

The Takemi Program in International Health at Harvard School of Public Health

Preliminary Findings: Problems and further improvement of maternal care in Senegal

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The Takemi Program in International Health at Harvard School of Public Health (HSPH) is an interdisciplinary research program, supported by the Japan Medical Association, that provides mid-career public health professionals from around the world with the opportunity to carry out research for one year, under the supervision of a faculty member at the university. Fellows are also able to study broadly beyond their field of research by attending Takemi seminars, courses, and other activities relevant to their interests at HSPH, throughout Harvard University, and at other universities in the Boston area. This valuable program provides an excellent environment for those involved in global health, and it also facilitates the creation of networks among fellows as well as with research supervisors and other university faculty. I have been engaged as a research fellow in the Takemi Program since September 2007. Prior to that, I worked on numerous projects with Japan International Cooperation Agency (JICA) concerning public health, maternal and child health, and healthcare worker training in countries such as Brazil, Cambodia, Indonesia, and Senegal.

Before coming to Harvard, I was also involved in the JICA Project on the Development of Human Resources in Health in the role of Chief Advisor in Senegal. Working together with the Senegal Ministry of Health and Medical Prevention, the project carried out activities to strengthen basic and continuing education for nurses and midwives, and to increase their numbers. While these efforts have achieved a certain measure of success, we are keenly aware of the need to improve the quality of basic healthcare,

especially for normal labor and delivery in public health care facilities, because strengthening basic and continuing education alone cannot improve the quality of care. For example, the percentage of deliveries in health facilities in Dakar, Senegal's capital, is 92% (81.8% for public facilities; 10.2% for private facilities), which is much higher than the national average of 61.8%.¹ However, the estimated maternal mortality rate (MMR) for all of Senegal, which is 410 deaths per 100,000 live births, remains a major challenge.¹

My research topic during my Takemi fellowship is "Routine Maternity Care for Normal Labor and Delivery at Public Health Centers in Senegal," and my objectives are to clarify the current situation and problems in maternity care for normal labor and delivery at public health care facilities, and to identify potential areas for improvement. I gathered my data by interviewing postpartum women and observing maternity care in health centers in Dakar in July 2007 and March 2008. My preliminary findings are as follows.

First, some health care workers provided inappropriate care that could harm women and babies during labor and delivery. For example, a male janitor was enlisted to apply fundal pressure; some women underwent numerous vaginal examinations by multiple health care workers; inadequately sterilized disposable urinary catheters were used repeatedly (Fig. 1); the same scissors used in an episiotomy were used to cut the umbilical cord; and newborn infants were washed using cold water directly from the tap.

Second, some women were not only neglected by health care workers, but were verbally and

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Fig. 1 Disinfection of medical instruments by chlorine



Fig. 2 A delivery room in one of the health centers

physically abused. For example, a woman reported that she gave birth at a health center without assistance; some health care workers scolded women when they cried out because of labor pain; and some of the women were even slapped by health care workers.

Third, health centers faced problems due to insufficient facilities (Fig. 2) and staff. The number of beds available was inadequate, and two or more women often had to share a bed during labor and/or after delivery. Necessary equipment such as scissors and forceps were in short supply, and as a result were often not properly sterilized. The labor and delivery rooms lacked toilets, so women in the labor room had to walk to the delivery room and use the plastic bedpan on the floor, in front of all those present. In addition, the number of health care workers on duty was often inadequate, and they were struggling with heavy workload under the poor working conditions.

The history of success in reducing maternal and newborn mortalities demonstrates that immediate and effective skilled professional care during and after childbirth can make the difference between life and death for both women and their newborns.² For example, Sweden halved its MMR between the 19th century and early in the 20th century as a result of a national policy favoring professional midwifery care for all births, and by establishing standards for quality of care.³

To achieve the Millennium Development Goal 5 of reducing maternal mortality, the

Senegalese government has given priority to the provision and enhancement of maternity care by skilled birth attendants (SBAs) such as doctors, midwives, and nurses. However, the preliminary results suggest that the risk of infection, which is the second cause of global maternal death,⁴ might occur among deliveries assisted by SBAs in health facilities. In addition, this may be the case not only in Senegal but in other countries as well. To function effectively, SBAs are largely dependent on the wider environment, including access to equipment, drugs, and supplies; transportation for referral; and partnerships with other SBAs.⁵ In other words, improving the quality of care by SBAs in Senegal will require steady, long-term support to strengthen the health system, as has been pointed out in discussions about global health policy more generally.⁶ This in turn will require further research with large samples across the country, to determine the current state of maternity care, the working environment, and adverse events after delivery at health facilities. Only through these measures will the health of mothers and newborns be able to improve.

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