

遠隔妊婦健診を主軸に

経済産業省モデル事業 「地域医療情報連携システムの標準化及び実証事業」

モバイル胎児心拍転送システムを活用



周産期電子カルテ・モバイル胎児心拍転送システム」のイメージ図。医師や助産師は、パソコンや携帯電話を介して、妊婦の状況を把握できる。

IT技術で
妊婦を見守る
負担軽減と不安解消

In Japan's Rural Areas, Remote Obstetrics Fills the Gap



Yukio Kikuchi, right, a midwife in Tateyama, examines Aizawa Fumiko, using the high-tech system.

By NORBERTO OLIVIERI
TATEYAMA — There's nothing like last October when five years ago, this town of 12,000 in northern Japan has been desperately seeking a replacement. In desperation, in fact, that it recently promised a baby-sitting obstetrician willing to commute.

The town has no doctors left. In the meantime, the city has adopted a high-tech maternity program that may provide the future of child delivery in Japan: program works are coordinated remotely by obstetricians using real-time data transmitted from the doctor's cellphone. When the doctors judge that a patient is about to go into labor, the woman heads to the nearest city where a doctor is available. In Kanamachi, a substitute drove out of town, but it was a winding mountain road, and the road that can be treacherous.

Japan, with a rapidly aging population and a falling birth rate, is grappling with a serious shortage of obstetricians. With a dearth of babies, obstetricians are being recruited in Japan have shortened their maternity wards since the beginning of the decade, leaving their positions to potentially more lucrative elderly care.

Since 2006, the number of obstetricians in Japan has declined by more than 5 percent to 12,016 in 2008, the most recent year for which figures are available, according to the government, but that figure actually devalues the number of doctors actually delivering babies was lower than 8,000 in 2008, according to an estimate by the Japan Society of Obstetrics and Gynecology.

Regularly half of all obstetricians are 50 or older, and overworked; many have given up delivering babies and are focusing only on general care. At the same time, the number of medical students choosing obstetrics as their specialty has plummeted since 2006. Turned off by long hours, average pay and a rising risk of malpractice lawsuits, industries, young doctors are gravitating instead toward specialties like dermatology and ophthalmology.

Some doctors nowadays work just out of a sense of duty, said Dr. Kikuchi, director of the Japan Association of Obstetrics and Gynecology. "You have to give them quality of life, a good income and their own practice."

What is more, women make up a majority of obstetricians in their 50s and early 60s. Many retire when they themselves have children. Dr. Taniuchi said, because the medical field remains unattractive to working mothers.

The crisis, he said, began in rural Japan and reached the major cities in the 1970s.

Even in Tokyo, maternity wards are closing closed or consolidating, creating a sense of anxiety among pregnant women who are urged to make an appointment for delivery as soon as they learn their due date.

"I was told that place where you can give birth are limited and that everybody is backing up to them," said 21-year-old Ms. Kikuchi, who is pregnant and lives in a suburb of Tokyo. "You have to make an appointment for the delivery, and a lot of people are having trouble finding a place."

Things have changed since the birth of her first child two and a half years ago. "The hospital," she said, "was all right."

But the hospital has been hard on her as a motherly ward. She has to travel an hour to the hospital to give birth, and she has to stay in a hospital for five days off of an emergency ward, which has been transferred by helicopter to maternity wards with available beds in a nearby ward, as she has to travel an hour to the hospital when they are scheduled to give birth.

Ms. Kikuchi said, once a pregnancy starts, you know for sure how long it will last. Using Internet technology, the doctor, patient and midwife can talk and see each other through a laptop.

With this system, Dr. Ogasawara can determine whether a patient in labor. Before, he would be notified, a patient would make the 40-minute drive to Kanamachi.

After a gynecological examination, I'd tell them, 'You're OK, and they'll have to spend another 40 minutes driving back to the midwife's office,' Dr. Ogasawara said. "Now, I can talk to the midwife, and if it's necessary, the obstetrician will be called."

After a gynecological examination, I'd tell them, 'You're OK, and they'll have to spend another 40 minutes driving back to the midwife's office,' Dr. Ogasawara said. "Now, I can talk to the midwife, and if it's necessary, the obstetrician will be called."

It was not only Taniuchi, but many other places have the same problem," Dr. Ogasawara said in an interview in his office, as he sat at his desk in front of the computer monitor. Webcams and two-way microphones.

Yukio Taniuchi, three other cities adopted the system last fall, said Mr. Kikuchi, the health official, about a dozen-year-old system to work out any potential problems, the system is expected to spread widely.

In Tateyama, 14 women have given birth using the system, and five are currently using it during their pregnancies. "When I was told that there was an alternative to give birth, I was like, 'What?'" said Aizawa Fumiko, 27, who is pregnant and due in an afternoon 10 days before her due date. "I think that is convenient," she said of the new system, "though it's my first time, and I'm not sure what to expect."

Dr. Ogasawara, 55, who admits he's not a second child five months ago, said she was a little nervous about the new system at first, but Ms. Kikuchi began waving her at home and Dr. Ogasawara advised her from Kanamachi, Ms. Aizawa said.

Although a long, blue Internet cable was connected to Mr. Kikuchi's laptop, the link was down — the first time that had happened since the system was put in place last fall. In Ms. Fumiko's opinion to the doctor over the computer screen of control his laptop display.

Then Ms. Kikuchi got up the cellphone to relay information that the doctor's signal was weak, and he closed over the Internet. But the doctor's signal was weak, and the doctor's voice was unclear, said Ms. Kikuchi, who said she should get next week Monday.

Dr. Ogasawara, 55, who admits he's not a second child five months ago, said she was a little nervous about the new system at first, but Ms. Kikuchi began waving her at home and Dr. Ogasawara advised her from Kanamachi, Ms. Aizawa said.

2007.4.8 ニューヨークタイムズ
遠野のモバイル遠隔健診を紹介

H20年3月末までの健診実績60人・延べ118回