

## ***HARSH TREATMENT***

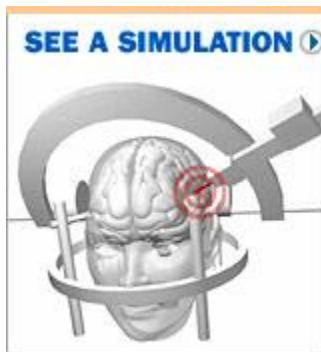
### **In China, Brain Surgery Is Pushed on the Mentally Ill**

Irreversible Procedures  
Rarely Done Elsewhere;  
A Mother's Regrets

By NICHOLAS ZAMISKA  
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NANJING, China -- Mi Zhantao, a poor 25-year-old living with his parents outside this provincial capital in eastern China, was battling depression and had trouble socializing. Doctors said he had schizophrenia. They recommended brain surgery.

Mr. Mi's family spent about \$4,800 -- the equivalent of four years' income, and more than their life savings -- on the operation, at No. 454 Hospital of the People's Liberation Army in Nanjing. The highly controversial procedure involved drilling tiny holes in the young man's skull, inserting a 7½-inch-long needle and burning small areas of brain tissue thought to be causing his problems.



The surgeon, who operated on Mr. Mi the day he met him, says he has performed nearly 1,000 such procedures, mostly for schizophrenia, but also for illnesses ranging from depression to epilepsy, since the hospital started offering the operation in 2004.

Mr. Mi's parents say the surgery did nothing but leave their son with a partially limp right arm and slurred speech. He continues to be depressed and withdrawn, his mother says. Wang Yifang, the surgeon, says he checked the medical records and, as far as he knows, the patient left the hospital uninjured.

Mr. Mi's mother, Kong Lingxia, 50, says she'll regret the decision for the rest of her life. "I feel so angry," she says. "But I'm really angry at myself. How could I let this happen?"

The irreversible brain surgeries performed at No. 454 Hospital, which are all but blacklisted for mental illness in the developed world, are being done across China. They are a symptom of the problems plaguing the nation's health-care system, which has left hospitals with scant public funding and hungry for profit.

Some foreign doctors were shocked when told of the number of surgeries Dr. Wang has performed and the problems he was trying to treat.

"It's completely off the charts. If he had done 10, it would be highly controversial," says Michael Schulder, president of the American Society for Stereotactic and Functional Neurosurgery. Such surgery involves locating and operating on specific targets in the brain.

Surgeons operate on the brain for problems ranging from tumors to movement disorders. But in mainstream medicine, the surgery performed on Mr. Mi -- called ablative surgery -- is a last resort for mental illness. It isn't done anywhere in the U.S. for schizophrenia. While the total number of psychosurgical procedures performed in the world is unknown, Emad N. Eskandar, of Massachusetts General Hospital, estimates fewer than 25 patients are operated on annually in the U.S. and Britain.

Doctors at Massachusetts General perform between six to 12 ablative procedures a year for mental illness, but only after rigorous screening, says Dr. Eskandar, the director of stereotactic and functional neurosurgery. The operations are intended to ease symptoms of intractable depression or obsessive-compulsive disorder. Patients must be competent to give informed consent, and the procedure, which normally takes at least a year to be approved, must be cleared by a committee including psychiatrists, neurologists, ethicists, surgeons and a layperson.



Dr. Wang Yifang, head of neurosurgery at 454 Hospital of the People's Liberation Army in Nanjing, has performed nearly 1,000 brain surgeries since 2004.

China's system is vulnerable to abuse because doctors make as much as 90% of their income through bonuses tied to business they generate, according to Henk Bekedam, who until recently was the World Health Organization's chief representative in China.

"In China, nowadays, in some military hospitals, their brain center is a profit center," says Sun Bomin, director of functional neurosurgery at Shanghai Jiao Tong University's Ruijin Hospital. Most of China's hospitals are run by the health ministry, but some are overseen by the 80-year-old People's Liberation Army, a legacy of the days when the military ran its own services. Those hospitals now are open to the public.

Dr. Sun says he performs around 20 or 30 brain surgeries for schizophrenia each year, but only with strict oversight from multiple psychiatrists. He says improper use of the procedure, such as not being selective enough about the patients, is the problem, not the procedure itself.

Under Mao Zedong, the state provided basic but near-universal care. That safety net was gradually dismantled as Beijing began privatizing health care in the 1980s, leaving many individuals -- and thousands of ailing state-run hospitals -- to fend for themselves.

China has been trying to repair the system, but its health bureaucracy, responsible for regulating drugs and medical procedures, is struggling with the wake of a corruption scandal. The former head of the State Food and Drug Administration was executed this summer for accepting bribes from drug companies to speed approvals.

The Ministry of Health in Beijing didn't respond to written questions about the surgeries.

A spokeswoman for the Ministry of National Defense office said the health department of the People's Liberation Army agreed to do a "thorough investigation" in response to written questions from The Wall Street Journal about the surgeries, but declined to comment while the investigation was under way.

Dr. Wang says government investigators came to his hospital in mid-October to inquire about the surgeries he was performing. On Oct. 26, Ms. Kong said in a telephone interview that local officials visited her and asked her why she had allowed a foreign reporter into her home.

Brain surgery for mental disorders has been a controversial practice since at least the 1930s, when doctors began performing lobotomies, removing or altering parts of the brain. That procedure was eventually blacklisted. The difference with the surgery being done today, advocates say, is that the areas of the brain being targeted are more precise.

The Chinese government banned the brain surgery for use on drug addicts in 2004, after news reports about the practice. But the procedure continues to be used for mental illness.

Dr. Wang, head of neurosurgery at No. 454 Hospital, defends the procedure. "There are so many mental-disease patients," he says. "In many of the mental-disease hospitals, 30% to 50% of the patients cannot be treated by medicine. And these patients have caused a great burden to their families and society."

#### CEREBRAL MATTER

- **The Issue:** Some hospitals in China are promoting brain surgery as a way to treat the mentally ill.
- **The Background:** China has been privatizing health care since the 1980s, leaving many individuals -- and hospitals -- to fend for themselves.
- **Bottom Line:** Some see the practice as a symptom of the problems plaguing China's health-care system, which has left hospitals with scant public funding and hungry for profit.

Dr. Wang, 44, graduated from Nanjing Medical University in 1987 and later joined the air force as a surgeon. He says his salary at the PLA hospital is about \$670 a month; he says he doesn't get bonuses tied to generating business and isn't paid more to perform more surgeries. However, Dr. Wang says he travels to nearby provinces frequently to perform the procedure at other hospitals, to earn more.

No. 454 Hospital has around 600 employees and revenue of some \$12 million a year, about \$1 million of which comes from the surgeries, Dr. Wang says. The hospital promotes the surgery aggressively, printing pamphlets featuring success stories, and runs a hot line people can call for information.

Shi Haiming, the No. 454 hospital's deputy director, declined to comment.

Dr. Wang says all patients are screened before the surgery and the procedures have helped many patients. Earlier this year, the hospital handed out more than 500 questionnaires to families of patients who have undergone brain surgery, he says. It asked about activities of the patients, such as talking with friends, taking the bus, shopping and, generally, whether the patients' lives had improved since surgery. The hospital received 317 completed surveys, and based on the answers, Dr. Wang and his staff rated each patient's condition on a five-tier scale. Dr. Wang says they determined that 93% of respondents had shown improvement.

Deng Jian's family says she hasn't improved. And they sued.

Ms. Deng, who was diagnosed with schizophrenia in her 20s, had the surgery in 2004. Ms. Deng, 42, suffered a brain hemorrhage during the procedure. Her right leg is now in a brace, and her right arm is lame. She salivates uncontrollably and needs to spit in a bucket.

Her father, Deng Jun, recalls the days when Ms. Deng could ride her bike on her own to Sun Yat-Sen's mausoleum near their home in Nanjing. Her mother, Ran Yuhua, says that before the surgery, "she had problems in the mind, but she could take care of herself. But after the surgery, she can't do anything. Can't even wring a towel or get dressed."

The morning they checked into the hospital, her mother remembers reading documents about possible risks. She asked the doctor what "cerebral bleeding" meant. Dr. Wang never answered her question, she says, and instead pushed her to pay. "He said, 'Hurry up, hurry up. Otherwise no time. We have surgeries to do,'" she recalls.

Dr. Wang disputes that he rushed the family to a decision. "This is unfair," he says. "They came and we repeatedly told them about the risks of the surgery." He says it took three to four hours to finish the necessary tests, including an electrocardiogram, chest X-rays, liver tests and a CT brain scan.

He says her problems are the result of "a complication" during the surgery, which happens in exceedingly few cases.

The family sued the hospital in Baixia District People's Court for about \$76,000 to cover costs of the surgery, nursing costs and compensation for Ms. Deng's injuries. In May, the court ruled in favor of the Deng family, awarding them about \$49,000, according to copies of court documents provided by the family. Fang Jianguo, a chief judge at the Baixia District People's Court confirmed the May verdict. The court documents also said the family should have considered the risks more thoughtfully.

Other hospitals are doing brain surgery to treat mental illness. No. 3 Hospital of the People's Liberation Army, in the city of Baoji, has performed more than 800 such surgeries, according to a doctor there. No. 463 Hospital of the People's Liberation Army, in Shenyang, says it has performed more than 2,000 surgeries since about 2001, with almost all patients reporting progress.

In the U.S., "mental-disease patients have places to go for treatment," says Jiang Keming, a surgeon at the No. 3 PLA Hospital. "But here, most patients are living out in the open and threatening the safety of society -- killing and setting fire to things. Families demand to give them the surgeries."

The Hunan Brain Hospital in Changsha, as well as the Air Force Guangzhou Hospital, perform 100 or more of the brain surgeries a year for mental illness, according to hospital staff. Doctors in China also prescribe medications for mental conditions, but cost is a limiting factor in many cases.

The first time Mr. Mi's parents noticed anything wrong with their son was in the summer of 2004, when he was 21. He had a fever for several days, then had trouble sleeping and often felt sick. He was depressed and moody, according to his mother, Ms. Kong.

That summer, he stopped going to the glass factory where his father worked and he had been an intern. The family asked several doctors for advice. Some said the young man had mental problems, without being specific, while doctors in Shanghai and Beijing reviewed his brain scans and told the father there was little to worry about.

Ms. Kong's sister, who lives in Shanghai, gave her a newspaper clipping dated July 16, 2004. The article, published in the Yangtze Evening News, carried the headline "After Seven Years, Violent Crazy Man Finally Wakes Up." It touted the benefits of a new brain surgery offered by No. 454 PLA Hospital, and detailed the success that a 22-year-old had with the surgery. It quoted Dr. Wang as saying: "You can go to school, go to work, no difference from normal people."

Ms. Kong, worried that her son's condition might get worse, thought this could help. In October 2005, the family withdrew their savings of about \$3,900 from the bank. They borrowed the rest of the money needed for the surgery from family and former classmates, packing hundreds of notes in their clothing and blankets. On Oct. 9, they took the train to Nanjing.

The next morning, the parents took their son to the hospital. This was the first time the doctors had seen Mr. Mi. They asked for the payment.

A doctor handed her a diagnostic report to sign. The page-long report detailed some of his symptoms and listed her son's illness as schizophrenia. Mr. Mi's parents had never heard the term before. Among other things, the report said their son "beats and curses" his family members, "smashes things" and hears imaginary voices, according to a copy of the report.

Ms. Kong says she didn't even read the report at the time, but signed it at the request of doctors. Her signature appears on the bottom, as well as the words "The situation is factual," in her handwriting. Ms. Kong now says that the doctor who drafted the report was simply making it up, and that neither she nor her husband ever complained that their son beat them or broke things in the home.

Dr. Wang denies his staff falsified records.

Not long after Ms. Kong signed the document, nurses put her son on a gurney and strapped him down. She says she thought the nurses were taking him to do some tests. "At least they should have him hospitalized for a few days before anything. We were not prepared at all."

Dr. Wang says most families bringing a patient for the surgery ask him "to do it as quickly as possible" because the patients are difficult to control.

A medical report filed by the hospital describes how frames were fixed on Mr. Mi's head and holes drilled into his skull. Dr. Wang says he used a needle, with a tip heated to about 180 degrees Fahrenheit, and inserted it into the brain for about a minute to destroy specific areas of tissue.

At around 3 p.m., nurses wheeled the young man out of the elevator. That night, he woke up suddenly and vomited. His mother says doctors told her vomiting was normal and that the surgery had gone as planned.

Mr. Mi was also bleeding from both ears, she says. For five days, he slipped in and out of consciousness, and when he regained consciousness, his right arm was limp and his speech was fuzzy, she says.

Dr. Wang says he checked hospital records which indicated that Mr. Mi was fine when he left the hospital. But he says that the surgery "doesn't help some people."

A few months after the surgery, in February 2006 during Chinese New Year, Ms. Kong says she found her son standing on the balcony of their sixth-floor walk-up apartment, overlooking the street where craftsmen grind statuettes out of red stone. She says Mr. Mi had put power cables around his neck, and later told her that he was trying to kill himself.

In August, Mr. Mi's parents took him to No. 123 hospital to get him tested. The hospital treated Mr. Mi with oxygen and physical therapy to try to reverse the brain damage, which may have been linked to the surgery, according to a report filed by Wu Qian, a doctor in the hospital's neurology department.

"He wasn't like this before," Mr. Mi's mother says, as her son rocked in his chair at the family's home and blinked his left eye sporadically. "Before, he didn't talk much. But now, when he talks, nobody understands."

--Ellen Zhu in Shanghai contributed to this article.