

Franz Max Albert Kramer (1878–1967)

Scientist Franz Max Albert Kramer worked as a psychiatrist in Poland and the Netherlands in the early twentieth century and is known for his contributions to research on psychological conditions that experts call hyperkinetic syndromes. Children with hyperkinetic syndromes display inattention, overactivity, and impulsivity. Along with scientist Hans Pollnow, Kramer defined a specific kind of hyperkinetic syndrome based on an initial case study of seventeen children, initially known as Kramer-Pollnow Syndrome. In 1980, the third edition of the Diagnostic and Statistical Manual of Mental Disorders, or DSM-III, renamed Kramer-Pollnow syndrome to be attention deficit disorder, or ADD. A later revision, in 1987, renamed it attention deficit hyperactivity disorder, or ADHD. Kramer advanced child psychiatry research by laying the groundwork for further research on and understanding of what experts call, as of 2021, ADHD.

Kramer was born on 24 April 1878 to Anna and Julius Kramer in Wroclaw, known at the time as Breslau, Poland. His father was a merchant. Between 1884 and 1896, he attended St. Maria Magdalena grammar school in Wroclaw, Poland. After leaving the grammar school, Kramer began to study medicine at Royal Prussian University in Wroclaw, Poland. He graduated and received a license to practice medicine in 1901.

The following year, he defended his doctoral thesis on spinal cord deformities. His doctoral adviser was Carl Wernicke, a German scientist known for his work on certain disorders of the brain. Following his formal education, Kramer pursued laboratory and teaching work in Berlin, Germany. He worked as an assistant for Wernicke at Königliche Universitäts-Poliklinik für Nervenranke (Royal University Polyclinic for the Mentally Ill), in Berlin, Germany. Kramer later worked under psychiatrist Karl Bonhoeffer at the Psychiatric and Neurological Hospital at the Royal Charité of Friedrich-Wilhelms-University in Berlin, Germany. Bonhoeffer promoted Kramer several times. In 1907, Bonhoeffer awarded Kramer a license to teach psychiatry and neurology, and in 1921 appointed him Associated Professor of Psychiatry and Neurology. Also in 1921, Bonhoeffer opened the children's ward at the Royal Charité, and appointed Kramer as its head. Outside of his work at the hospital, Kramer acted as an expert source in criminal and civil trials, and helped to establish the Deutscher Verein zur Fürsorge für jugendliche Psychopathen (German Association for the Care of Juvenile Psychopaths) in 1918. He remained on its managing committee until 1933.

Beginning in 1921, Kramer collaborated with another scientist, Hans Pollnow, under the direction of Bonhoeffer. Together, they identified the hyperkinetic syndrome then known as the Kramer-Pollnow syndrome. In the early 1900s, medical experts considered unfocused, overactive, and impulsive children to have some form of hyperkinetic syndrome. Kramer and Pollnow built on the work of researcher Rudolf Thiele, who studied the effect of encephalitis in children. They proposed that encephalitis, a type of inflammation in the brain, could cause the hyperkinetic syndrome. For ten years, between 1921 and 1931, Kramer and Pollnow followed forty-five cases of children and adolescents with hyperkinetic syndrome. They thoroughly described the study in the 1932 article "On a Hyperkinetic Disease of Infancy." In the cases, they found no correlation between encephalitis and hyperkinetic disorder, but found evidence for an undescribed form of hyperkinetic syndrome.

Kramer and Pollnow characterized the new form of hyperkinetic syndrome, Kramer-Pollnow syndrome, as a motor restlessness manifesting in children, occurring when they were awake and not sleeping, unlike other hyperkinetic syndromes, which experts otherwise classify as sleep disorders. In the cases they observed, Kramer and Pollnow noted no sleep disturbance or nocturnal agitation associated with Kramer-Pollnow syndrome. According to them, children with Kramer-Pollnow syndrome manifested remarkable motor activity in an urgent and unfocused manner when they were

awake. Furthermore, children with Kramer-Pollnow syndrome were displeased when deterred from manifesting motor impulses, such as fidgeting or clumsiness.

In 1980, the American Psychiatric Association first used the label attention deficit disorder, or ADD, with or without hyperactivity, in the DSM-III, to describe this condition. In a 1987 revision, experts collapsed those diagnoses into Attention Deficit/Hyperactivity Disorder, or ADHD. The American Psychiatric Association, or APA, publishes the DSM to provide a standardized classification of mental disorders. Similar to children with Kramer-Pollnow syndrome, children with ADHD experience incessant motor activity when awake and not sleeping. Kramer-Pollnow syndrome as a form of hyperkinetic syndrome in the twentieth century influenced the way researchers approached ADHD as a hyperactive disorder later.

During the 1930s, soon after Kramer and Pollnow completed "On a Hyperkinetic Disease of Infancy," the Nazis, followers of an anti-semitic social and political movement, began to acquire political support in Germany, and Kramer's medical career came to an abrupt halt. Throughout the 1930s, the German government instituted increasing restrictions on Jewish people's rights, including their ability to practice medicine. Kramer repeatedly sought to emigrate from Germany, but, according to biographer Kathleen Housley, psychiatrists and neurologists had more difficulty finding positions elsewhere, compared to other scientists in other disciplines, such as physics or chemistry. Eventually, with the support of letters from colleagues including Bonhoeffer certifying him as a medical expert, Kramer immigrated to the Netherlands. Through the rest of his life, Kramer continued to work on child psychology in the Netherlands.

Kramer contributed to child psychiatry through his co-discovery of Kramer-Pollnow Syndrome. ADHD stemmed from Kramer-Pollnow syndrome, a form of hyperkinetic syndrome. Kramer-Pollnow syndrome has influenced the way ADHD is viewed in the twenty-first century as a hyperactive disorder in children. After fleeing to the Netherlands, Kramer continued to contribute to the understanding of psychological development in children. Kramer played an important role in advancing child psychiatry in Europe during the early twentieth century.

Kramer moved to Bilthoven, the Netherlands. He died in Bilthoven, the Netherlands, on 29 June 1967 at the age of eighty-nine.

Sources

1. Bonhoeffer, Karl. *Die akuten Geisteskrankheiten der Gewohnheitstrinker: Eine klinische Studie [The Acute Mental Illnesses of Habitual Drinkers: A Clinical Study]*. Breslau: Verlag von Gustav Fischer in Jena, 1901. <https://books.google.com/books?id=Sx0TAQAAMAAJ> (Accessed December 2, 2020).
2. Hoare, Peter, and Andrew Stanfield. "Psychiatric Disorders In Childhood and Adolescence." In *Companion to Psychiatric Studies (Eight Edition)*, eds. Eve C. Johnstone, David Cunningham Owens, Stephen Lawrie, Andrew McIntosh, and Michael Sharpe, 595-633. London, United Kingdom: Churchill Livingstone, 2010.
3. Neumärker, Klaus-Jürgen. "The Kramer-Pollnow Syndrome: A Contribution On the Life and Work of Franz Kramer and Hans Pollnow." *History of Psychiatry* 16 (2005): 435-51. <https://journals.sagepub.com/doi/10.1177/0957154X05054708> (Accessed November 12, 2020).
4. Mahone, E. Mark, and Martha B. Denckla. "Attention-Deficit/Hyperactivity Disorder: A Historical Neuropsychological Perspective." *Journal of the International Neuropsychological Society* 23 (2017): 916-29. www.ncbi.nlm.nih.gov/pmc/articles/PMC5724393/ (Accessed November 12, 2020).
5. Seabrook, John. "The Minds of Psychopaths." *The New Yorker*, 19 June 2017. www.newyorker.com/magazine/2008/11/10/suffering-souls
6. Wernicke, Carl. *Der aphasische Symptomencomplex [The Aphasic Symptom Complex]*. Breslau: Max Cohn & Weigert, 1874. <https://books.google.com/books?id=jf5oIMekprkC> (Accessed December 2, 2020).