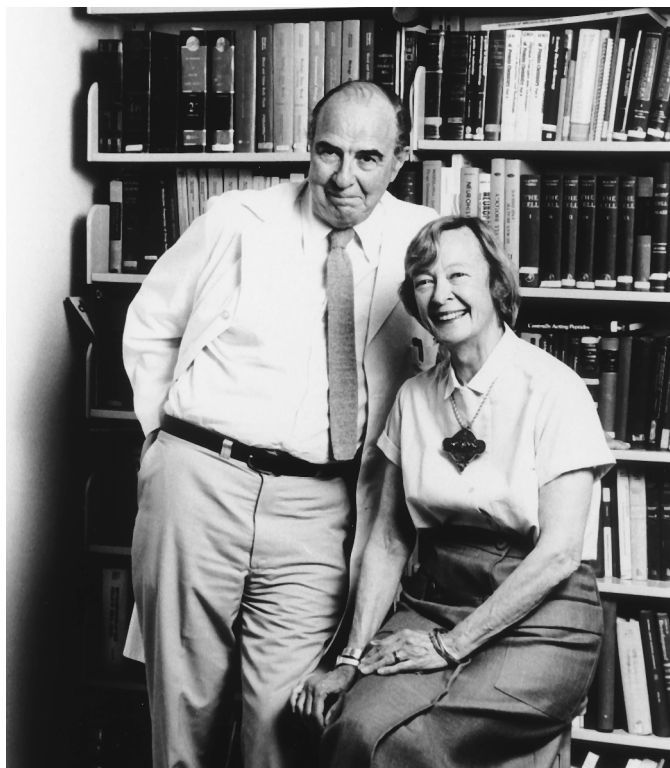


Images in Psychiatry



Marie Nyswander, 1919–1986

Marie Nyswander, a psychiatrist and psychoanalyst who trained at Cornell University, developed methadone maintenance for the management of heroin addiction in the 1960s with her husband, Vincent P. Dole, M.D. (pictured above), both of The Rockefeller University. In 1955, she organized the Narcotic Addiction Research Project, the first program to accept patients who were still addicts. In 1956, she wrote a book, *The Drug Addict as a Patient* (1), in which she advanced the view that addiction should be approached as a medical problem. At that time, little was known about the way heroin affected the body's chemistry. Vincent Dole, a Rockefeller University professor and senior physician, was appalled at the growing problem of heroin abuse and began studying the biology of addictive diseases on the basis of his background as a prominent investigator of metabolic disorders. In late 1963, two persons were recruited by Professor Dole to join him in his initial efforts to develop a pharmacotherapy for opiate addiction: one was Marie Nyswander, a psychiatrist who had worked with opiate addicts, both in the streets of New York, in Bellevue, in Harlem, and in Lexington, Ky.; the other was a young clinical investigator in training as a first-year resident in internal medicine, Mary Jeanne Kreek, who was recruited to join the team as the primary clinical investigator of the research work. This team coalesced in the beginning of 1964 to begin the clinical research work at The Rockefeller University that led to methadone maintenance treatment. This initial work led to what was, in fact, the first published piece of scientific research that provided the rationale and scientific fabric for methadone treatment, the studies of narcotic tolerance and cross-tolerance, provided by once-daily treatment with orally administered methadone, as well as development of the treatment modality per se (2).

Working with addict volunteers recruited by Dr. Nyswander, Dr. Dole's laboratory tested the mode of action of a number of pharmacological agents. Within a year, they discovered that methadone hydrochloride, a synthetic narcotic developed in Germany during the

war as an analgesic to replace morphine, relieves narcotic hunger; but because it is metabolized slowly in body tissues, it does not produce the alternating euphoria and severe withdrawal typical of heroin addiction. Addicts stabilized on a regimen of methadone are able to pursue normal activities. Retention rates for those who remain in treatment for more than 2 years range from 55% to 80%.

Drs. Nyswander and Dole received the first annual award of the National Drug Abuse Conference in 1978 and the first annual Nyswander-Dole Award, created in 1982 in their honor by the New York Urban Coalition, the New York State Division of Substance Abuse Services, and the Committee of Methadone Program Administrators. Dr. Dole also received the 1988 Albert Lasker Clinical Research Award for their pioneering studies on the physical basis of opiate addiction and for developing the methadone maintenance program. Their work has been a tremendous contribution not only to the treatment of heroin abuse, but also to the control of the AIDS epidemic. HIV infection rates are severalfold lower in methadone-maintained patients than in street intravenous drug users. Research into the biology of these addictive diseases continues at The Rockefeller University under Mary Jeanne Kreek, M.D.

REFERENCES

1. Nyswander M: *The Drug Addict as a Patient*. New York, Grune & Stratton, 1956
2. Dole VP, Nyswander ME, Kreek MJ: Narcotic blockade: a medical technique for stopping heroin use by addicts. *Trans Assoc Am Physicians* 1966; 79:122–136

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