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# Health Policy Regarding Pregnancy Care in two "Lowest-Low" Fertility Social Contexts: A Comparison between Korean and Japanese Policies

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#### Abstract

To develop policies regarding fertility and pregnancy that will be effective in preventing further declines in fertility rates in the context present-day Korea, current policies in Japan were analyzed and compared with those now being implemented in Korea. This study was structured to involve (a) comparison of maternal health projects in Korea and Japan, and (b) comparison of infertility support policies based in regional cities in Korea and Japan.

Korea's Health Plan 2030 emphasizes strengthening healthcare for high-risk pregnant women, expanding investments to benefit vulnerable groups, and establishing a support system for infertile couples. In Japan, government programs involving treatment targeting infertility specifically were implemented nationwide in 2006. Wide dissemination of accurate knowledge related to pregnancy is emphasized. Also, counseling centers specializing in infertility were established by 67 local governments.

We have confirmed that Korean policies include decentralization, while Japan is implementing the central government's infertility policy uniformly in all regions. Japan also adjusted its policy out of concern that problems related to infertility and childbirth will worsen due to the social disaster of COVID-19.

The results indicate that providing additional support for psychological counseling may be preferable to increasing the number of in-vitro fertilization procedures. The physical burden on women may be minimized by benchmarking policies in Japan. Step-by-step application of these procedures should be systematically supported to achieve the best results.

Keywords: Health Policy, Pregnancy Care, Lowest-Low Fertility, Comparative Study, Japanese Policies

# 1. INTRODUCTION

Korea's fertility rate continues to decline, making it the lowest among OECD countries [1, 2]. In addition, an increase in the age at the time of marriage has led to an increase in the rate of pregnancies among women aged 35 or older, with the inevitable attendant problems of high-risk pregnancies [3]. The increase in the number of "older" pregnant women with complications of pregnancy, in the context of an ultra-low fertility society, has emerged as a serious social problem [4]. Therefore, effective policies that take the characteristics of pregnant women into account should be developed and applied. High rates of pregnancy among "older" women also occur in other developed countries [5]. Until 2012, Japan had a fertility rate of 1.41, similar to that of Korea. However, Japan has maintained a fertility rate of 1.41-1.46 for 8 years since 2012 [6-8]. There

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is a need for benchmarking in Japan of policy measures to prevent further decline in fertility rates.

In Korea, the 3rd Basic Plan for Low Fertility and Aged Society (2016-2020) was announced through the Committee on Low Fertility and Senior Citizens, to support childbirth and to support women during pregnancy [9]. In addition, in Japan, the "Second Healthy Mother and Child 21" policy, which began in 2013, discussed specific management and support measures for pregnant women [10]. The policy is being implemented to enable continuous healthcare of pregnant women through linkage with medical institutions. Looking at the policy in detail, we can find the parts that are being promoted in different forms, and reflecting national characteristics.

Therefore, this study aims to analyze and compare the policies of Korea and Japan, focusing on policies relevant to pregnant women and to increasing the fertility rate, as solutions to the problems of low fertility and low birth rate in an aging society. Through this policy comparison, we would like to present an efficient and high-quality direction.

# 2. METHOD

This study was structured to involve (a) comparison of maternal health projects in Korea and Japan, and (b) comparison of infertility support policies based in regional cities in Korea and Japan.

# 3. RESULTS

# 3.1 Comparison of Maternal Health Projects

Among the key tasks of Health Plan 2030 proposed by the Korean Ministry of Health and Welfare in 2020, maternity is included as a target for health management by population group [11]. The goal of maternal health management in this policy is "by strengthening maternal health behavior practice and perinatal management, to mitigate health risks for pregnant women and fetuses in advance and to minimize the occurrence of disability, to promote healthy births and to reduce maternal mortality". In particular, this policy emphasizes strengthening healthcare for high-risk pregnant women, expanding investments to benefit vulnerable groups, and establishing a support system for infertile couples. On the other hand, in Japan, treatment targeting infertility specifically a pilot project was implemented in 2004 to alleviate the economic burdens of in-vitro fertilization (IVF) and intracytoplasmic sperm injection [12]. This was expanded nationwide in 2006. The characteristics of this project are that achieving pregnancy and childbirth are assumed to require accurate knowledge related to pregnancy, and that there is a need to widely disseminate and develop this knowledge, targeting infertile couples and explicitly including males (Table 1). In addition, as the number of people receiving fertility treatment increases, the importance of counseling support is increasing. Therefore, counseling centers specializing in infertility were established by 67 local governments, and counseling methods include the use of email, SNS, etc. [13]. One recent change that has implications for policy development in Korea is that Japan's childbirth-promotion policies and activities have been expanded and developed to include men [8].

Japan announced its "Health Policy 2040" in 2020. It includes health-promotion programs for healthy pregnancy and healthy childbirth. Among its goals is a reduction in the number of underweight babies. The policy promotes health before pregnancy, as well as treatment targeting infertility specifically [14].

#### 3.2 Comparison of Infertility Support Policies in Cities in Korea and Japan

In Korea, where decentralization that incorporates state-led welfare policies is being implemented, different maternal-health policies with impacts of various magnitudes are operating in different regions [15]. Infertility-related policy in Gangnam-gu, which represents Korea's main metropolitan area, includes health check-ups for prospective couples, support for IVF procedures, and a treatment of infertility that is based on Chinese traditional medicine. In particular, with the revision of the law in 2019, insurance coverage for expensive infertility treatments could be received without age restrictions. But, psychological counseling and

examinations of women's fertility potential have not yet been introduced as prerequisite studies [16].

In contrast, Japan is implementing the central government's infertility policy uniformly in all regions (Table 1). Japan's application of policies nationwide without taking into account the characteristics of particular regions has been cited as an obstacle to solving the low-birthrate problem [8]. The monetary value of Japan's infertility support project had been limited to 150,000 yen (1.8 million won) per individual session and 7.3 million yen (7,700 million won) per year. The total number of sessions has been limited to 6, and the support has been available only to women under 43 years of age [17]. Concerned that problems related to infertility and childbirth will worsen due to the social disaster of COVID-19 in 2020, the Japanese government increased the monetary value of the support to 300,000 yen (3.3 million won) per individual session, it removed the limit on household income, and it extended the age of eligibility by one year (to women under 44 years of age) [17]. In detail, Japan's policy is structured to relieve physical pain caused by IVF through the process of supporting the artificial insemination process first. In detail, Japan's policy is structed to minimize the physical pain caused by IVF, by supporting artificial insemination first. However, while the health-insurance system will cover artificial insemination that uses sperm collected from third parties other than the spouse, one problem that health insurance does not cover infertility treatment after artificial insemination [18].

### 3.3 Comparison of Infertility Support Policies in Local Areas in Korea and Japan

In Korea, local governments are required to establish and implement policies that meet the socio-economic situation of the region, in line with the national policy regarding low fertility. In the case of Daejeon City, a local autonomous area, infertility support has been limited to supporting the costs of procedures (e.g. intra-uterine insemination and IVF). It has not included counseling for emotional support for infertile couples or support for preemptive tests to confirm pregnancy potential (Table 1).

Table 1 shows differences between Korea and Japan with regard to infertility-related policies in three categories: The characteristics of maternal health projects, infertility support policies, and infertility support policies in cities.

Table 1. Comparison between policies in Korea and in Japan regarding pregnancy care

Category	Korea	Japan
The characteristics of maternal health projects	<ul> <li>Emphasizes strengthening healthcare for high-risk pregnant women, expanding investments to benefit vulnerable groups, and establishing a support system for infertile couples</li> </ul>	<ul> <li>Assuming that accurate knowledge of pregnancy is required to achieve pregnancy and childbirth, emphasizing the need to target infertile couples (including males), disseminating and developing relevant knowledge</li> </ul>
Infertility support policies	<ul> <li>Health check-ups for prospective couples</li> <li>Support for IVF procedures</li> <li>Treatment of infertility that is based on Chinese traditional medicine</li> </ul>	<ul> <li>Support for infertility testing for married couples</li> <li>Support for IVF procedures</li> <li>Treatment of general infertility</li> <li>Support for professional counseling on infertility for married couples</li> </ul>
Infertility support policies in cities	<ul> <li>Implement policies that vary by region</li> <li>limited support for costs of procedures to address infertility</li> </ul>	<ul> <li>implementing the central government's infertility policy uniformly in all regions</li> </ul>

In Japan, the Ministry of Health, Labor and Welfare's policy on support for couples suffering from infertility is basically the same throughout the country [8]. For example, comparing Kurume City in Japan with Daejeon in South Korea, the COVID-19 pandemic has affected government policies in the following ways [19, 20]. In 2020, with the spread of COVID-19, Kurume City began a project specifically to support the treatment of people suffering from infertility. That project has three parts. First, the age at which a woman qualified for subsidies was changed from under 43 to under 44. For women whose age at the time of the start of the first treatment was 40, the total number of times that subsidies could be given was changed from 3 to 6. Second, the treatments included (i.e., the treatment stages that are included) were changed. Specifically, procedures from egg collection to embryo freezing were included, and if embryo transfer was postponed due to the spread of COVID-19, subsidy of type "D" could also be included (Type D refers to cessation of treatment when transplantation is not possible due to poor physical condition, etc.). Finally, income requirements were changed. Specifically, the husband and wife will be eligible for a subsidy if, because of COVID-19, their total income in 2020 is expected to suddenly decrease to less than 7.3 million yen.

Thus, similarities in policy between Korea and Japan include support for health checkups and infertility treatment costs for infertile couples, and both countries support pregnancy testing, infertility expertise, and a treatment of infertility that is based on Chinese traditional medicine. In some cases, counseling is also supported. In the future, personalized policies should be provided in both countries, such as systematically managing personal health records in infertility policies [21, 22].

# 4. CONCLUSION

By comparing Korea and Japan, this study presents possibilities for efficient childbirth-support policies for Korea, to address the dangers posed by decreases in population due to the continuing low birthrate. In particular, this comparison focused on infertility-related policies among the maternal-health policies implemented in Korea and Japan. We have shown from our results that providing additional support for psychological counseling may be preferable to increasing the number of IVF procedures, particularly to the extent that the latter may reinforce consideration of women as mere tools for the production of babies. The physical burden on women may be minimized by benchmarking policies in Japan. Step-by-step application of these procedures should be systematically supported to achieve the best results.

Important policies have been introduced in Korea and in Japan to solve the problem of low fertility. Although it is difficult that the recent stability of Japan's fertility rate is the result of fertility-related policy, it is thought that it was helpful in that process of project development is carried out step-by-step, and infertility counseling centers appear to operate well. In particular, in light of the results of previous study [23] that 51.5% of women undergoing infertility treatments experience depression, a system for professional counseling for infertile couples should be established. For policies aimed against infertility to be successful, they should emphasize training of counselors to help infertile couples, along with qualitative (subjective) analyses of policy development.

As this study was conducted with a focus on infertility-related aspects of policies to encourage childbirth, one limitation is that it was not able to present a macroscopic direction for the overall policy. Subsequent studies should include comparisons of policies in a wider range of advanced countries. In addition, analyses and comparisons of Japan's and South Korea's overall childbirth promotion policies would be useful.

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