

Report: Planetary Health × Planetary Health Alliance

Deterioration of the natural environment brings a threat to human health. Planetary health: a concept that will change healthcare in a new age.

The Healthcare Paradigm Shift in the Post-COVID-19 Era - #5

By Center on Global Health Architecture

Ocean warming is reducing the size of fisheries and moving their populations away from the tropics and toward the poles. This is one example of many of how rapidly changing environmental conditions are threatening the health of people around the world.

The concept of "planetary health," in which the relationship between such global environmental changes and human health is demonstrated through a scientific approach and linked to various action guidelines, is now spreading worldwide. The Planetary Health Alliance advocates this concept and is a crucial part of the core for research, experimentation, and information accumulation. Samuel Myers, director of the organization, believes that the spread of this concept will help change the future of our planet. What are their goals for planetary health?

In this series, Mitsubishi UFJ Research and Consulting will focus on domestic and overseas companies and organizations that we believe will bring change to the healthcare industry and examine healthcare in the Post-COVID-19 Era from global health perspectives and planetary health.

This is an article published in a series with Forbes JAPAN, which is based on an interview with Samuel Myers from Planetary Health Alliance in February 2022.

The Need to Collect Our Wisdom and Work Together to Address Environmental Issues

We human beings are members of the global community. Since the environment of the Earth highly influences our health, the Earth must be healthy for humans to live healthy lives.

It took a long time for humanity to reach such an important idea. The concept of planetary health, the idea that the health of humanity and the health of the planet are inseparable, is gradually beginning to spread worldwide with the launch of a joint committee in 2015 by the Rockefeller Foundation and the global authority medical journal The Lancet.

Samuel Myers, Director of the Planetary Health Alliance (PHA), a global organization established with support from the Rockefeller Foundation to promote planetary health, shares the background of the organization's founding.

“PHA was established in 2016, shortly after the Lancet - Rockefeller Foundation Joint Commission issued its report on Planetary Health. The report is an assessment by The Lancet of urgent global health threats such as climate change, biodiversity loss, pollution, and resource depletion.

If we are going to address the threats in the report, we should also know how we should take action against it. With this in mind, we proposed the establishment of a PHA at the same time as the report. Therefore, when PHA was first established, the goal was to speed up the growth of planetary health-related research, education, and an interdisciplinary field, by creating a platform that would bring together various organizations from around the world in one place.”

The Concept of Planetary Health Spreading Around the World

As PHA advocates planetary health, the emphasis is on scientific evidence.

In order to prove the "important idea" of humanity's connection to nature that we mentioned at the beginning of this article, we need to connect the dots and make a line with scientific evidence. Myers and his colleagues have tried to prove how dependent humanity is on the natural systems of the moment with a scientific approach.

Myers:

“For instance, I took the lead in an experiment in which six different grains are grown at higher than normal CO₂ concentrations. The experiment showed that the nutrients in the grains were reduced, with particularly large losses of iron, zinc, and protein. The CO₂ concentration we set in this experiment is the concentration we expect to reach in the middle of this century. Currently, 1-2 billion people already suffer from nutrient deficiencies. If the Earth's CO₂ concentrations reach that level, the number of people at risk of zinc and other deficiencies will increase by 150 to 200 million people.”

Other studies continue to connect the dots, such as the relationship between pollinator shortages and crop yields, the recent increase in wildfire smoke damage, and the risk of death from new coronavirus infection.

Myers:

“About a quarter of the gap between highest possible yields and actual yields on farms is due to a shortage of wild pollinators. Lack of pollinators reduces the harvest of fruits, vegetables, nuts, and seeds that provide preventive effects against heart disease, stroke, and some cancers. These are just a few examples of how the decline of bees and other insects, and thus the loss of biodiversity, directly affects human health.

In addition, climate change has led to widespread wildfires in North America, Europe, southern Siberia, and the Amazon. Data has shown that people exposed to smoke damage in these areas have a higher mortality rate

from new coronavirus infection. Factors such as climate change, wildfires, and air pollution have been linked to the risk of severe infectious disease.”

These specific examples are only some of the results of research conducted by the planetary health community. Six years after its founding, the organization has grown to more than 300 member organizations in 60 countries. It has expanded its efforts from academia to education while creating regional hubs and working with international organizations to promote planetary health. The European Environment and Sustainable Development Advisory Councils Network (EEAC Network), an advisory body to 13 European governments and parliaments, adopted Planetary Health as its framework for 2022, and new planetary health hubs are spreading in the Caribbean, South Asia, East Africa, and other regions.

Myers:

“A new aspect of mainstreaming planetary health has been added to our activities over the past year and a half. Various actions are taking place globally, such as creating degree programs at universities and the publication of academic journals. Our intention is to translate our accumulated knowledge and framework into more concrete actions and decisions. We are increasingly focusing on mainstreaming planetary health to the private sector, policy makers and the general public to help grow awareness that protecting and restoring our planet’s natural systems is a matter of urgent self-interest.”

“With that view, we emphasize working with international organizations beyond the national level. The United Nations Development Programme (UNDP) has been embracing planetary health and is framing its next three years health agenda with planetary health at its core.

The World Health Organization (WHO) has also become steadily aware of planetary health, and the concept of planetary health was incorporated considerably into the Geneva Charter of well-being published in December 2021. More recently, WHO announced that the theme of World Health Day (April 7, 2022) will be “Our Planet, Our Health.” The fact that these activities, which initially started at the university level, have expanded to the national and international stages indicate that the concept of planetary health has gained worldwide acceptance.”

How Can Japan Contribute to Planetary Health?

The concept of planetary health is gaining recognition worldwide, yet it is not something we hear much about in Japan. In general, where does Japan stand in terms of planetary health?

Myers:

“Japan is in a very unique position in planetary health, and I think it is a possibility for Japan to become a leader in this field. This is because Japan is experiencing situations that the world will eventually experience.

One example is while Japan has advanced technology, it faces a declining population. This is a problem the world will face in the near future. As an island nation, people in Japan are also used to living within environmental boundaries and are highly sensitive to sustainability. Given these characteristics of Japan, it can be seen as an excellent potential model case to lead the way in planetary health.

And not to forget the very exciting activities of Nagasaki University. They have translated the textbook, *Planetary Health, Protecting Nature to Protect Ourselves* published by Island Press and are trying to spread the concept of planetary health throughout the university. In order for us to realize and make major changes in the way we live for a sustainable global environment, the so-called Great Transition, we need to break down vertical barriers and think together with people from different fields, such as engineers, economists, and agronomists. In this regard, I would say that Nagasaki University's approach is innovative.”

Michikazu Koshiha, Head of the Center on Global Health Architecture at Mitsubishi UFJ Research and Consulting (MURC), adds the situation in Japan to what has been said so far.

Koshiha:

“In Japan, several universities are members of PHA, including the University of Tokyo and Nagasaki University. Among them, Nagasaki University is the only university that has launched a planetary health initiative and is a signatory to the São Paulo Declaration created by PHA in 2021.

On the other hand, as discussed in the PHA's history, planetary health approaches in Japan are currently being developed mainly in universities. When you look outside the country, Beyond Meat, a U.S. company that produces plant-based meat alternatives, and Gore Street Capital, which builds renewable energy infrastructure, sponsored the 4th Planetary Health Annual Meeting. Moreover, in Singapore, Impossible Foods, a company that offers alternative meats, and in China, Ant Group, a company that issues green energy points (Ant Forest) through Alipay, have developed businesses with a strong focus on planetary health. However, Japanese companies have not moved that far.

Japan has continued to take the global initiative in environmental countermeasures. There is also a history of positive efforts by Japanese companies that have been highly evaluated. We have high expectations of the possibility of new approaches by Japanese companies through concepts such as Planetary Health in the future.”

What Businesses Will Do Is Key to Expanding the Movement

Planetary health is a new concept whose range is extensive, and it is difficult to indicate the size of the market. However, suppose the size of the global health market is translated into SDGs Goal 3 (Ensure healthy lives and promote well-being for all at all ages). In that case, the estimated market size is calculated to be around 123

trillion yen (about 1,062 billion dollars). If the Great Transition is the path to planetary health, then businesses must participate. If so, what does the PHA expect from business?

Myers:

“We have recently expanded our activities into the business area. We have been working recently with several individual businesses and the World Business Council for Sustainable Development (WBCSD). We are also starting to teach planetary health courses to executives from companies in the financial services field. We are also receiving an increasing number of inquiries about how planetary health can be linked to sustainability-related activities within different companies

Despite the fact that PHA does not have direct contact with investors, we are aware of the need to collaborate with the financial and banking fields in order to achieve the Great Transition. In a recent case, we provided planetary health training to the management team of a very large multinational bank which is often involved in critical infrastructure development. By expanding this type of training to the financial and banking fields, we aim to create an environment that will encourage companies to take the right actions.”

While PHA may illuminate the financial and banking fields, it does not seem to swim with the tide of cash flow. Instead, there is a glimpse of a strong will to work in the public interest and scientific activities for the benefit of humanity and the planet as a whole, rather than seeking profit for someone else. At last, after listening to Myers' story, Koshiba concludes the series on the future of healthcare.

Koshiba:

“A concept such as global health has been considered as a health issue in developing countries, but global pandemics such as the new coronavirus showed the importance of people working together across borders. Then the new concept, planetary health, was introduced, and we are confronted with the fact that healthcare issues exist that need to be addressed on a global scale.

We believe that companies have a significant role in supporting these concepts and working to solve actual problems. For the sake of fully meeting these social expectations, it is essential to make effective use of ever-evolving technologies and promote them to benefit them in society.”

Japanese companies are joining hands domestically and contribute to healthcare from Japan to the world, and the entire planet is just around the corner. Our team at MURC will continue to support companies and organizations working on planetary health.

▼Profile**Samuel Myers**

The founding director of the Planetary Health Alliance, he received his B.A. from Harvard College, MD from Yale University School of Medicine, and MPH from the Harvard TH Chan School of Public Health. He is a physician in internal medicine.

He understands and quantifies the impact of the collapse of Earth's natural systems on human health and supervises the activities of an organization with the goal of incorporating that information into global resource management decisions.

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