

Chapter 37

Disasters and Women's Health

Field of expertise: Disaster Obstetrics and Gynecology

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Summary

Women's health care in disasters involves many problems that cannot be dealt with by obstetrics and gynecology collaboration alone. Collaboration with various fields such as pediatrics, perinatal care, and mental health has become necessary. In addition, it has become clear that women's health management in times of disaster cannot be solved simply by restoring medical facilities and systems, and we must carefully analyze these issues and construct a comprehensive disaster obstetrics and gynecology care system in the future.

Keywords: disaster obstetrics and gynecology, obstetrics, gynecology, cancer screening, inclusive disaster risk reduction

Introduction

During and after a disaster, it is necessary to collaborate not only with both obstetrics and gynecology departments, but also with various other medical departments. In the face of disasters, disaster obstetrics and gynecology is evolving into an academic and medical system that broadly covers the field of women's medicine.

1: Problems Revealed by the Great East Japan Earthquake

At the Second UN World Conference on Disaster Reduction held in 2005, the Hyogo Framework for Action was adopted as a basic guideline for disaster reduction activities for the following 10 years. It is credited with suppressing the increase in the number of deaths from disasters over the decade, as the national and local governments made disaster prevention a priority and strengthened emergency response. On the other hand, even during the past decade, large-scale disasters have claimed many victims, and the damage caused by small-scale disasters, such as those from climate change in recent years, has become increasingly diversified. In particular, it has been pointed out that vulnerable groups such as women and children have been significantly affected. In the aftermath of the Great East Japan Earthquake, the Japanese people's spirit of helping each other drew attention. However, there have been reports of cases where women were the only ones on dinner duty when they returned to evacuation centers after

cleaning up their homes and searching for their relatives during the day. By picking up on individual cases, we can see that men-centered disaster prevention has a great impact on the mental health of women. At the Third UN World Conference on Disaster Reduction held in Sendai City, Miyagi Prefecture in 2015, the Sendai Framework for Disaster Reduction was adopted. In it, the importance of women's and young people's leadership is stated, and the role of women as stakeholders can be expected. In this framework, the "health of mothers, newborns, and children" and "sexual and reproductive health" were added as new keywords. Obstetrics, gynecology, and women's medicine are expected to play a significant role in disaster reduction in the future.

2: Paradigms Destroyed by the Earthquake

Conventional wisdom and necessary responses

Figure 37-1 summarizes the disaster cycle and the responses of obstetrics and gynecology (Ito & Miki, 2012). In the case of obstetrics, there were many cases of the Maternal and Child Health Handbook (Boshi techō)¹ being lost because of the Great East Japan Earthquake, and as a result, the vulnerability of paper-based management became apparent. In Iwate Prefecture, the Perinatal Medical Information System Ihatov was established in 2009, and the Maternal and Child Handbooks were restored from electronic data from registered handbooks. The establishment of a disaster-resistant management system for maternal and child health information is essential.

As for gynecology, immediately after the Great East Japan Earthquake, surgeries were canceled and daily treatment for cancer patients was also suspended (Ito & Sugawara, 2013). Surgery and outpatient services were resumed on the 11th day after the earthquake, and anticancer drugs and radiation therapy were resumed after about three weeks (Ito & Sugawara, 2013). In order to restore the medical system as soon as possible, both physical and non-physical measures, such as the establishment of a new information system and the restoration of facilities and equipment must be addressed promptly.

During and after the chronic phase of the disaster cycle, the focus shifts from emergency response to mental care and health management. Beginning in April that year, cervical cancer screening (mass screening) by the Miyagi Cancer Association's traveling bus service resumed, and in the coastal areas hardest hit, the service resumed in February of the following year (Miki et al., 2020). It was thought that the rapid restoration of clinics and screening systems would lead to a rapid recovery of consultation rates, but in fact, even five years after the disaster, many areas had not recovered to the consultation rates of the year before the disaster (Figure 37-2) (Miki et al., 2020). This means that there are problems in health management that cannot be recovered simply by physical and non-physical restoration.

¹ The Boshi techō or Maternal and Child Health Handbook is a small booklet first given to a pregnant person, to chronicle the pregnancy, well-being, birth, and immunization of the child, up to and including the age of six. One booklet is provided for each child in Japan.

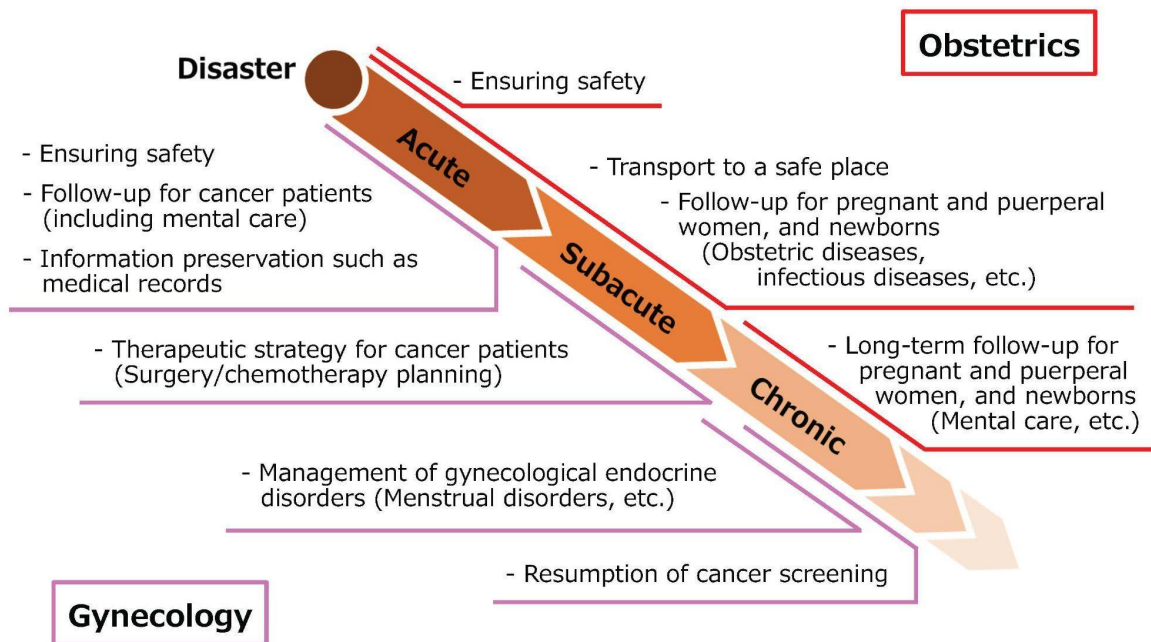


Figure 37-1. The disaster cycle and obstetric and gynecological diseases

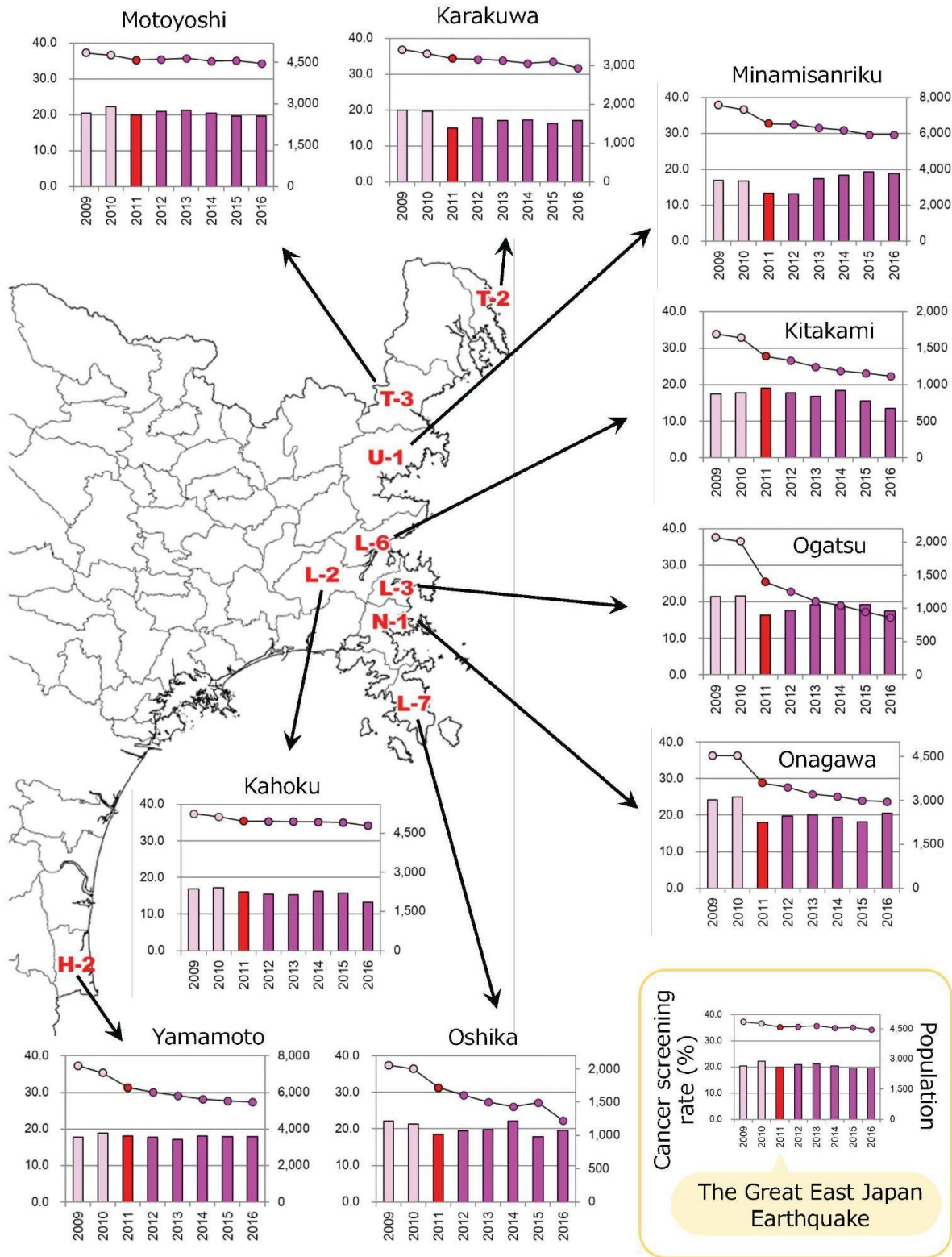


Figure 37-2. Changes in the consultation rate for cervical cancer bus screenings in the coastal areas of Miyagi Prefecture

3: A New Approach

In the aftermath of the Great East Japan Earthquake, there were many deliveries done without prior meetings and consultations with the mother due to consultation delays in the early stages of pregnancy, the inability to receive prenatal checkups, and the loss of the Maternal and Child Health Handbook. As mentioned in Section 2 above, there is an urgent need to digitize medical information and build a network (Figure 37-3). It is also important to take measures at the individual level, such as taking pictures of the handbook with a smartphone and sharing them with relatives in remote areas.

In the area of gynecology, it is necessary to create an environment where affected women can monitor their own health, but we need to investigate in detail what was lacking and what was needed. In order to manage women's health in the long term after a disaster, comprehensive measures and actions are needed, including the enhancement of mental care (dealing with stress), disaster countermeasures from the perspective of women (including the management of evacuation centers and temporary housing), and awareness of disaster prevention on a daily basis (Figure 37-3).

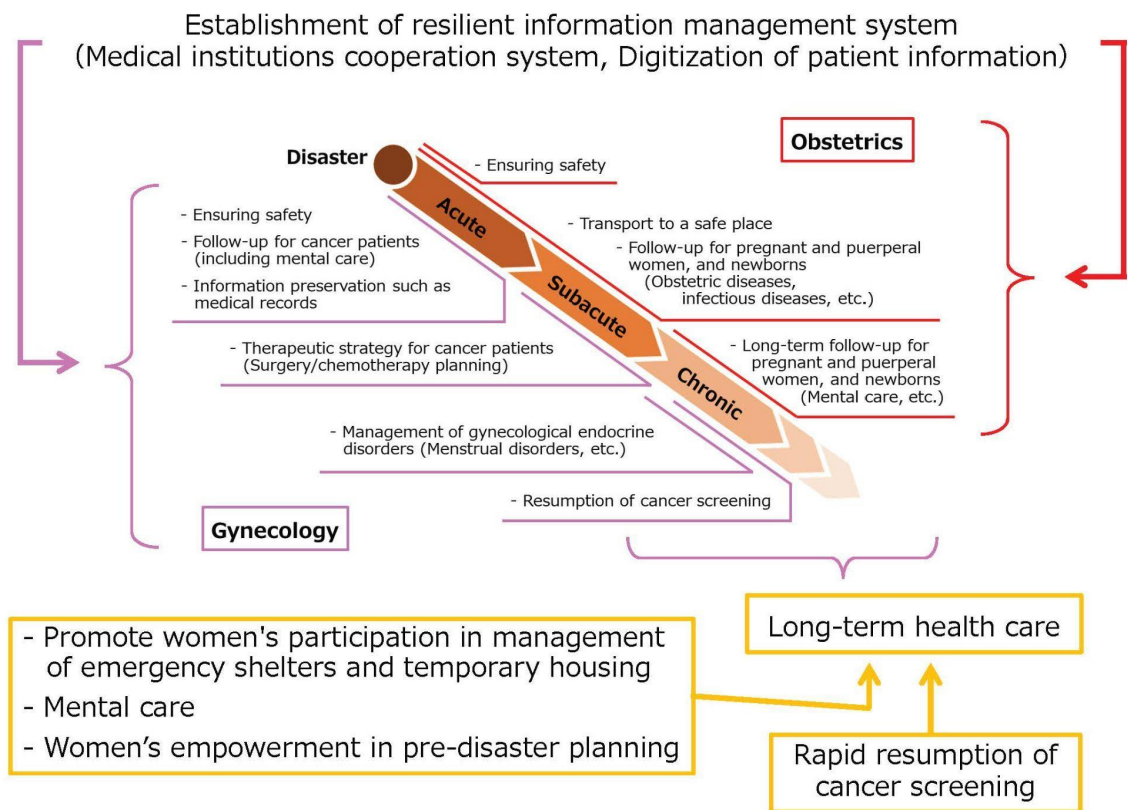


Figure 37-3. Future developments of the disaster cycle and obstetrics and gynecology

4: Achievements and the Future

A new approach to disaster science

It has been reported that postpartum mothers who were discharged from the hospital without receiving adequate postpartum care were exposed to excessive stress for six months

afterward, highlighting the need for collaboration between obstetrics, perinatal care (from 22 weeks pregnant to less than 7 days after birth), pediatric care, and disaster medicine. Furthermore, the Outline of Measures for Society with a Decreasing Birth Rate (2015) emphasizes the dissemination of disaster prevention activities and drills that take infants and expectant mothers into consideration, as well as strengthening the cooperation among relevant organizations to protect children. In response to this, the Ministry of Health, Labor, and Welfare has further developed the training of pediatric perinatal liaisons for disasters. In addition, the Japanese Society of Obstetrics and Gynecology is working to launch PEACE (Perinatal Early Assessment and Communication system for Emergencies), which is a system for sharing information among hospitals during disasters. In the future, not only cooperation within obstetrics and gynecology, but also cooperation among other departments related to women's medicine will be required, and constructing an integrated disaster obstetrics and gynecology is necessary

Conclusion - from the authors

In this section, we discussed the importance of women's leadership, which is one of the basic guidelines of the Sendai Framework for Disaster Reduction, from the perspective of women's medicine. "Age," "gender," and "disability" are also important keywords in this framework. An inclusive society is a society in which people from all walks of life are not isolated, but are supported and included in each other's lives so that they are not excluded, and in order to achieve inclusive disaster risk reduction, a society must be inclusive on a daily basis, to a point where inclusivity is so normal that it doesn't require additional attention.

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