Koeki (Common Good) Philosophy in Life Sciences, with Emphasis on Medicine and Medical Technology

Mieko Oshima

生命科学領域の公益哲学、特に医療と医療技術における共通善について

大島美恵子

2003年４月のヒトゲノムの全解読をうけて、ゲノム情報がヒトの疾患治療に応用される時代に突入した。その一方で、真に人間のためになる医療とは何かという討論がなされぬままに法案化が進みつつある生殖医療の問題や、人間の尊厳を侵しかねない医療行為が治療の名のもとに行われる危険性などが浮上している。人間のためになる生命科学とは何かを考える公益学のひとつの方向を生命公益学として提案するとともに、医療分野における公益哲学を考察する。医療における公益の歴史から始め、法律の関係する二つの非公益的な話題としてハンセン病訴訟と救急救命士による気管挿管の問題をとりあげ、医療における公益性について考える。本講は、日本公益学会誌「公益学研究」第２号に書いた研究ノートをもとに、その後の新しい展開をふくめて英語訳としたものである。

1. Introduction

The Academy of Koeki Studies (Common good studies) was born in Tokyo, May 2000 and the Koeki studies started by the academy members who belonged to wide ranged interdisciplinary fields in arts and sciences.

Koeki, in Japanese word is, "a thought and acts, putting oneself in somebody's place" for common good in society. Common good in society is not absolute concept but it is relative. It is sense of value which varies according to the times at

which society exist. Koeki study is to research the above common good as an object of study. In other words, Koeki study is to examine and reconsider the problems in the present society from the viewpoint of common good. A view point of common good can be called as principle of common good or even as Koeki philosophy. And the Koeki study in natural science that the author going to discuss here, is one field of Koeki philosophy-based studies. In the Koeki study in natural sciences, problems that are derived from advancement of science and technology should be analyzed, assessed and reconsidered by using scientific data from the angle of Koeki philosophy. Without discussion of Koeki philosophy of what is common good, the Koeki study in natural science is unable to start. In this essay, the writer introduce the Koeki study in life science that affects human happiness, and show the personal views on Koeki study in medical fields.

2. Proposal for the Koeki Studies in Life Sciences

On April 2003, at the celebration of the 50th anniversary of the proposal of the double helix model for the structure of DNA by Watson and Crick, a brilliant article was reported that the whole human genome was decoded (Asahi, April 14, 2003). As a result, in the field of life sciences, their technology has been applied to the treatment and prevention of human diseases, by using genomic DNA information[1]. And further dramatic technological development is expected in the near future.

However, the rapid developments of life sciences have brought about many complicated problems concerning human life that can not be resolved within the existing frame of reference in society. They are, for example, a rejection of medical insurance along with the expectation of the future onset of a disease discovered by gene diagnosis, the propriety of gene therapy, and the ethical issue of reproductive medicine, etc. The author has observed many cases of these problems as a biochemist worked in the governmental institution with a hospital organization of advanced medical treatment.

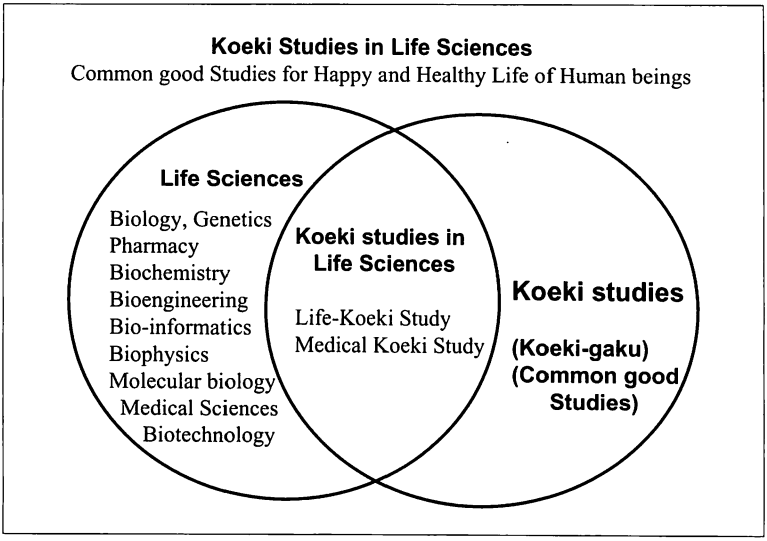
In order to resolve these problems, firstly, it is necessary to remember the core principle of life science: "Life science should be utilized for human true happiness". Furthermore, it is important to discuss and consider these problems among people of different fields who have different opinions. When one thinks of human true happiness, there should be a philosophy existing behind, which is that true happiness is not only for one's own sake, but also for the sake of everyone. That philosophy is called Koeki or common good.

Let's take up an example of reproductive medicine case which was much publicized recently in Japan: a sister gave birth through artificial insemination with her brother-in-law's sperm, on behalf of her older sister who was sterile (Reported in many Japanese newspapers, for example Asahi, May 11 and May 28, 2001). There were many people who had relevance to this issue; 1. A patient who wanted to receive the treatment because of desire for having children (a patient and her spouse), 2. A medical doctor who actually carried out the treatment at the request of patient (a doctor in obstetrics and gynecology), 3. Patient's families and those around them (a third party who were close to the patient), 4. General medical doctors who did not perform the treatment (group of specialists in medicine), 5. Scientists who have the experience in basic research on reproduction (specialists in non-medical field), and 6. The members of bioethics committee (group of specialists in non-medical field). There were issues of completely opposing ethics among those people. There were other deeper issues: the issue of the unborn baby's happiness, whether the Japanese society would accept this, and legal issue such as acknowledgement of the child. Thus, it became a big social issue that cannot be resolved only by discussions about ethics by scholars. Besides, opinions that were reported by the Japanese media were mainly from the socially high-ranked specialists, such as medical doctors, doctors in scientific societies, and the members of bioethics committee. The opinions from the patient and the medical doctor who did the treatment as well as other obstetricians were hardly discussed or analyzed. Unfortunately, discussion about reproductive medicine itself was completely put aside. And on April 2003, the specialist group of bioethics in the ministry of Health,

Labor and Welfare reported their final views on the application of the reproductive medicine in Japan (Nihon-Keizai, April 10, 2003). Their conclusion was that any case of pregnancy using uterus of others is prohibited. It means that a married couple without wife's uterus is unable to have their own child legally. And some irresponsible professor in sociology commented that the couple should accept the life without children. The law including the prohibition of the above case will be published next year. The Western nations, with an ethics based on Judeo-Christianity could rather easily get common understanding, however, in Japan, people's common understanding is not based on their religious backgrounds. The first thing is that to start discussing the matters with everyone regardless of individual, stratum or generation differences. Needless to say, the patient should be included. In the past, when there were confrontation over ethics, or a clash of interests between patients and the others, socially prominent people's opinions were often accepted in Japan. Even without discussion, opinions that were given by the authorities such as scientific societies or governmental meetings were considered right. It was Japan's bad practice that many Japanese people did not think themselves, and obeyed the authorities without expressing their opposing ideas.

In order to apply knowledge and technology of life science correctly for human true happiness, it is important to understand a present situation of life science and its practical application in Japan. At the same time, it is also important that to analyze and verify whether life science and its practical application would be really beneficial to human beings or not. That is the point at which my eyes are directed in my proposed Koeki study. In short, Koeki study in life sciences is a science that analyzes life science and its development from the philosophical point of view of common good. The necessity of Koeki study is to discuss each other and propose the best solution based on verification. Koeki study was introduced as a science that is to research generally on action that is based on nonprofit-making for the general good and its thoughts. For that purpose, it is essential to verify the Koeki from the comprehensive view of the social science, the humanities and the natural science.

The author is going to revise the relationship between life science and Koeki



following the illustration in the former papers[2), 3)]. The area where the two circles are overlapped is the field of Koeki studies in life sciences that I will propose. Followings are the actual research examples Koeki study in life sciences concerns:

1. Science and technology that are related to healthy life such as food and living environment (food additive, clothing, construction material, medicine, cosmetics, detergent, etc).
2. Science and technology that are related to agriculture and stockbreeding (genetically modified food, using cloned sheep and cloned cow, soil pollution, etc.)
3. Various issues that are related to the beginning of life (reproductive medicine, infertility treatment, artificial insemination, prenatal diagnosis, gene screening, etc).
4. Various issues that are related to the end of life (definition of death, hospice and palliative care, notification of name of disease, death with dignity, brain death and organ transplant, euthanasia, etc).
5. Modern medicine issues (quality of life for patients, to give informed consent to patients, possibility of noninvasive treatment, gene diagnosis and its harmful

effects, etc).

6. Treatment of the elderly and the weak (the elderly care, care for people who have patients with senile dementia or handicapped, nursing, care, childcare, etc).
7. Global environmental problems and necessity for the recognition of limited environment (waste disposal and recycling, global warming, etc).
8. Necessity for international cooperation for developing countries to help development of life science and technology, welfare and medical treatment.

These subjects above are those that have not gained social consensus for their solution due to the difference of people's ideas and thoughts in Japan. There is the area that needs reconsideration in life science in order for people to live happily physically, mentally and socially, which is called Koeki study in life science.

3. In pursuit of the common good in medical fields

As stated, the advancement of medical technology has brought up many issues that should be examined by Koeki phylosophy. In order to consider nature of the common good, the author show the brief history of medicine.

3-1. Brief history of medicine and medical common good

"An Oath of Hippokrates" is the first thing that medical students learn at medical schools. Since human beings were born, medical treatment that had been practicing was based on not on scientific medical knowledge but on experiences. It is said that there was already written about rewards of surgery in Hammurabi Code of ancient Babylonia in BC 2000. Hippokrates, who was born in ancient Greece in BC 450, tried to perform medical treatment based on scientific observation instead of the conventional treatment. It was mixed with arcane practices. He observed "health and disease" scientifically as natural phenomenon. Then, the ideals for physicians were described in "An Oath of Hippokrates," in short, it was about the way of

healers. He insisted that medical doctors should choose treatments those are beneficial to patients by using their very best medical knowledge, and they should never choose one that is known to be harmful to patients. "An Oath of Hippokrates" is the basic principle of medical ethics, and it is shared by that of common good. After that, medical technology has been advanced by its own or by exchanging ideas and skills in various places in the world. Around 12th century in Europe, medical science and law were born as fields of study that were controlled by Christian theology. This is the time when medical practices that were based on experiences started developing as medical science.

In the 19th century, the science was subdivided with increasing speed. The word "science" was born around 1860, and then, "natural science," "social science," and "humanities" were also created. Medical science was developed, producing new medical technology as one field of natural science.

In the 20th century, the science was further subdivided in accordance with rapid economic growth. Each science such as economics, social science, engineering, physics, and chemistry, etc., was developed separately, which made it difficult to understand each other. As a result, natural science, social science and humanities have become independent fields of studies that have little interchange.

Now, medical science that supports medical practices shows drastic development due to the advancement of life sciences. In exchange of the fortunate fact that life of incurable patients are saved and incurable diseases are overcome, developments of new way of diagnosis and treatments are conducted regardless of patients' happiness. Moreover, there is a possibility of medical performances that could violate patients' personal dignity becomes possible. It is a danger that medical science develops far from "An Oath of Hippokrates."

However, people who are engaged in medicine did not just sit back with their arms folded, watching the problematic development of life sciences, they have organized the medical ethics study group and the evidence based medicine (EBM) study group in the Committee on Science, Engineering and Public Policy under the jurisdiction of the Ministry of Health, Labor and Welfare. Moreover, very recently,

a custom of informed consent has been introducing into Japan. Doctors try to practice medicine that gratifies patients' demand, taking a position where doctors face up diseases together with patients.

Now, not only people who are engaged in medicine but are also general public should be driven by necessity of reconsideration of technological development of medicine both individually and socially from the viewpoint of the common good. My proposed "medical common good" is to seek what medicine should be socially and morally.

Following are actual two examples from recent newspaper articles that show what the medical common good is. One is the process of settlement of Hansen's disease medical-harm lawsuit, and the other is an issue of intratracheal intubation by paramedic.

3-2. The process of lawsuit on Hansen's Disease and its solution

Hansen's Disease (Leprosy) is a disease that is caused by infection of leprosy bacillus that was written even in books including the Bible in Roman era. Although its infectiousness is very low, it was long loathed due to its aftereffect that is deformation of face and the limbs. In Japan, the Leprosy Prevention Law was enacted in 1907, and Leprosy quarantine policy was officially taken since 1931. Because of this law and policy, Leprosy patients were involuntary admitted to national sanatorium by the prefecture, and were confined there until they died (since then to 1996, 22,000 patients have died in the sanatorium). They were forbidden to have contact with outside society. On the other hand, its therapeutic drug Promin was developed in 1953, and by 1960 the cure was almost established. Medical doctors in Japan who take an active practice at moment were educated Leprosy as curable disease. In the middle of 1950, the international Leprosy Association concluded that the patients needed not to be isolated, the isolation policy was being abolished among advanced nations in the world. However, in Japan, even though the cure was established, they kept isolation policy until 1996 when Abolishing Leprosy Prevention Law was enacted. While the patients took Japan to court for

human rights violation, but they were defeated, and it was impossible for them to come back to regular social life even though they were treated and cured completely. The national lawyer team for Hansen's Disease Unconstitutional Lawsuit was organized by lawyers who work on human rights protection. The plaintiffs brought cases to court in Kumamoto, Tokyo, Okayama, etc., together with those lawyers. Finally, in May 11th, 2001, the plaintiffs won the lawsuit completely at Kumamoto district court (Asahi or other newspapers, May 11, 2001). The ruling argued the following two points as unconstitutional.

1. The Ministry of Health and Welfare (at present the Ministry of Health, Labor and Welfare) neglected revisions of policy even after the establishment of the cure.
2. It was a violation of human rights not to revise the law that guarantees that the patients to be able to get medical treatment outside the national sanatorium and secure their return to society.

Then the Kumamoto District Court suggested three main principles: disclosure of responsibilities of the Japanese government, restoration of patients' human rights, and prevention of recurrence. Furthermore, it suggested that the government should not appeal and should accept the ruling.

On May 23rd, 2001, the Koizumi Cabinet announced that the government was dissuades from appealing due to the necessity of early solution, even though this issue was central to government politics (Asahi, December 24, 2001). They also announced that they would carry out supporting policy (organize pension plans, redeem patients' lost honor, eradicate prejudice toward leprosy in public, etc). On May 26th, the Kumamoto district court advised the plaintiffs and the government to compromise over bereaved families of former Leprosy patients and non-hospitalized former patients. Then the plaintiffs preliminary accepted the court advice, and the government decided to agree to open discussion, attaching the conditions (Asahi, December 27, 2001). The conditions are that former patients should be within 20

years after their death, expenses for lawyers and charge for delinquent should not be paid, inheritance by the bereaved families should be accurately judged, the court should check evidence of onset of Leprosy, etc. Basically, the government accepted the court advice, and the money paid to settle out of court was up to 60 billion yen. It has been almost 90 years passed since the patients forced to be isolated.

In Japan, it often happens that once a law is enacted, it does not change even though the law did not suit the actual situation anymore. The responsibilities of the government and successive Ministers of Justice and politicians who ignored patients' claims and hid the reality for a long time from the general public are heavy. This example that the government executed a policy that they believed was beneficial to the nation and the public, but in fact, it was far from the real common good. We should make efforts not to make the same mistake by announcing the inspection and results swiftly. It shows clearly that verification and reflection from the common good point of view (Koeki philosophy) is significant.

3-3. Problems of intratracheal intubations by paramedic

The development of a problem of intratracheal intubation by paramedic is also similar to the Hansen's Disease lawsuit. At the end of 2001, it was reported that intratracheal intubation by paramedic was performed in northern part of Japan, such as Akita and Yamagata prefecture. So the local government sent an official notification to saying that paramedics should observe the law (Asahi, December 10, 2001).

This issue traces back to 1990 when the Emergency Lifesaving Bill was enacted. In the middle of consideration of the bill, a firehouse that employs paramedics proposed the idea, saying that paramedics can perform intratracheal intubation in an ambulance. Then Japan Medical Association opposed it. They insisted that only medical doctors perform medical treatment in an ambulance. Of course it is an ideal to have the ambulance in which medical doctors always ride, it is impossible to have these cars in an out-of-the-way area such as Tohoku. Although the parties concerned knew this fact, the Emergency Lifesaving Bill passed under the pressure

of Medical Association. In other words, doctors' vested rights took precedence over patients' benefit. As a result, about 10 years have passed, with the contradiction that if the law is observed, life cannot be saved in an emergence.

Meanwhile paramedics took some actions, for example, Akita prefecture announced the rate of lifesaving in the past (Asahi, December 9, 2001). Shonai district in Yamagata also reported (Asahi, December 13, 2001). They said that the survival rate of lifesaving treated by paramedics could be better. There are many examples that paramedics actually saved lives.

However, on March 2002, an opposite article appeared in a newspaper (Asahi, March 27, 2002). This says that a research group in the Ministry of Health, Labor and Welfare (the leader, Prof. Hiroyuki Hirasawa, Chiba University) conducted a research on the foreign literature on this subject. The report said that it is groundless that intratracheal intubation by paramedics was helpful to increase the survival rate of patients. How should we analyze this? The research was based on foreign literature and reported by a research group that consisted only of all governmental specialists. They did not analyze actual cases that happened in Japan. It is obvious that there is no cases exist on official literature because this act is illegal in Japan.

The argument by Medical Association is that intratracheal intubation is risky work, so leaving it to paramedics is dangerous. And only medical doctors can perform the procedure. This is medical doctors' conceit. Whoever one would be, if one has no special skill and knowledge, one cannot save life. From Japan Medical Association's argument, there is no common good philosophy at all.

When the Japanese Society for Emergency Medicine sent out the questionnaire to its councilor, 70 % of them replied, and the result was announced (Asahi, April 26, 2002). According to the result, 93.3% of councilors answered intratracheal intubation by paramedics should be admitted if training were appropriately offered. The unreasonable law should be revised as soon as possible and the training system should be organized for paramedics without bowing to the pressure from the Medical Association. The law should protect people.

4. Conclusion

The author took up two medical examples concerning law here, but there are many such cases that exist. Newspaper articles that related to medicine are widely ranged from medical accidents, new medical treatment, problems in medical expenses, problems of medical system reforms, care for the elderly and the handicapped, medical insurance, etc. There are piles of problems that should be resolved in the common good way one by one.

Practical medical technology is not only based on medicine, but also many other fields of study. For instance, they are nursing, laboratory medicine, medical engineering, physical therapeutics, health economics, law, medical sociology, etc. To analyze medicine from the common good viewpoint, it is necessary to cooperate with all those fields of study.

The past development of medicine was often written as a brilliant success in Japan. However, various medical-harm lawsuits show that the development had negative impact as well. The medical common good study also analyzes the negative aspects that happened in the past. This can be applied to other science and technology fields. Technology is created by the most advanced scientific knowledge, and later, it was often found to be harmful to human beings. When it was found to be harmful, reflection and revision is necessary as soon as possible. In order to revise it, the Koeki philosophy can provide the basis and the frame of reference. And here the significance of Koeki study lies.

Scientists must understand possibility and limit of developing science and technology very well. Scientists have an obligation to convey their knowledge to the general public accurately with plain words. Otherwise, people expect too much of cutting-edge of science, and once problems happen, they tend to become negative toward the development of science itself. Scientists should think of the development of science and technology based on the common good philosophy (Koeki philosophy), "what is true happiness for human beings" with the general public. There the common good (Koeki) can develop.

5. References

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