Assisted Reproductive Technology in Japan

The Status of Third-Party Reproduction and Future Prospects of Cross-Border Reproductive Care
Basic Data

- **Infertile patients**: 466,900 people (estimation in 2002)
- **Birth of first IVF baby**: 1983 at Tohoku University
- **Total number of children born through ART**: 242,435 babies as of 2009
- **IVF cycles performed**: 213,800 cycles in 2009
- **Average cost of IVF**: 300,000-500,000 yen
  (3,900-6,500 USD)
- **Number of IVF clinics**: 627 Clinics
- **Pregnancy Rate**: 23%
- There is no comprehensive legislation in Japan.
# Specific Fertility Treatment Fee Subsidy System

<table>
<thead>
<tr>
<th>Objects</th>
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<tbody>
<tr>
<td>• Legally married couples</td>
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<tr>
<td>• Those who have been diagnosed by a doctor as being unable to or</td>
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<tr>
<td>having very little possibility of becoming pregnant through</td>
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<tr>
<td>treatment methods other than specific infertility treatments</td>
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<tr>
<td>(IVF and ICSI)</td>
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<tr>
<td>• Those who take an In Vitro Fertilization (IVF) and an Intracytoplasmic</td>
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<tr>
<td>Sperm Injection (ICSI)</td>
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<tr>
<td>• No age restrictions</td>
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<table>
<thead>
<tr>
<th>Amount of subsidy</th>
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<tbody>
<tr>
<td>• Up to a maximum of ¥150,000 for the one particular fertility</td>
<td></td>
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<tr>
<td>treatment</td>
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<thead>
<tr>
<th>Medical facilities</th>
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<tbody>
<tr>
<td>• It is needed to be seen in the medical facilities that designated</td>
<td></td>
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<td>by responsible organization</td>
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<thead>
<tr>
<th>Income limitation</th>
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<tbody>
<tr>
<td>• The amount of income that various subsidies have already deducted</td>
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<tr>
<td>is less than ¥7,300,000</td>
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<tr>
<th>Limitations of the number of times</th>
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<tr>
<td>• Up to three rounds of treatment in the first year and up to two</td>
<td></td>
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<tr>
<td>rounds annually from the second year, for a period of up to five</td>
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<td>years and <strong>a total of ten times</strong></td>
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### The Health, Labor and Welfare Ministry’s new policy from 2016

<table>
<thead>
<tr>
<th></th>
<th>Proposed revision</th>
<th>Existing subsidies system</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age restrictions</strong></td>
<td>Younger than 43 years old</td>
<td>No age restrictions</td>
</tr>
<tr>
<td><strong>Limitations of the number of times</strong></td>
<td>Up to six rounds of treatment (Up to three rounds of treatment if the woman is 40 to 42 years old)</td>
<td>Up to 10 rounds of treatment</td>
</tr>
<tr>
<td><strong>The number of times per year</strong></td>
<td>No limitations</td>
<td>Two times (Three times during first year)</td>
</tr>
<tr>
<td><strong>A total period of time</strong></td>
<td>No limitations</td>
<td>Up to five years</td>
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- In fiscal 2012, some 135,000 people received them, as the budget for the subsidies reached some ¥20 billion for the central and local governments.
- In more than 30 percent of the cases, the woman was at least 40 years old.
  http://www.japantimes.co.jp/opinion/2013/08/22/editorials/subsidized-fertility-treatments/#.UkJKQJ2Cjec)
The Present Situation of Japanese Infertile Patients

- **Average length of treatment**: 4.3 years
- Infertility Treatment is not covered by medical insurance.
- **Special Infertility Treatment Aide**:  
  — benefit payment conditions —
  1. Couples in lawful marriage
  2. Diagnosed as infertile
  3. Only for IVF or ICSI
  4. At most 2 cycles a year
  5. Terminable (5 years)
  6. Use of designated hospitals
  7. Maximum annual income per couple
     (7,300,000 yen / US$95,000)
- Infertility treatment imposes a heavy burden on couples physically and financially.
Embryo Transfer

Guidelines on number of embryos transferred (Japan Society of Obstetrics and Gynecology “Views on the prevention of multiple pregnancies in ART” 2008):

- In principle, **single embryo transfer** should be used.
- However, **up to two embryos** may be transferred if women are over 35 or have experienced more than two consecutive miscarriages.

**Maternal Protection Act:** Abortion is allowed up to the 22nd week of pregnancy either to save the life of the woman, to preserve physical health, in the event of rape or incest, or for economic or social reasons. However, the Act does not identify fetal reduction as legal abortion.

**Multiple pregnancy rate:** 11-13% (2007)
**Fetal Reduction Rate:** 33.4% per multiple pregnancies

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Egg Donation

A need for egg donation arises in Japanese couples due to increased infertility rates with age.

Guidelines on egg donation:
• “Embryo donation is not permissible.” (2004, Japan Society of Obstetrics and Gynecology)
• “Egg donation is conditionally permissible.” (Japan Society for Reproductive Medicine “Opinions offered concerning ART using third-party gamete” 2009):
  • Anonymous in principle
  • Without compensation
  • Only for women considered unable to conceive naturally
  • Women under the age of 46 within lawful marriage.
Japanese Institution for Standardizing Assisted Reproductive Technology (JISART) (http://www.jisart.jp/):

- JISART was organized in 2003 in response to poor legal systems on third-party reproduction.
- It now comprises 25 fertility clinics.
- In 2008, JISART formulated their own guidelines, allowing donated eggs to be used for IVF:
  
  **Recipient:** 1. Women with no eggs, 2. Have experienced more than six failures of IVF, 3. Carrier of a serious gene disorder, 4. Age-related infertile women are not eligible.

  **Donor:** 1. Women under 35 with at least one child, 2. Up to three eggs collected, 3. Should be anonymous in principle but relatives or friends are permissible in some circumstances.

- 18 egg donations have been performed and 6 children born (2008-2011)
The first egg bank in Japan OD-NET: Oocyte Donation Network

• OD-NET is the first NPO egg bank in Japan, which started on January 15, 2013.
• Recipients must be married women under 40 who are born infertile (women with age-related infertility are NOT eligible).
• Donors must be Japanese women under 35 with children.
• Recipients may only be refunded money for the actual expenses related to the donation (no money is paid for the eggs).
• Donors must incur all the costs for egg donation including 2-3 ethical deliberations (300,000 yen each).
• Five clinics (members of JISART) will perform the treatment.
• Thirty-eight women have so far been selected from over 100 who have applied as of May 2013.
Surrogacy

- A committee of the **Science Council of Japan** made public a draft report that calls for enacting a law to ban surrogate birth (2008)
  1) Surrogate pregnancy should be prohibited by law.
  2) A trial implementation of surrogacy may be considered.
  3) Surrogate pregnancy arranged for profit should be punished. (Punishment should be given to the medical doctor who provided treatment, mediators, and commissioning persons, but surrogate mothers should be excluded.)
  4) The birth mother should be considered the legal mother of a child born as the result of a surrogate pregnancy.
  5) Establishment of legal parenthood between a child born as a result of surrogate pregnancy and the commissioning married couple by way of an adoption or a special adoption should be recognized.
Japanese court on surrogacy: The case of Aki Mukai

Background:
• Aki Mukai, a TV actress who had undergone a hysterectomy, and her husband Nobuhiko Takada, a professional wrestler, had twin boys delivered by an American surrogate mother in 2003.
• In 2004, Tokyo’s Shinagawa district hall refused to accept the children’s birth certificates.
• The Ministry of Justice (MOJ) said Mukai cannot be recognized as the mother of the children under Japanese law; Mukai’s legal maternity can only be established by means of adoption.
Japanese court on surrogacy: The case of Aki Mukai

Judicial battle:
• The couple filed a petition, insisting that the children’s birth certificates be accepted by Tokyo’s Shinagawa district hall and the twins to be registered as Mukai’s children.

Decision:
• In 2005, the Tokyo Family Court denied their petition. Mukai and Takada then appealed to the High Court.
• In 2006, the Tokyo High Court ruled that the twins could be registered as the legal children of Mukai and Takada as stated on their Nevada birth certificates. The Ministry of Justice appealed to the Supreme Court.
• In 2008, the Supreme Court reversed the decision and ruled against Mukai and Takada. It held that Nevada's court judgment was contrary to public policy in Japan. The judges also pointed out that Mukai and Takada could use adoption to establish the parent-child relationship.
The Case of Baby Manji

Japanese couple Ikufumi and Yuki Yamada hired a surrogate mother to bear a child for them in 2007. Dr. Patel arranged a surrogacy contract with Pritiben Mehta, a married Indian woman. The doctor supervised the creation of an embryo from Ikufumi Yamada’s sperm and an egg harvested from an anonymous Indian woman. Then the embryo was implanted into Mehta’s womb.

In June 2008, the Yamadas divorced, and a month later Baby Manji was born. Although Ikufumi wanted to raise the child, his ex-wife did not.

Baby Manji had three “mothers”—the intended mother who had contracted for the surrogacy, the egg donor, and the gestational surrogate—but legally she had none.
The Case of Baby Manji

• The intended father went to India to take the child back to Japan, but he was unable to do so.
  (1) The Japanese embassy refused to issue a passport to the child on the grounds that under Japanese law the woman who gives birth (the Indian surrogate) is the mother. The intended father could acknowledge the child, but even in so doing, the child would not be able to acquire Japanese citizenship given that she would become an illegitimate child acknowledged after birth.
  (2) India also refused to issue a passport because Indian law requires that a child be legally adopted before leaving the country, but bars single men from adopting.

After spending months in legal limbo, the little girl, named Manji, was issued a visa at the Japanese embassy using an “identity certificate” from the Indian government solely for the purpose of leaving the country.

Baby Manji’s grandmother who struggled to get her back to Japan.

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The Case of Suwa Maternity Clinic

Background:
- Dr. Yahiroyo Netsu is a director of Suwa Maternity Clinic, established in 1976 in Nagano Prefecture.
- Dr. Netsu openly criticizes and defies the impositions of the Japan Society of Obstetrics and Gynecology and the Health Ministry, which recommends prohibition of surrogacy.

Surrogacy Cases performed in the Suwa Maternity Clinic:
- In 2001, Dr. Netsu announced the birth of the first child conceived through surrogacy in Japan. The intended couple’s gametes were fertilized in vitro and the embryo was implanted in the womb of the young sister of the intended mother.
- In 2003, shortly before the Health Ministry concluded its report recommending a ban on surrogacy, the second case carried out by Suwa Maternity Clinic was made public.
- Dr. Netsu announced in 2006 the first case in which a woman in her 50s had given birth in the previous year for her daughter. The fertilized egg was provided by her daughter, who had had a hysterectomy due to cancer, and the daughter's husband. This was the fifth confirmed surrogacy case performed in Japan.
The Case of Suwa Maternity Clinic

Dr. Netsu’s Guidelines for Surrogacy Treatment:
Surrogate pregnancies are available to patients only under the following conditions:
(1) Women who have no uterus and cannot carry a pregnancy to term;
(2) The intended couple must be legally married and both able to donate sperm and eggs;
(3) Surrogates also have to be married and already have children of their own;
(4) Surrogates, who are usually the patient’s mother or sister (confined to patient’s mother since 2006), serve on a voluntary basis and receive no financial remuneration;
(5) Surrogates must be registered as the mother of the child and the child must then be adopted by the intended couple.
2003 survey: Questionnaire was administered to 8000 members of the public and 62.0% responded.  
2007 survey: Questionnaire was administered to 5000 members of the public between the ages of 20 and 69 and 68.2% responded.
Seiko Noda (member of the House of Representatives)

• She had undergone 14 unsuccessful IVFs & 1 miscarriage with her first husband since 41 years of age.
• In 2010, she became pregnant on the second attempt using a donated egg in the US and the de facto husband's semen. The cost for all procedures was $62,500 (5,000,000 Japanese yen).
• A fetal disorder was identified in the 4th month of pregnancy.
• On 6 Jan. 2011, she gave birth to a boy by cesarean section at the age of 50. She had a hysterectomy after the delivery.
• The baby boy suffered serious medical problems. He is on a mechanical ventilator and has never left the hospital.
• In 2012, a draft report, which allows non-commercialized third-party reproduction was prepared by a group of interested LDP members, including Noda.
Sex Selection with PGD

• PGD (preimplantation genetic diagnosis) is allowed only for the diagnosis of hereditary disease (guidelines of the Japanese Society of Obstetrics and Gynecology, 1998).

• More Japanese couples tend to go abroad to countries such as Thailand for PGD because sex selection by PGD is prohibited in Japan.
Conclusions

• Cross-Border Reproductive Care from Japan:
  Japanese couples are increasingly traveling to the US and Asian countries such as India or Thailand for third-party reproduction, as this option is basically not available in Japan. The phenomenon is also widely reported in the media.

• Japan requires much more information about assisted reproductive technology abroad to adopt a quality system for infertile patients.