

Lowering Maternal Mortality in Developing Countries through Telemedicine

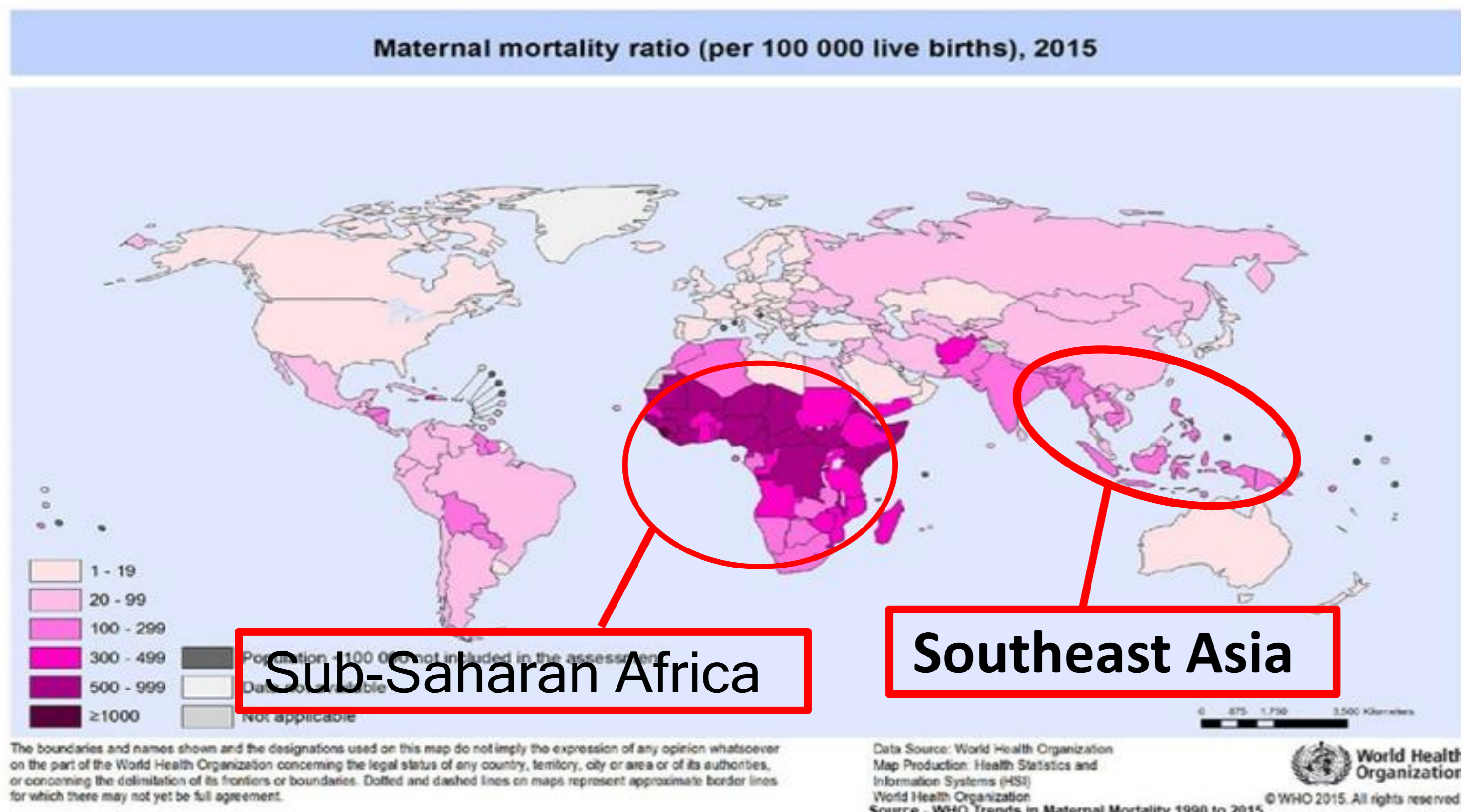
#2742 Okayama Sozan High School

Introduction

UHC (Universal Health Coverage), which means “to ensure that everyone should be able to receive health services at a low cost” is the basis of our research. According to a 2019 UN agency report, between 2000 and 2017, the maternal mortality ratio (MMR, number of maternal deaths per 100,000 live births) dropped by about 38% worldwide. However, 94% of all maternal deaths still occur in low and lower middle-income countries. We focused on telemedicine as a means to reduce this.

Contents

① Childbirth in Developing Countries



1. Importance of Professional Care

- Obstetric care from a health professional during delivery is critical in reducing maternal mortality.
- The lowest coverage levels tend to be in the poorest countries where maternal mortality levels are highest.

Maternal Mortality Rate
 Japan... 5/100,000
 World... 216/100,000

Ex.) **Mandera County, Kenya**
MMR 250/100,000 (2017)

Only about two in five (39%) births are delivered by a skilled birth attendant compared to 62% at the national level.

Ex.) **Lon Twai, Myanmar**
MMR 342/100,000 (2017)

Women living in mountainous areas often deliver babies assisted by families or neighbors.

Delays in medical treatment mean that pregnant women and babies are often in danger, and MMR is high.

Interview

It is effective for pregnant women to get the proper advice from medical professionals. This will prevent the onset and allow early detection of disease.

Ms. Seki Noriko
 (obstetrician and gynecologist)

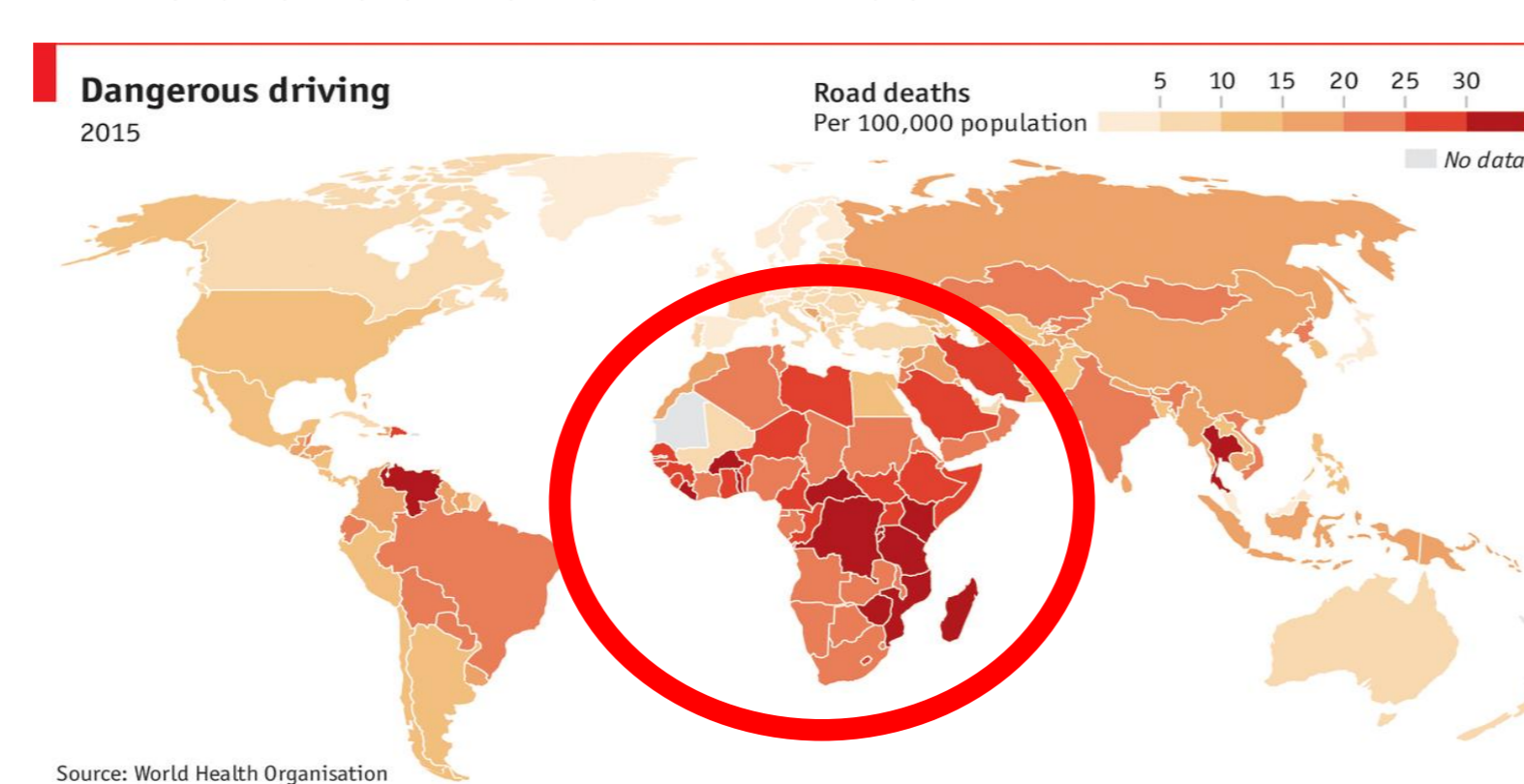


① Lack of Transportation

➤ Unpaved road

State Road Pavement Rate in Cambodia **10%**

Road Pavement Rate in Sub-Saharan Africa **15%**



Japan $\frac{1}{30,856}$ $\times 4.15$ Cambodia $\frac{1}{6,844}$

▲The number of accidents is too high in Cambodia

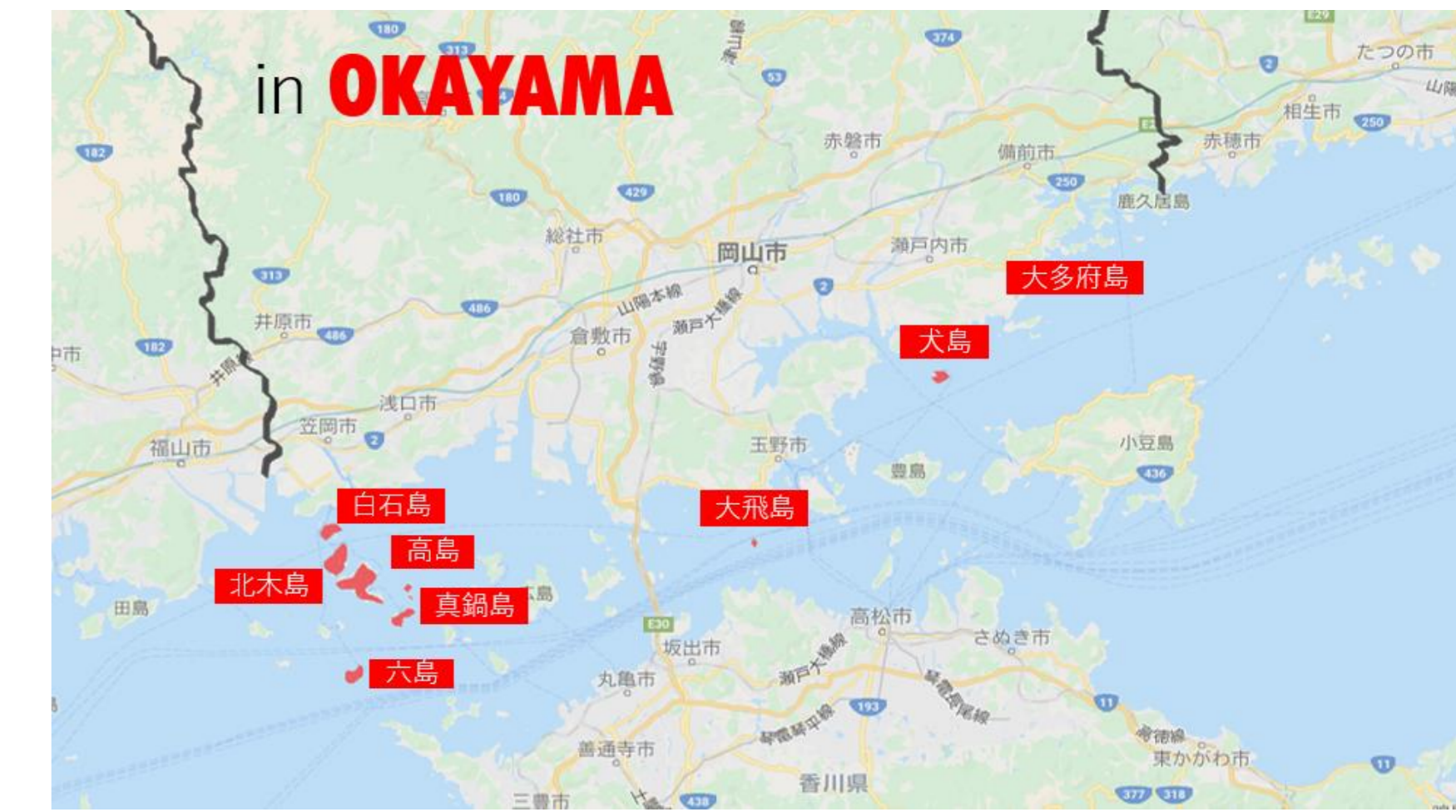
▲Road deaths per 100,000 people in Africa are high.

③ Proposal

Japan

Development of Telemedicine

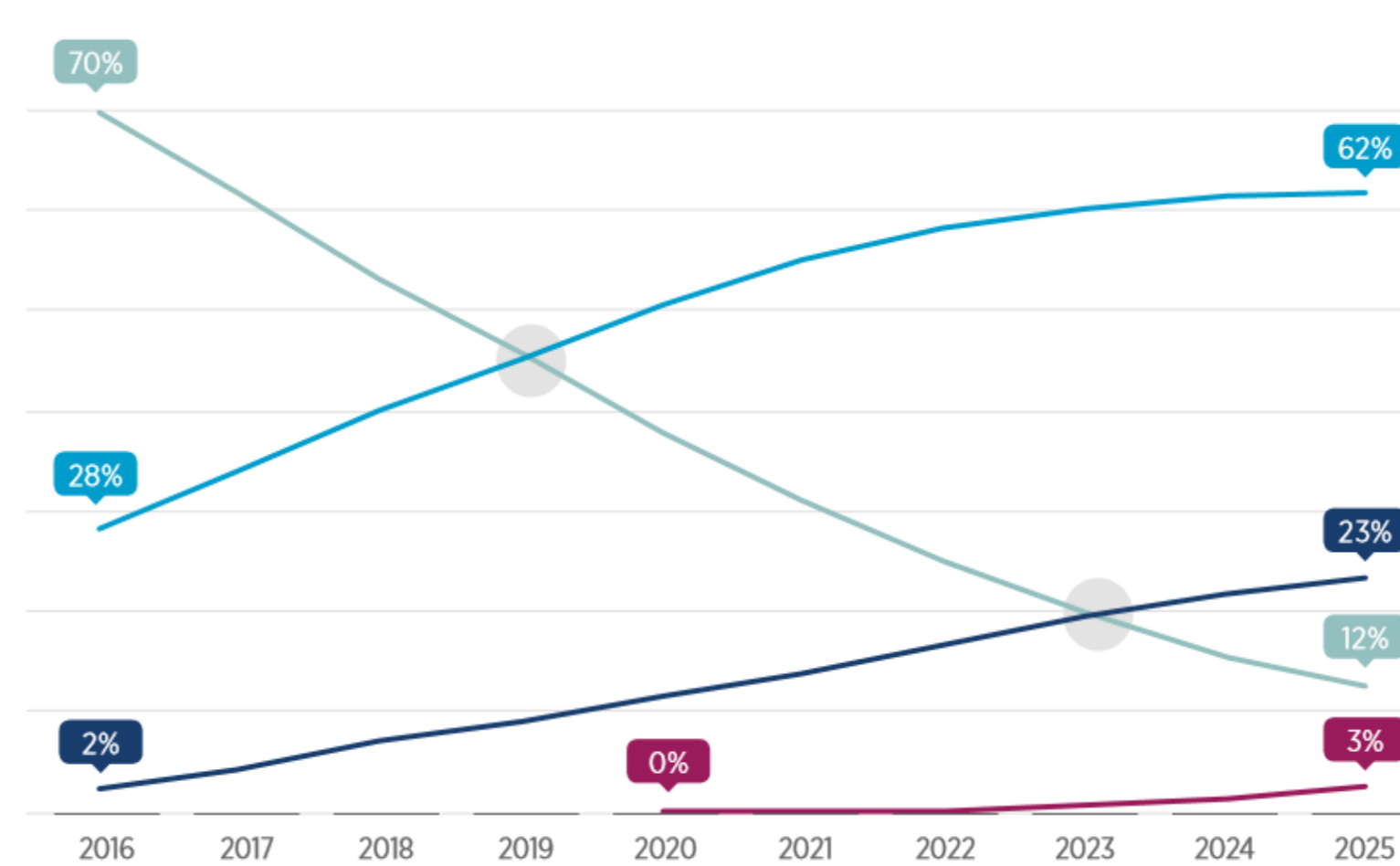
1970s: The government started to improve telemedicine.



Okayama, Seto inland sea: 85 remote island, no obstetrics and gynecology clinics

Developing Countries

Improvement of ICT environment



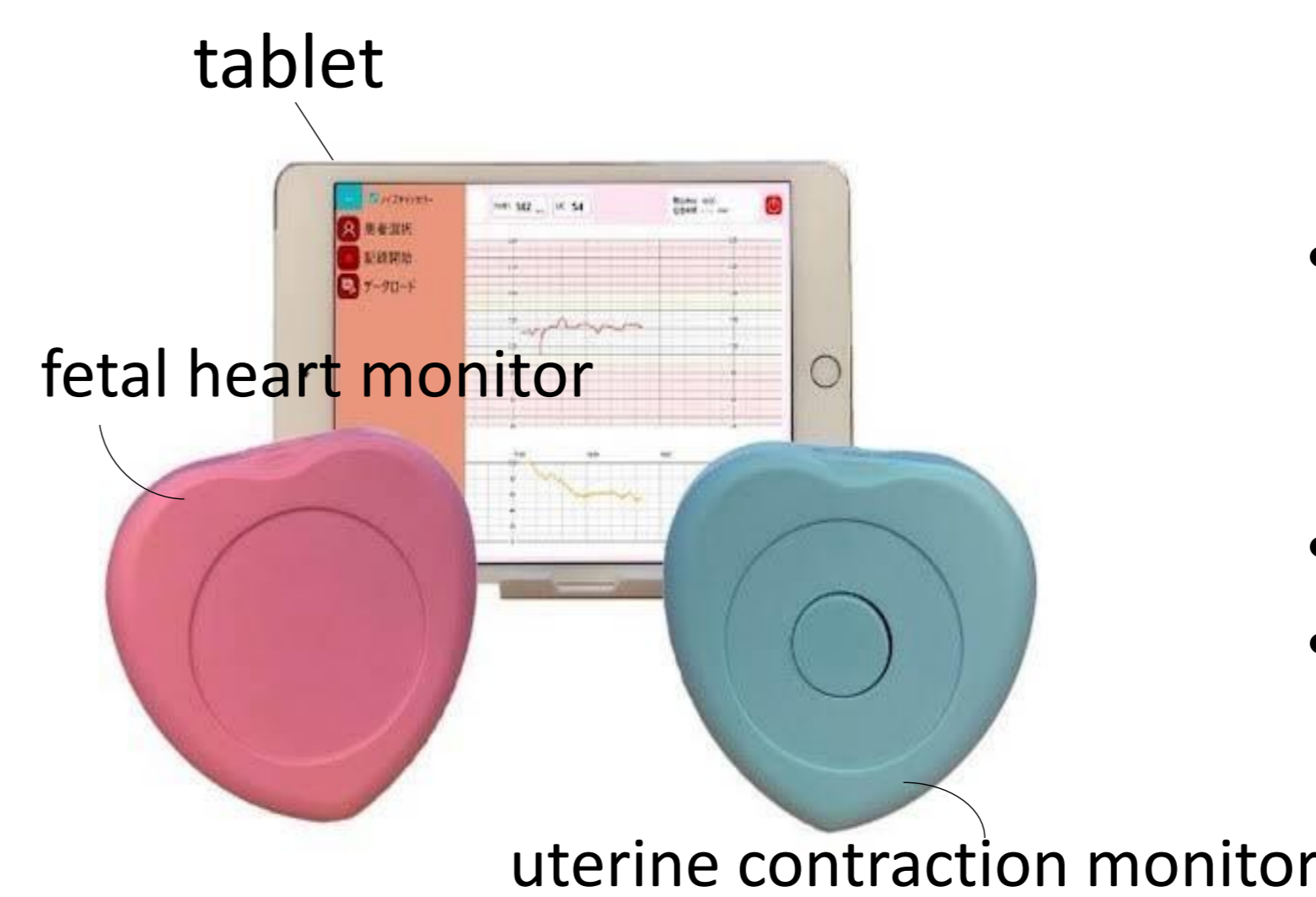
- Sudden change even in Africa
- Some developing countries put more energy into improvement of communication than into that of any other type of infrastructure.

▲ Mobile connection of Sub-Saharan Africa

Telemedicine for Pregnant Women in Remote Areas

Melody International Company in Kagawa

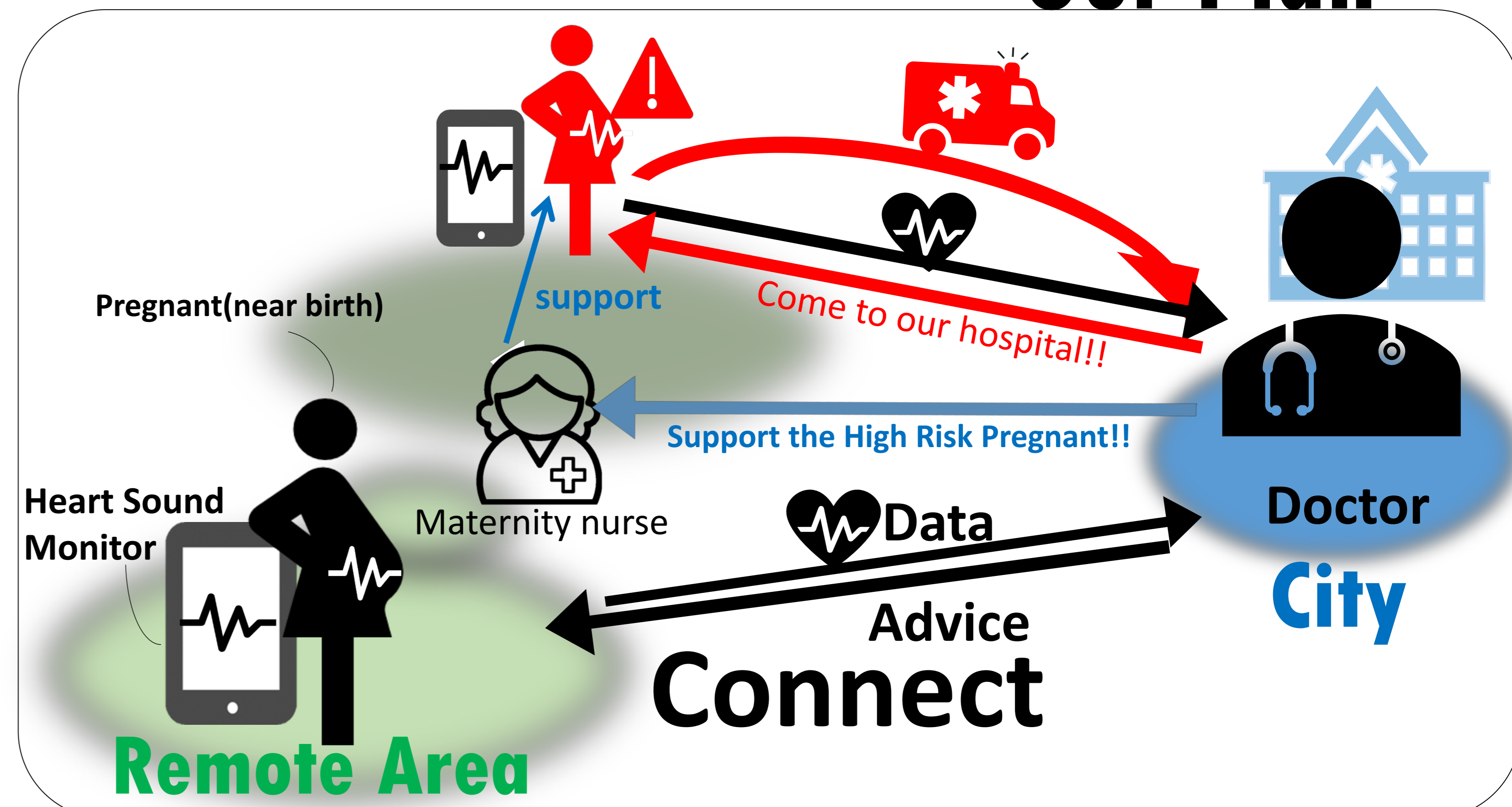
We visited there on September 7th.



◀ Fetal Monitor iCTG

- Can check maternal and fetal conditions via the internet, even at distant locations
- Assists doctors in difficult situations
- Also used in Chiang Mai, Thailand

Our Plan



Conclusion Telemedicine can support safe childbirth in developing countries, which contributes to an equal society.

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