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Health and Global Policy Institute (HGPI) Planetary Health Project Policy Recommendation Model Core Curriculum for Nursing Education Looking Towards

<u>The Future of Post-SDGs: The Necessity of a Planetary Health</u> <u>Perspective Including Climate Change and Health</u>

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) is currently reviewing the revision of the Model Core Curriculum for Nursing Education (hereinafter referred to as "the Curriculum"). The new curriculum is scheduled to be in implemented from the 2026 academic year. Prior to nursing science, the Model Core Curriculum for Medical, Dental, and Pharmaceutical Education was revised in the 2022 academic year, and education based on the new curriculum started in the 2024 academic year. In the medical education curriculum, one of the basic policies of the revision is to incorporate the qualities and abilities required of physicians in a society 20 years from now. As part of this, "climate change and medicine" has been newly added to the curriculum.

In recent decades, health issues caused by emerging infectious diseases and weather disasters resulting from global environmental changes such as climate change have been affecting the entire world. Climate change is the root cause of overall environmental problems, affecting the social determinants of health (clean air, safe drinking water, adequate nutrition, safe living conditions, etc.). This situation threatens basic human rights, including the right to life and the right to a healthy environment, affecting not only the current generation but future generations as well. In response to the challenges of climate change and health impacts that affect all people and all generations, there is a growing recognition worldwide of the importance of incorporating a comprehensive understanding of "sustainability" and "planetary health" in the education of healthcare professionals, with reference to discussions such as the Sustainable Development Goals (SDGs).

Planetary health is a concept that explores the mechanisms by which the Earth's natural system and human health interact. The "external environment," including the physical, chemical, biological, and social environments, which nursing has traditionally considered as a category for understanding the subject, can also be considered an aspect of planetary health. However, it is necessary to recognize the inseparable link between human health and the health of the earth (natural environment) based on the concept of planetary health, and to focus on both aspects in the future.

The importance of nursing's role in climate change issues has been advocated globally for more than a decade, and the International Council of Nurses (ICN: International Council of Nurses) released a statement in 2018, "Nurses, Climate Change and Health," which states that "[I] Leadership from nurses to take immediate action to build climate resilient health systems is necessary ."In addition, universities outside of Japan, particularly in Europe and the United States, have begun to incorporate topics such as "planetary health," "sustainable

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healthcare," and "climate change and health" into their medical and nursing curricula, and the American Association of Colleges of Nursing (AACN), which is referenced in the revision of the Model Core Curriculum, has also begun to incorporate these topics into its curriculum. In the "Essentials" of the American Association of Colleges of Nursing (AACN), which is referenced in the revision of the Model Core Curriculum, clearly states the importance of understanding "Planetary Health" and "Climate Science."

In response to such social backgrounds and trends in Japan and abroad, it is essential to introduce the perspectives of "planetary health" and "climate change and health" into nursing education in Japan in order to develop nursing professionals who can respond to these issues in the future. Based on this way of thinking, HGPI proposes the following recommendations for the revision of the Model Core Curriculum for Nursing Education, particularly with regard to the "qualities" and "abilities" required in the curriculum.

In preparing the proposal, revisions were proposed based on the "Reference 4 Outcome of Project 2 [proposed abilities and qualities]" proposed at the second meeting of the Liaison and Coordination Committee on the Revision of the Model Core Curriculum for Nursing Education, held on February 1, 2024. The revised Model Core Curriculum for Nursing Education is expected to consist of four chapters: "Introduction," "Chapter 1: Basic Qualities and Abilities Required of Nurses," "Chapter 2: Learning Objectives," and "Chapter 3: Learning Evaluation and Strategies," The contents described in "Outcome of Project 2 [Proposed Competencies and Qualities]" will be reflected in the contents of Chapters 1 and 2. The items to be included in Chapters 1 and 2 are important items that determine the learning content, and it is expected that the planetary health perspective will be incorporated in this project.

1. "Abilities" and "Qualities" required in nursing education in the post-SDGs era

Regarding Document 4 "Outcomes of Project 2 [proposed abilities and qualities]" presented at the "second meeting of the Liaison and Coordination Committee on the Revision of the Model Core Curriculum for Nursing Education" held on February 1, 2024, the following revisions in red in Table 1 are proposed for revision.

Level 1	Level 2	Level 3	proposed qualities and abilities	proposed amendment
PR: Professionalism	Ethical Conduct in Nursing Profession	Basic Understanding of Ethics in Healthcare	Explain norms, principles, and guidelines related to ethics in medicine and nursing (e.g., Principles of Ethics, Ethical Guidelines, Code of Ethics for Nurses, Declaration of Helsinki, Belmont Report, Nuremberg Code, Lisbon Declaration, Universal Declaration of Human Rights).	Explain norms, principles, and guidelines related to ethics in healthcare and nursing (e.g., Principles of Ethics, Ethical Guidelines, Code of Ethics for Nurses, Declaration of Helsinki, Belmont Report, Nuremberg Code, Lisbon Declaration, Universal Declaration of Human Rights, "Nurses, Climate Change and Health").

Table 1 "Abilities" and "Qualities" required in nursing education



		Understanding Ethical Issues in Health Care	Understand the significance and overview of basic human rights related to health, including the right to life, and social security (social insurance, social welfare, and public assistance).	Understand the significance and overview of basic human rights related to health, including the right to life and environmental rights , and social security (social insurance, social welfare, and public assistance).
	Accountability for Professionalism in the Nursing Profession	Acting as a Professional Group towards Society	Able to act to eliminate inequality due to diversity.	Able to act to eliminate diversity and generational inequality.
SO: Health Support in The Community	Community and Health	Environment and Health	Explain the relationship between the natural environment, social environment, and global environmental issues and human health.	Explain the interrelationship between the global natural environment, social environment, and human health, namely from the perspective of the planetary health.

2. Current state of nursing education and three specific future considerations

In the 2017 "Model Core Curriculum for Nursing Education in Japan," which is currently the standard curriculum, the items in Table 2 below are related to the issues of environment and planetary health.



Table 2: Aims and Learning Objectives in Current Nursing Education

B-2-2) Environment and Health

Goal:

Learn the current situation and issues of environment surrounding people's living and its relation to health.

Learning objectives :

a. Explain environment (social/cultural environment, physical/chemical/biological

environment and political/economic environment)

- b. Explain the current situation and issues of environment and its relation to health and life.
- c. Explain the influence of drugs and radiation on health/living.
- d. Explain the necessity of working on environment to support health.
- e. Explain the influence of disaster on health/living.

f. Understand the relation of environment to health/living knowing genetic/sexual diversity.

B-3-2) Ethics in Nursing

Goal:

Understand knowledge regarding ethics and dignity of life/human beings, in healthcare/medical care/welfare.

Learning objectives:

b. Explain standards/principles and guidelines (ethical principles, ethical guidelines, ethical principles

for nursing professionals, Helsinki Declaration, Belmont Report, Nuremberg Code, Lisbon Declaration, Universal Declaration of Human Rights, and so forth) regarding ethics in medical care/nursing.

E-3 Nursing practice in time of disaster

Goal:

Learn the preparedness for disaster and ways of nursing, and the nursing knowledge necessary for region-wide preparation even in non-emergency and for victims and areas in time of disaster.

In the above, current Table 2, the section "**B-2-2**) Environment and Health" includes many items related to planetary health. This is compared to the five areas of the Planetary Health Education Framework proposed by the Planetary Health Alliance (PHA), an organization of more than 420 universities, non-governmental organizations, research institutes, and government entities around the world: (1) interconnection within Nature

(2) the Anthropocene and health are considered to be covered. In addition, learning objective (4) in the 2017 Model Cole Curriculum, "d. Explain the necessity of working on environment to support health" also includes elements related in part to 3) equity and social justice, and 4) movement building and systems change.





What should be strengthened in the "Environment and Health" component in the future is to gain more knowledge about the interrelationship between human and global health based on a "planetary health" perspective, as well as knowledge and methods for nurses and health professionals to create social movements to change people's consciousness from the perspective of equity and social justice.

In the section **"B-3-2) Ethics in Nursing,"** several specific examples are provided as norms, principles, and guidelines for ethics in healthcare and nursing.

However, the "Nurses, Climate Change and Health," published by the ICN, is an important guideline from an equity and social justice perspective and should be included as part of the study content. The effects of climate change will be felt more strongly by future generations because of the time lag before they become apparent. We need to think and act on intergenerational inequalities as well as inequalities due to

In the section **"E-3: Nursing Practice in Times of Disaster,"** the learning aim is defined as peacetime preparedness and responding to a disaster. In particular, natural disasters such as torrential rains, floods, and heat waves caused by climate change have the potential to increase injuries and deaths.



As climate change is expected to increase the occurrence of unpredictable and largescale natural disasters in the future, these items will become increasingly important, but at the same time, it will be necessary to learn **how to prevent climate change from exacerbating the causes of disasters**. Currently, the healthcare sector accounts for 4.6% of Japan's total greenhouse gas (GHG) emissions, and unless the current healthcare system is reviewed and adapted to further increases in healthcare demand, GHG emissions are expected to continue to rise. Learning about measures to decarbonize

It is important to recognize that human health can only be achieved through the existence of a healthy global natural environment, and that the two are inseparable. Nurses, along with advocating for people's "right to life," are also expected to learn about and act as advocates for the foundational "environmental right." The conceptual elements of "environment" in healthcare need to be reconsidered and a paradigm shift to a new concept of "environment" that incorporates planetary health is necessary.

¹ 1) Interrelationships in nature; 2) Anthropocene and health; 3) Equity and social justice; 4) Movement building and systems change; 5) Systems thinking and complexity

² Environmental rights are defined as "the right to enjoy and control a good environment as a condition for maintaining a healthy and comfortable life," etc.



Reference:

Definition of environment in nursing.

(Japan Academy of Nursing Science. From the Committee for Academic Terminology Review in Nursing - Glossary of Important Terms Constituting Nursing Science)

"In nursing, the environment is generally divided into two aspects: the internal environment and the external environment. The internal environment includes the internal mechanisms that maintain homeostasis within the organism, while the external environment includes the external conditions that affect human life and survival and is discussed as the physical, chemical, biological, and social environments.

Nursing professionals should be well versed and skilled in analyzing the environment and the ways in which it and the interactions of key elements within it affect human health. Based on that analysis, they can help people regain their health while improving the environment that is affecting their health."

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Author

- Shu Suzuki (Senior Associate, Health and Global Policy Institute)
- Kozue Matsumoto (Program Specialist, Health and Global Policy Institute)
- Eri Cahill (Program Specialist, Health and Global Policy Institute)
- Joji Sugawara (Vice President, Health and Global Policy Institute)

Health and Global Policy Institute (HGPI)

Grand Cube 3F, Otemachi Financial City, Global Business Hub Tokyo 1-9-2, Otemachi, Chiyoda-ku, Tokyo 100-0004 JAPAN TEL: +81-3-4243-7156 FAX: +81-3-4243-7378 E-mail: info@hgpi.org