Model Core Curriculum for Nursing Education in Japan

Learning objectives aiming for acquiring

"core abilities of nursing practice in bachelor's degree program"

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Committee for Fostering Human Resources in Nursing Education, MEXT, Japan

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Notes

- *1 Notation of person (people) as the object of nursing is "person" in principle while if it is limited to the person who is receiving medical care such as hospital treatment, "patient" (e.g., patient-centered medical care) is used. However, when the use of contextually universal expression is more appropriate, "object" is used (e.g., "understanding of the object").
- *2 Parentheses denote a synonym, explanation, or example of the preceding term.
 - Example) Medical accident possible to occur on a daily basis (incident, nosocomial infection, needlestick accident)
- *3 As for group and organization names, the portion indicating corporate status is abbreviated.
- *4 The level of achievement at the end of each sentence titled "Learning Objectives".

The level of achievement is broadly graded in i "(learn the subject matter and) understand", ii "(understand and) be able to explain", and iii "(explain and) be able to practice" roughly. Further, "being able to explain" indicates the ability of deeper understanding and commenting than "be able to give an outline".

"Be able to participate" indicates the ability to take part in planning and carry out independently more than "be able to join"

View of Model Core Curriculum for Nursing Education

1 Background of t of formulating the model core curriculum

O Issues in the current nursing science education

Triggered by the enforcement of "Act on Assurance of Work Forces of Nurses and Other Medical Experts" in 1992 and other similar statutes, the number of nursing universities rose rapidly in the country, from 11 in 1991 to 255 in 2017. Among those who passed the national examination given in February of 2017, the ratios of graduates from nursing universities in exams for nurses, public health nurses and midwives were 32.5%, 90.3% and 26.6%, respectively.

Given the circumstances, the final report complied in March of 2011 by "Committee for Fostering Human Resources in Nursing Education" (hereinafter "the 2011 report") made material proposals regarding the quality assurance of nursing education in universities, such as suggesting to make the training of public health nurses in bachelor's degree programs optional for each university and specifying 5 groups of abilities necessary for nursing practice of nurses trained in the bachelor's degree program implemented by "Core Abilities of Nursing Practice on Bachelor's Degree Program and Achievement Goals at Graduation" and 20 nursing practice abilities comprising aforementioned groups.

While each university has made efforts towards the fulfillment of education based on the same proposal, some issues needing further improvements have been pointed out, such as securing the training fields, redeployment of teaching staff and retention of educational standards, practice of systematic education based upon the principles and objectives of the university, dissolving the dissociation of departmental education and postgraduate nursing practice, and elevating the ability of evidence-based nursing practice.

O Responding to social change

Recently, in our country of low birthrate and aging society, various reforms such as comprehensive reform of social security and taxes concerning the way nursing should be have progressed. The roles and workplaces of nursing profession are being diversified, including health promotion and preventative care in the community, by construction of a medical care provision system and the community-based integrated care system based on regional medical care vision. Meanwhile, they are required of nursing practice abilities to observe and assess people's physical conditions in various situations and to respond accordingly and appropriately. Besides, aiming for implementation of patient-focused medical care, they are required to play roles as members of teambased healthcare and multi-disciplinary collaboration, demonstrate nursing expertise and cope with further medical safety. Furthermore, they are required to be able to understand and assess the change

of standpoint of nursing in the society, the trend of medical costs, and the effective use of limited medical resources, as a member of society as well as a medical professional, and to be able to foresee various changes that are likely to recur and respond by constantly reassessing their own roles.

In nursing science education in universities, enrichment of the contents of bachelor's degree program is required, in order to train high quality human resources possessing the abilities necessary to be a nurse in response to those social changes.

O Discussion process in this committee

Under these circumstances, "Committee for Fostering Human Resources in Nursing Education, MEXT, Japan" was established in October of 2016, in order to discuss specialized matters regarding improvement and fulfillment of nursing science education in universities. This committee, with the background of the rapid increase of nursing universities and heightened social demands for fulfillment of nursing science education, is to propose learning objectives materializing "Core Abilities of Nursing Practice in on Bachelor's Degree Program and Achievement Goals at Graduation" to contribute to sustain and improve the standards of nursing science education in bachelor's degree program of each university¹; established a working group for a number of specialized reviews; continued discussions reflecting the results of widespread public hearing, and now compiled the "Model Core Curriculum for Nursing Science Education".

2. Purpose of formulating the model core curriculum, its utilization in university education

O Purpose of formulating the model core curriculum

This model core curriculum extracts core contents that all nursing universities have to commonly work on in the education (inclusive of education as a commonly needed basis for public health nurses, midwives and nurses) of nurses in a bachelor's degree program and enumerates learning objectives as reference to construct curriculum in each university.

Each university, of course, has to construct the curriculum independently and autonomously based on its original principles and features, considering the social demands of human resource development in each field, characteristics of disciplines and so on. On this assumption, this curriculum was composed for the purpose of presenting to the parties concerned with nursing universities and broadly to the citizens the specific learning objectives for students necessary to acquire essential nursing practice skills before they complete the bachelor's degree program for

¹ For each university, public health nurse and midwife education in nursing science education in a bachelor's degree program is optional, this model core curriculum proposes learning objectives regarding nurse training education inclusive of basic education commonly needed for public health nurses, midwives and nurses.

nursing science, contributing to the fulfillment of education for nurses in a bachelor's degree program and quality assurance for the society based upon the status of utilization of "Core Abilities of Nursing Practice in on Bachelor's Degree Program and Achievement Goals at Graduation" indicated in the 2011 report and subsequent changes in environment around nursing education including system reform.

Further, this model core curriculum needs to be reviewed and revised as social needs, the expertise and techniques required of human resources for nursing change.

O Utilization in each university

When each university composes the curriculum, not only learning objectives but also learning contents and methods, ways to evaluate learning outcomes and so forth are to be considered. This model core curriculum does not define a framework of curriculum, and each university is to use its own judgment when composing the curriculum inclusive of setting of class subjects, teaching methods, order of courses and so forth. It is expected that each university utilizes the learning objectives given in the model core curriculum as reference in the process of composition and evaluation of its own curriculum.

In establishing the model core curriculum, the final learning objectives are described aiming for acquiring so-called competency and carefully selected to be completed in two-thirds of the hours of study at each university. Each university is expected to contain the learning objectives proposed in the model core curriculum and to construct distinctively original curriculum yet fulfilling the contents of "Regulation for Enforcement of the Act on Public Health Nurses, Midwives, and Nurses".

Further, it is difficult to acquire before graduation all the new knowledge and skills along the progress of medical and nursing care and the background studies and science and technology, that is assumed to be acquired throughout one's lifetime, and it is necessary to carefully examine what is to be given before graduation.

In nursing science education, in addition to distinctive efforts and improvement of class contents in each university such as an education that cultivates the orientation towards nursing research and elaboration of teaching methods to listen to the voices of people outside of nursing parties, it is required to improve the teaching abilities of staff to implement those matters mentioned above, and to improve the practical abilities of teaching staff supposing the clinical and regional training practice. Further, the development of human resources that are capable of scientific inquiry from a nursing viewpoint is demanded, as well as developing critical/creative thinking ability as a bachelor's degree holder, not limited to giving specific expert knowledge and skills; high standards of ethics as a professional, establishing professional identity; information gathering capability in research and clinical settings; training reading comprehension; and reinforcing self-insight by knowing oneself well, and introspection to deeply look back at oneself as a basis for the ability to build interpersonal relationships.

"Standards Referenced in Curriculum Organization for Quality Assurance of Nursing Education in Universities" was established in September of 2017 by "Subcommittee for Nursing Science, Committee on Health/Human Life Science, Science Council of Japan"². And, the Committee of Evaluation for Nursing Science Education at Japan Association of Nursing Programs in Universities is discussing "structure and contents of competency-based education for bachelor's degree in nursing". It is expected to result in an education of further high quality used together with this model core curriculum.

O Presenting "basic qualities/abilities" in nursing science and ensuring commonality with other medical human resources

At this composition of model core curriculum, basic qualities/abilities needed for human resources for nursing are demonstrated confirming they are consistent with the contents shown by the definition of 20 nursing practice abilities in 5 groups given in the 2011 report. They include common ground values to be shared among various professions as medical professionals from the viewpoint of promoting the team-based healthcare and so forth, and others that human resources for nursing are uniquely required to bear in the field of team-based healthcare.

Further, the 2011 report pointed out that it is subject to discussion to arrange the formats similar to the model core curricula of medicine/dentistry/pharmacy, and the revision of the model core curriculum of medical and dental education conducted in 2016 also stressed the importance of efforts to keep consistency among other professions, the structure of this model core curriculum is to follow those points. In training the medical professionals, the promotion of horizontal cooperation will contribute to the clarification of roles and flexible coordination in clinical settings. In order to respond to the expectation of citizen for health care and medicine in Japan, it is necessary to make the contents of undergraduate education even more mutually consistent among nursing science, medicine, dentistry and pharmacy.

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² Reference standards in composing the educational program are to propose basic approaches and so on regarding individual characteristics of each academic field, basic knowledge that all the students need to acquire, learning methods and evaluation of learning results, to be referenced in the process of the composition of educational programs in each university, and are being worked on a field by field basis by the Science Council of Japan. In the "Principles of Quality Assurance according to academic field in University Education" that the Science Council of Japan compiled in July of 2010, the curricula and their differences in medical, dental, pharmaceutical, nursing fields and so on are said "it is between quality assurance regarding the training program of specific professionals and general quality assurance of field-by-field university education", "each has its own objective, and it is hoped to be appropriately understood that each is essentially not to compete against each other and that each university independently chooses its options to be taken."

O Practical training

In order to respond to heightening expectations of citizens for human resources for nursing in recent years, it is indispensable to fulfill the clinical and regional training practice. The report "Committee on Development of Nursing Education" compiled in 2002 positions the significance of clinical and regional training practice as "the clinical and regional training practice of nursing is where students put themselves in the practice given by nursing professionals and give care as a nursing professional. In this learning process, they intend to integrate the knowledge/skills/attitude learned on campus and acquire nursing methods. Students conduct nursing acts towards the object person and verify what they learned at school practically and deepen their understanding further. The clinical and regional training practice is an essential process to reach from the stage of "knowing" and "understanding" to the stage of "using" and "practicing"." The abilities of nursing practice is "to be cultivated in the process where students themselves intensely practice nursing facing the object person who receives the nursing services" and the fields where adequate support system and appropriate opportunity of clinical and regional training practice are possible need to be secured.

Regarding this matter, since students' learning levels of nursing practice abilities are immature, it is pointed out that universities tend to set the health level of objects according to the readiness of the students when universities request the training practice from the viewpoint where they consider the risk management is important. Adequately considering the risk management, the fulfillment of guidance systems is expected in the clinical and regional training practice such that students grasp nursing needs where they are necessary in line with the real medical circumstances and can acquire the ability to execute the nursing process. Moreover, it has also become a problem to secure the field of clinical and regional training practice, since it is expected that students can expand their recognition of reality and acquire nursing practice abilities by executing the nursing process in various settings such as scene of daily life, schools and working fields, and conducting training practice to expand the width of experiences. It is necessary to discuss the modality of clinical and regional training practice in various settings.

Further, in the training practice, communication skills will be developed by comingling with other professions at training facilities and so on and by learning cooperation/collaboration, and some thought must be given to cultivate the awareness regarding team-based healthcare early on. In this case, it is desirable to clearly define contents and levels that students need to experience in the field as a motivation for them to attend the training practice.

In addition, in order to secure cooperating organizations and negotiate with other nursing human resource training organizations smoothly, seeking cooperation of prefectural administrations such as Council on Community Healthcare are considered effective.

O Schemes of education

This model core curriculum proposes tangible learning objectives regarding contents of

knowledge and abilities to be attained, aiming for the acquisition of nursing practice abilities, as well as schemes of education or evaluation for achieving those learning objectives.

Hereafter, it is expected that each university or institution moves forward as to active learning to fortify the nursing practice abilities, simulation education, schemes for clinical and regional training practice and evaluation method for learning conditions, and the planning of faculty development for teaching staff associated with the aforementioned, and establishing the methodology.

O Three policies

The university is required to compose and publicly announce the three policies (diploma/curriculum/admission) for accrediting diplomas/conferring degrees, forming and executing curricula, and admitting newly enrolled students, coherently, in April of 2016. In composing curriculum, it is necessary to be consistent with those policies.

3. Dissemination and request for cooperation to citizens

The understanding of citizens concerned as the object of nursing in various settings is imperative in the execution of clinical and regional training practice. It is desirable that each university appropriately obtains consent to accept the training practice upon the coordination with the cooperating training facility and attempts to disseminate the necessity and importance of nursing science education broadly, seeking the citizens' cooperation to clinical and regional training practice. Many training facilities are accepting training practice and study for other professions, and therefore, certain thoughts are to be given in the dissemination notes considering inclusion of the items mentioned below. It is desirable to seek the understanding of citizens' responsibilities regarding the understanding of community medicine and selection of and examination by appropriate medical organization, enacted by the revision of the medical law in 2014.

- (1) The understanding and cooperation of patients themselves and their families are imperative in medicine/nursing care.
- (2) It is indispensable in nursing science education, as well, that students have direct contacts with patients themselves or object people of nursing care such as a person requiring care, through training in various settings of healthcare/medical care/welfare. Their cooperation is essential.
- (3) Cooperation for training practice as well as nurturing of nursing students are desired.
- (4) Cooperation in nursing science education can be broadly returned to citizens in the form of better nursing care or advancement of nursing science in the future.

4. Requests to students and parties concerned

O Requests for nursing students

Nursing science today plays a part in advanced medicine while it has widely spread in fields like public health and welfare, and also a public hygiene viewpoint is necessary to overview various manners of living. What they witness during the training practice and the like is merely a snapshot of the manner of living of people as nursing objects. However, they need to bear in mind that they are attending a quite important incident in one's life such as birth, aging, sickness and death. If they attend the learning including clinical and regional training practice with these, more significant achievements will be made. In doing so, they are asked to recognize that nursing science is a quite characteristic academic study pursuing how to protect people's dignity and face them.

Moreover, by pursuing the nursing science in a bachelor's degree program, they will be able to have various options as a nursing professional. Keeping in mind that a nursing professional has a variety of ways of success such as research minded clinician, researcher, educator of the next generation personnel and so on, they are asked to draw the career plan including going onto graduate program and so forth.

Even after having selected one's path among a variety of options, they are asked to hold nursing related interests broadly for a lifetime. For example, it is required to keep holding research mindedness even in a clinical setting, or to continue being always diligently conscious of various fields in order to aim for new nursing-scientific discovery or development, or improvement in nurturing and education of the next generation, even after choosing the research or education. Further, it is essential to actively build relationships not only between medical teams but also with many people pertinent to the parties concerned.

While the students are to maintain these attitudes for a lifetime, they must have a high sense of ethics and culture as members of society. They are asked to be aware that the learning environment around nursing students consists of not only teaching faculty and staff but also the cooperation of various people such as the citizens and parties concerned with nursing science education off campus, and to always consider contributing to the society. With one's own work-life balance in mind, they are asked to work hard for a lifetime to contribute to the society through nursing science.

O Requests for stakeholder with nursing science education

As nursing science education, especially, clinical and regional training practice, will recognize community healthcare (community-based cyclic healthcare) and the community-based integrated healthcare system, more than ever, and will be concerned with various fields, from now on, regional parties concerned and so on are kindly asked to cooperate in training practice at each university, inclusive of home care/visiting nursing, health care activity and education in workplaces. And, as collaboration with various professions related to healthcare/medical care/welfare and so forth is required from the above-mentioned viewpoint, a joint effort in various ways is requested to

implement education recognizing such cooperation even while in school.

In addition, when educating, the contents in "Requests for nursing students" shown above might be given some consideration.

Overview of Model Core Curriculum for Nursing Education

1. Considerations in formulating

When composing the model core curriculum, the following are particularly considered based upon the background and issues mentioned in the previous section.

- (1) It provides material learning objectives to train human resources for nursing responding to various needs.
- (2) It clarifies qualities/abilities required of human resources for nursing.
- (3) It provides "goals" and "learning objectives" aiming for training of human resource that values the identity of those who are the object of nursing.
- (4) Upon understanding that, for nursing practice, a holistic assessment integrating physical, psychological and social viewpoints for people as the object of nursing, is essential, it provides full-fledged basic knowledge (anatomical physiology / pathophysiology / pharmacology / etc.) and content such as specialized basic knowledge as the basis for nursing.
- (5) Taking into account its electability at over 250 nursing universities, essential content that are to be commonly learned by the entire students, were considered.
- (6) Consistency with "Regulation for Enforcement of the Act on Public Health Nurses, Midwives, and Nurses" and "Guideline of National Board Examination for Nurses" is maintained.
- (7) It considers that when each university composes the curriculum, it will also discuss "Structure and Contents of Nursing Education on Bachelor's Degree Program based on Core Competency" proposed by the Committee of Evaluation for Nursing Science Education at the Japan Association of Nursing Programs and "Standards Referenced in Curriculum Organization for Quality Assurance of Nursing Education in Universities" proposed by "Subcommittee for Nursing Science, Committee on Health/Human Life Science, Science Council of Japan".
- (8) Regarding the training of healthcare human resources in a bachelor's degree program, it was composed focusing on the simultaneous revision with the model core curricula for medical education, dental education and pharmacological education in the future and partial commonality.

2. Major items

This model core curriculum presents learning objectives necessary to acquire the core abilities for nursing practice (hereinafter "core competency") presented by "Core Abilities of Nursing Practice in on Bachelor's Degree Program and Achievement Goals at Graduation" that was composed in March of 2011. The core competency specifies 5 groups of abilities necessary for nursing practice of human resources for nursing trained in the bachelor's degree program and 20 nursing practice abilities comprising aforementioned groups, and these abilities are connoted in "basic qualities/abilities required of human

resources for nursing" demonstrating the ideal type of person to be trained by the core curriculum. While the core competency is meant to "focus on socially imperative nursing practice abilities and conceptualizes them", this model core curriculum connotes the core competency and also presents material learning objectives necessary to acquire the basic qualities/abilities required of human resources for nursing in the bachelor's degree program.

The major items of this model core curriculum are arranged based on the phased learning and the process in acquiring nursing practice abilities, basic qualities/abilities required of human resources for nursing are placed in A items, and B items, and below are structured being learning objectives connected to acquisition of qualities/abilities in A. Also, the major items are structured based on the model core curriculum of preceding medical education, dental education and pharmacological education, from the viewpoint that they will contribute to the comparison and mutual understanding with other medical professions.

However, the major items themselves do not represent the class subject names, nor does the order of listed items represent the order of learning.

(1) Structure of major items

In this model core curriculum, "Basic qualities/abilities required of human resources for nursing" shows the qualities/abilities that are to be learned for lifetime as a nursing professional, and the same items show the level to be acquired prior to finishing the bachelor's degree program as "A Basic qualities/abilities required of human resources for nursing (nursing profession)." Items B through G enumerate learning objectives needed to acquire nursing practice abilities individually, keeping in mind the qualities/abilities shown in item A. Positioning of each major item is outlined below.

"A Basic qualities/abilities required of human resources for nursing (nursing profession)" defines the learning contents and achievement level desirable for the bachelor's level concerning basic and fundamental knowledge and concepts for acquiring qualities/abilities to be learned prior to finishing the bachelor's degree program.

"B Society and nursing science" shows the contents regarding the relationship between environment, culture and life, and health, and the livelihood support system.

"C Basic knowledge necessary for understanding objects of nursing" shows the knowledge and base for nursing professionals to understand people as the object of nursing and to perform assessment in nursing practice. Especially in nursing practice, as it is necessary to comprehend the object people in holistic/integrated manners, the knowledge necessary to execute the nursing on understanding of their living as well as physical/mental aspects, comprehensively.

"D Basic nursing knowledge underlying nursing practice" shows the knowledge and skills necessary for nursing professionals to acquire the ability to execute (practice) nursing, accommodating the object's needs in the relationship between object person of nursing and nursing professional. Specifically, it shows the thought process of the nursing professional, basic nursing skills, and nursing practice in proportion to growth and health stages when executing (practicing) nursing, as well as the roles that the nursing professional plays in organization as nursing is executed (practiced) as a member of organization, not individually.

"E Basic nursing knowledge necessary for nursing practice in various settings" broadens the setting of

execution (practice) of nursing from the relationship between the object person of nursing and the nursing professional and shows the knowledge necessary for nursing practice in various settings.

"F Clinical and regional training practice" positions the clinical and regional training practice as a major item as it is special learning mode by integrating the nursing knowledge/skills and nurturing abilities applicable to practice, and shows the ways of learning to integrate the knowledge/skills shown in B through E, and of participating in nursing in the field.

"G Research of nursing science" is positioned as a major item as the human resource nurtured in a bachelor's degree program is required to possess qualities/abilities for scientific pursuit and the attitude to continuing study for a lifetime and will acquire problem solving abilities as their basis through conducting the research of nursing science.

(2) Goal of major items

A Basic qualities and abilities required as human resources in nursing (nursing profession)

Learning objectives to acquire qualities/abilities and achievement levels of human resources for nursing (nursing profession) in a bachelor's degree program are defined.

B Society and nursing science

Learn the culture and system forming a society and their relationship to health and acquire knowledge as a basis of nursing science. In addition, study the roles of nursing profession in society.

C Required basic knowledge to understand the object of nursing

Acquire knowledge necessary to understand people's living aspect in an integrated way, as well as their physical/mental aspects that are biologically common, and comprehensively understand people that are affected by various surrounding environments. With this understanding of people as the basis, learn nursing theories concerning health and understand the basics of nursing.

D Specialized basic knowledge underlying nursing practice

Based upon an understanding of human beings, environment, health and nursing as concepts comprising nursing science, knowing the basics of problem-solving skill and the like, nurture the ability to execute (practice) nursing accommodating the needs of people as nursing object. Acquire abilities of nursing practice in proportion to object's needs characterized by growth and health stages, as well as the roles of the nursing profession and ways of collaboration centered around the object in an organization.

E Required basic knowledge for nursing practice in various settings

The settings where nursing is provided are diverse, such as medical institutions, home, health organizations, welfare facilities, industry/workplace, schools, and research organizations. Moreover, globalization has increased the opportunity of cross-border nursing practice such as healthcare/medical

activities for foreigners living in Japan or, in foreign countries. Understand various settings where these kinds of nursing are needed as well as nursing practice by acquiring specialty knowledge necessary to respond to object's needs and recognizing the complexity of situations reflecting characteristics of the object.

F Practical training

Clinical and regional training practice is one of the educational methods to integrate knowledge and skills of nursing and to nourish the abilities to apply those to practice. With the basic qualities/abilities required of human resources for nursing constantly consciously in mind, the students will attend the training practice where various settings and people become the objects. Through the training practice, they are to make efforts to integrate the knowledge and skills, to develop interpersonal skills and ethics necessary for forming the relationship with nursing care receivers and in team-based healthcare, as well as to acquire the abilities to reflect on one's self about how one should be a nursing professional.

G Research of nursing science

The outcome of nursing science research is returned to people who are the object of nursing, as the basis of nursing practice. Additionally, it demonstrates the necessity of nursing in society and make an explanation of nursing possible. For that, the research becomes a basis to construct a system of nursing science and contributes to the development of the specialty of nursing science. Further, it improves problem solving abilities for exploring better nursing, through conducting research of nursing science. In a bachelor's degree program, the focus is on building a basis of various research activities in the future.

Basic qualities/abilities required as human resources for nursing

1. Professionalism

Committed to contribute to the implementation of a healthy and happy life of people in any growth stage, health level or place of living, execute nursing to advocate people's dignity, and contribute to development of nursing science as its base and to the creation of necessary roles.

2. Knowledge of nursing science and nursing practice

Acquire knowledge necessary and sufficient for nursing of various people, broadly understand individual/family/group/community, and practice evidence-based nursing based on assessment results.

3. Evidence-based problem-solving abilities

On unknown issues, collect various information broadly on one's own, and tie it to action towards problem solving by exhibiting creativity, ethical/moral judgment and selection of scientific evidence.

4. Communication skills

For establishing and developing mutual relationships of people, be humanized and warm, possess a deep awe of human beings, acknowledge, share meaning and thoughts of mutual speech and action, and, get engaged in support with knowledge/skills/attitude for respecting life and culture of various people.

5. Collaboration in healthcare/medical care/welfare

Collaborate with object and all the people concerned with health care/medical care/ welfare and living, and play a role as team leader, member or coordinator as needed.

6. Management of quality and safety of care

Manage quality of care and safety towards providing safe, high-quality care for people.

7. Expanding the role of nursing required by society

By acknowledging various and rapidly changing social conditions and playing the roles demanded by regional and international societies, fulfill responsibilities of the profession, as well as discover and expand necessary roles.

8. Scientific inquiry

Understand necessity of nursing science research as a basis to contribute to the implementation of a healthy and happy life of people, and through knowing research outcomes and their application examples materially to nursing practice, direct interest towards construction of a knowledge system of nursing science.

9. Attitude to continue studying for a lifetime

As a professional, reflect with all the people who cooperate and collaborate, aiming for the improvement of nursing qualities, and continue studying autonomously the latest knowledge and skills, for a lifetime.

A Basic qualities and abilities required as human resources in nursing (nursing profession)

Learning contents and their achievement levels to acquire the qualities/abilities required of human resources for nursing in a bachelor's degree program are enacted.

A-1 Professionalism

Learn to get commit to contribute to the implementation of a healthy and happy life of people in any growth stage, health level or place of living, execute nursing to advocate people's dignity, and contribute to development of nursing science as its base and to the creation of necessary roles.

A-1-1 Mission, role and responsibility of the nursing profession

Goal:

Acquire basic knowledge towards the exhibition/creation of the mission, role and responsibility of the nursing profession, namely, to contribute to the implementation of a healthy and happy life of people and learn to fulfill the responsibility within one's own boundaries for acknowledging one's own responsibility and abilities.

Learning objectives:

- a. Understand and respect that a healthy and happy life of people is diverse, knowing the values or social background that people have.
- b. Explain the various roles required of the nursing profession.
- c. Explain legal obligations of the nursing profession.
- d. Know the boundaries of one's own responsibility and abilities, and to fulfill possible roles and responsibilities.

A-1-2 Understanding and advocacy of basic human rights for the foundation of nursing

Goal:

Learn the necessity of understanding and advocacy of basic human rights for the foundation of nursing.

- a. Explain basic human rights of people.
- b. Understand the situation where basic human rights of people are advocated in nursing.
- c. Understand methods and measures to advocate basic human rights in nursing (significance and necessity of informed consent and informed assent, duty of confidentiality, method of protection of private information and so forth.

- d. Understand the necessity and situation where human rights of caregivers need to be protected, knowing care is interactive.
- e. Explain basic human rights as a basis for nursing to be practiced within the boundaries of one's own responsibility and abilities.

A-1-3 Nursing ethics

Goal:

Learn importance of ethics in nursing practice, theories and ethical principles and ways of thinking about ethics.

Learning objectives:

- a. Respect dignity of life and human beings.
- b. Understand ethical issues surrounding nursing and their background and history.
- c. Understand theories, ethical principles and methods of thought to resolve the ethical issues.

A-2 Knowledge of nursing science and nursing practice

Acquire adequate knowledge necessary for nursing of various people, understand broadly the individual, family, group and the community, and learn evidence-based nursing practice based upon the result of assessment.

A-2-1 Learning modality

Goal:

Learn to sort out information objectively and critically, not only of nursing but also of various kinds consolidate it and tie it to evidence-based nursing practice.

Learning objectives:

- a. Understand the necessity of sorting out various information objectively and critically, as the base for nursing practice.
- b. Examine and express knowledge of nursing science from nursing practice.
- c. Acquire attitude of independent learning through appropriate advice and so forth.
- d. Select and participate in necessary subjects and programs in proportion to individual interests.

A-2-2 Abilities of nursing practice

Goal:

Learn evidence-based holistic nursing practice based upon integrated knowledge, skills and attitude.

Learning objectives:

- a. Understand necessity of integration of knowledge, skills and attitude, in nursing practice.
- b. Be conscious of one's own responsibility and abilities, and practice nursing integrating accurate knowledge, reliable skills and appropriate attitude.
- c. Participate in necessary nursing as a team member.
- d. Evaluate one's own nursing practice abilities and learn as needed.

A-3 Evidence-based problem-solving abilities

On unknown issues, collect broadly various information on one's own, and acquire a base tied to action towards problem-solving by exhibiting creativity, ethical/moral judgment and selecting scientific evidence.

A-3-1 Problem-solving abilities

Goal:

Discover issues by one's own abilities and learn action towards solving them.

Learning objectives:

- a. Discover necessary issues by oneself.
- b. Determine priority of issues of one's own need in proportion to importance and necessity.
- c. Find out actions towards problem solving not only by oneself but also in cooperation with others.

A-4 Communication skills

For establishing and developing mutual relationships of people, learn to be humanized and warm, possess deep awe of human beings, acknowledge and share meaning and thoughts of mutual speech and action, and get engaged in support with knowledge, skills and attitude for respecting life and culture of various people.

A-4-1 Mutual relationship in communication and support

Goal:

Understand that communication influences mutual relationships with people in nursing, and learn communication aimed at better support.

- a. Understand that communication influences mutual relationship with people in nursing.
- b. Explain communication method necessary to establish mutual relationship with people.
- c. Recognize one's own tendency and communicate with one's own issues in mind.

A-5 Collaboration in healthcare/medical care/welfare

Learn basis to collaborate with the object person and all the people concerned with healthcare/medical care/welfare and living, and play a role as team leader, member or coordinator as needed.

A-5-1 Collaboration in health care, medical care and welfare

Goal:

Learn basis to collaborate with various people and play a role required of nursing profession as a team member.

Learning objectives:

- a. Explain objective and significance of collaboration in healthcare/medical care/welfare, and role required of nursing profession.
- b. Materially explain the practice of collaboration in healthcare/medical care/welfare.
- c. Participate in action towards various issues in health, through collaboration with various people.

A-6 Management of quality and safety of care

Learn basis to manage quality of care and safety continually, towards the provision of quality and safe care for people.

A-6-1 Quality assurance of care

Goal:

Learn basis of management and assurance of quality of care towards provision of quality care.

Learning objectives:

- a. Understand the necessity of managing and assuring the quality of care towards provision of quality care.
- b. Explain material methods to manage and assure quality of care.
- c. Participate in activities to manage and assure quality of care.

A-6-2 Safety management

Goal:

Acknowledge medical accidents and incidents which are possible to occur on a daily basis such as wrong medication, tipping, fall, nosocomial infection and needle piercing accidents and other risks, and learn safer nursing for people.

Learning objectives:

- a. Explain necessity of abilities enhancement to secure the safety in nursing.
- b. Take actions to secure the safety in nursing.
- c. Participate in activities to enhance the safety in nursing.
- d. Manage own conditions as well as ascertain knowledge and skills and understand the importance of seeking support from others in proportion to the limit of abilities.

A-7 Expanding the role of nursing required by society

By acknowledging various and rapidly changing social conditions and playing the roles demanded by regional and international societies, fulfill responsibilities of the profession, as well as learn the basics of discovery and expansion of necessary roles.

A-7-1 History and legal basis of nursing profession

Goal:

Learn history of nursing as basis to assess roles of nursing profession demanded by society and its responsibility.

Learning objectives:

- a. Understand the history of medical care/nursing and their legal basis.
- b. Understand the roles of nursing profession and transition of activities, and matters that influence those.

$\textbf{A-7-2} \ \ \textbf{Roles of nursing profession in various settings of healthcare/medical care/welfare and so forth}$

Goal:

Learn roles of nursing profession in various settings of healthcare/medical care/welfare and so forth.

Learning objectives:

- a. Understand various settings where nursing profession work and the respective roles of each.
- b. Assess roles and responsibility of nursing profession demanded in the future, recognizing the change of regional society and trend of healthcare/medical care/welfare.

A-7-3 Roles of nursing profession in international societies and diverse cultures

Goal:

Learn roles of nursing profession in international societies and diverse cultures.

Learning objectives:

a. Understand the current conditions and issues of healthcare/medical care/welfare in international

societies.

- b. Understand the abilities necessary to support living of people of diverse cultural backgrounds.
- c. Understand the issues and strategies of health issues in international societies and assess roles and responsibilities required of nursing profession in the future.

A-8 Scientific inquiry

Understand the necessity of nursing science research as a basis to contribute to the implementation of a healthy and happy life of people, and through knowing research outcomes and their application examples materially to nursing practice, direct interest towards construction of knowledge system of nursing science.

A-8-1 Necessity/significance of research in nursing science

Goal:

Learn the necessity and significance of research in nursing science.

Learning objectives:

- a. Understand that research is initiated based upon practical issues, research outcomes are returned to practice and becomes evidence for the practice.
- b. Understand the examples applied to nursing practice based on the research results.
- c. Understand the necessity/significance of research in enhancement of nursing practice and nursing science.

A-9 Attitude to continue studying for a lifetime

As a professional, reflect with all the people who cooperate and collaborate aiming for the improvement of nursing qualities, and continue studying autonomously the latest knowledge/skills, for a lifetime.

A-9-1 Necessity and method of self-study

Goal:

Learn the necessity and method of self-study for nursing professionals.

- a. Understand the necessity of self-study for a lifetime.
- b. Understand the importance of reflection in everyday nursing practice.
- c. Understand the methods to enhance self-education, assess individually executable methods and practice them.

A-9-2 Development of expertise of nursing science

Goal:

Understand the importance of career development contributing to the development of expertise of nursing science and learn individual career path/career development method.

- a. Understand the concept of career path/career development.
- b. Comprehend methods to acquire various opportunities of lifetime learning (reflecting the practice, self-learning, continuing education in workplace, various training programs offered by academic societies and professional organizations, graduate schools, collaborative research and so forth) and explain their future application to career path/career development method.

B Society and nursing science

Study cultures and systems forming a society and their relation with health, and acquire knowledge as a basis of nursing science. In addition, study the roles of nursing profession in society.

B-1 Community and culture supporting people's life

Goal:

Learn the basic knowledge and view to understand cultural and social background related to regional characteristics that influence people's living.

Learning objectives:

- a. Explain methods to comprehend regional characteristics such as living, culture, environment, socioeconomic structure and so forth, of people in the community.
- b. Explain information and indicators related to healthcare/medical care/welfare system and health of the community.

B-2 Social system and health

B-2-1 Concepts of health

Goal:

Learn the definition of health and concepts related to health.

Learning objectives:

- a. Explain the definition of health.
- b. Explain the key concepts related to health.
- c. Explain the theories as a basis to understand health behavior.
- d. Explain the social determinant factors of health.
- e. Explain the importance of methods to comprehend health of people in various health conditions correspondingly.
- f. Explain the concept of prevention.
- g. Explain the genetic and environmental factors of disease and disorder.

B-2-2 Environment and health

Goal:

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

- 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-2-3 Relation between life/lifestyle and health

Goal:

Understand people in various lives/lifestyles and learn the relation between life and health as basis for thinking of the way of a healthy life for them. Moreover, learn the knowledge related to behavioral science and social science necessary to support people to take better health behaviors.

Learning objectives:

- a. Understand culture in the background of lifestyle, and various lifestyles.
- b. Explain the relation of nutrition/dietary, physical activity/exercise and rest/sleep to health.
- c. Explain the relation between stress and health.
- d. Explain the relation between addictions (smoking, drinking, gambling and so forth) and health.
- e. Explain the concept of health and policies (primary health care, health promotion, National Health Promotion Campaign) in association with life habits.
- f. Explain the importance of assessment of individual lifestyle from health viewpoint.
- g. Explain the relation between major social resources and people's living and health.
- h. Explain basic theories (psychology, behavioral science) necessary to support people's behavior modification.

B-2-4 Community care system

Goal:

Understand social resources, groups and organizations existing in the community where individuals and families live, and learn the necessity to build a community care system and network for people's healthy living.

- a. Explain resources and various activities of groups and organizations in association with people's living.
- b. Explain the necessity of constructing a community care system and network necessary for people in collaboration/cooperation with related agencies and various professions.

B-2-5 Trend of society and systems of healthcare/medical care/ welfare

Goal:

Learn the trend and characteristics of society surrounding nursing. Learn systems of health care/medical care/welfare necessary to support health and life.

Learning objectives:

- a. Explain trends and characteristics of society.
- b. Explain transition and features of social security system in Japan.
- c. Explain the types of social security systems (social insurance, public assistance, social welfare, public health, medical care and so forth).
- d. Explain the types of social insurance (medical insurance, pension insurance, compensation insurance, employment insurance, long-term care insurance.)
- e. Explain major laws and regulations related to public health and medical care (Community Health Act, Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases, Health Promotion Act, School Health and Safety Act, Industrial Safety and Health Act, Medical Care Act and so forth.)
- f. Explain the trend of issues and measures in healthcare/medical care/welfare: lifestyle disease, maternal and child health, child welfare, school health, adult health, industrial health, elderly healthcare/medical care/welfare system, dementia, disabled child/adult program, mental health, dental health, infectious disease, cancer, intractable disease and so forth.

B-2-6 Epidemiology/healthcare statistics

Goal:

Learn epidemiology and healthcare statistics as basis for practicing evidence-base nursing.

Learning objectives:

- a. Explain demographic statistics (stationary and dynamic population), disease structure, basic statistics and indicators related to healthcare/medical care/welfare.
- b. Explain health problems and relative risks.
- c. Explain assumption of epidemiological causal relation.
- d. Explain information literacy.
- e. Retrieve statistical data from database and literature/books and utilize.)

B-3 Role and responsibility of nursing profession in society

B-3-1 Legal positioning of nursing profession

Goal:

Learn legal positioning of nursing profession.

Learning objectives:

- a. Explain the laws and related regulations (Act on Public Health Nurses, Midwives, and Nurses, Act on Assurance of Work Forces of Nurses and Other Medical Experts and so on) enacting nursing profession.
- b. Understand trend of nursing and related systems and regulations (specific interventions, visiting nursing, certification system and so forth.
- c. Explain the features of laws (Medical Practitioners' Act, Acts on Medical Experts, Acts on Welfare Workers) concerning major professions to collaborate with nursing profession.

B-3-2 Ethics in nursing

B-3-2-1 Ethical standards and practice

Goal:

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

Learning objectives:

- a. Understand the transition of ethics of related areas such as bioethics, medical ethics, clinical ethics and so forth.
- 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.
- c. Explain the trend of ethical issues associated with progress of medical care.
- d. Explain ethical issues and coordination methods in medical and nursing fields.

B-3-2-2 Personal information in health care/medical care/welfare

Goal:

Deal with personal information in healthcare/medical care/welfare under ethical consideration.

- a. Explain handling and security of personal information in healthcare/medical care/welfare.
- b. Explain laws and regulations regarding protection of personal information and confidentiality.
- c. Comply with protection of personal information and confidentiality.
- d. Be considerate when sharing information among various professions.
- e. Explain legal basis and points to be noted regarding information disclosure.

B-3-3 International society and nursing

Goal:

Learn the current status and issues of healthcare/medical care/welfare in international society.

- a. Explain the current status and issues of health care/medical care/welfare in the international society.
- b. Explain the consideration for people as nursing objects from an international viewpoint.
- c. Take into consideration the roles and contribution of nursing in the international society upon understanding the characteristics of healthcare/medical care/welfare in Japan.

C Required basic knowledge to understand the object of nursing

Acquire integrated knowledge necessary to understand people's living aspect as well as their physical and mental aspects that are biologically common, and understand people that exist being affected by various surrounding environments comprehensively. With these comprehensions of people as the basis, learn nursing theories concerning health and understand the basics of nursing.

C-1 Basic view based on nursing science

C-1-1 Essence of nursing

Goal:

Learn what nursing is.

Learning objectives:

- a. Explain the definition of nursing
- b. Explain the objective of nursing.
- c. Explain the role of nursing theories and characteristics of specific theory.

C-1-2 Relationship between concept of care and nursing science in care

Goal:

Learn the concept of care and positioning of nursing science in care.

Learning objectives:

- a. Explain the concept of care.
- b. Explain the profession concerning health care/medical care/welfare.
- c. Explain positioning of nursing science as a study concerning care.

C-1-3 Human beings comprehended from nursing viewpoint

Goal:

Understand the concepts comprising nursing science and learn how to comprehend human beings from the viewpoint of nursing.

- a. Explain major concepts of nursing science
- b. Explain human beings in an integrated manner utilizing theories/concepts to understand nursing theories and phenomena.

C-1-4 Nursing process

Goal:

Understand as knowledge the flow of the nursing process, and learn methods to apply it to practice.

Learning objectives:

- a. Explain what the nursing process is.
- b. Explain information gathering for object understanding.
- c. Explain methods to assess gathered information based on evidence.
- d. Explain the utilization of specialized knowledge necessary for aiming better health conditions of the object.
- e. Explain methods to clarify the nursing needs and determine the priority.
- f. Explain methods to establish nursing objectives and material planning/execution.
- g. Explain methods to evaluate the nursing which has been practiced.

C-2 Basic view based on nursing science

Everyday living is carried on through association with various people and environments, and the way of living highlights the person's identity. Learn nursing that supports life through understanding the issues of growth/development as a living person.

C-2-1 Living for human beings

Goal:

Learn integrated knowledge to comprehend the linkage between human's living behaviors and health condition, and deepen the understanding that nursing practice develops in response to the change of people's living.

Learning objectives:

C-2-1-1 Motives of living behavior

- a. Explain the basic needs of human beings.
- b. Understand living habits, purpose in life, and religious activities.

C-2-1-2 Living behaviors and biological functions

- a. Understand the composition of dietary life, factors that affect dietary behaviors, and the significance of eating for health.
- b. Explain the structure and function of digestive tract and glands concerning dietary behavior.
- c. Explain nutrition and energy metabolism.

- d. Outline the metabolism of substances such as carbohydrates, lipids, proteins, vitamins, minerals and so forth.
- e. Explain regulation mechanism of blood glucose.
- f. Understand the significance of excretion for health as excretory habit and style and so forth.
- g. Explain the structure and function of digestive tract concerning excretion, kidney and urinary tract.
- h. Explain the structure and function of skin.
- i. Understand the significance of cleanliness for health such as cleanly behavior, recognition of cleanliness and so forth.
- j. Understand the behaviors concerning clothing and significance.
- k. Understand the significance of activity and rest for health such as biorhythm, balance between activity and rest, exercise habits, sleep pattern.
- 1. Explain the mechanism of exercise necessary for living behaviors through the coordination of bones, skeletal muscles, and nervous system.
- m. Explain the structure and function of bones, cartilage, joints, ligaments and muscle.
- n. Understand sex (gender) and reproduction in living.
- o. Explain the structure and function of male/female reproductive organs.
- p. Explain the change of reproductive functions associated with sex (gender) cycle and aging.
- q. Understand work and leisure in living.
- r. Understand the interaction of communication (verbal/non-verbal).
- s. Understand learning behaviors in living.
- t. Understand mental health in living.
- u. Understand the feelings obtained externally through the five senses (vision/hearing/tactile/smell/taste).
- v. Understand the living of the object by integrating each living behavior.

C-2-1-3 Diversity of living person

- a. Understand the way of diversity.
- b. Understand the mind formed in individual living and its relation to personality.
- c. Understand the change of living behavior/communication/emotion/social roles, associated with growth/development of human beings.
- d. Understand the diversity of living habits individually succeeded by the community and family.
- e. Understand the importance of living in proportion to individuality.

C-2-2 Individual and family

- a. Understand the developmental issues of individual and family.
- b. Understand the process of forming a marital relationship.
- c. Understand the process of the birth of child and forming a family.
- d. Understand how each family member functions to live a family life.
- e. Understand the family's function of child bearing and raising.
- f. Understand the self-care function of family.
- g. Understand the socialization function of family.
- h. Understand the impact that economics has on a family.
- i. Understand family as a system and basics of intervention in family.

C-2-3 Place as living environment

- a. Explain the significance of community/society as living environment.
- b. Explain what living is and its relation to environment and culture.

C-2-4 Living people in the community

- a. Explain the impact of culture and customs of the community on living.
- b. Understand the impact of balance between dependence on others and independence on living in the community.
- c. Understand the concept of death and significance of death and end-of-life care for individuals and family.

C-3 Understanding of human beings from biologically common physical/mental aspects

Learn the structure and function of the human body necessary for understanding a human from physical and mental aspects. Knowledge acquired will be utilized as reasoning ground upon nursing practice and integrated holistic assessment.

C-3-1 Cells and tissues

Goal:

Learn the basic concept of the minimal units of life-cells, genes, and tissues.

Learning objectives:

C-3-1-1 Genome and genes, and cells

- a. Explain genome, chromosome, genes, and the basic mechanism of heredity.
- b. Explain cell cycle and cell division.
- c. Explain cell structure.

C-3-1-2 Tissues

Explain epithelial tissues, connective tissues, muscular tissues, and nerve tissues.

C-3-2 Life support and regulation of biological functions

Goal:

Learn the basic concept of biological functions for life support.

Learning objectives:

C-3-2-1 Homeostasis

- a. Explain body fluid volume and components.
- b. Explain body fluid regulation (volume, electrolyte, and osmotic pressure).
- c. Explain the regulatory mechanism of acid-base equilibrium.
- d. Explain the regulatory mechanism of body temperature.

C-3-2-2 Respiratory system

- a. Explain the structure and function of the airways.
- b. Explain the structure and function of the lungs (the mechanism and regulation of respiration).

C-3-2-3 Circulatory system and blood

- a. Explain the structure and function of cardiovascular system and lymphatic system.
- b. Explain the regulatory mechanism of blood pressure.
- c. Explain the component and function of blood.
- d. Explain hematopoietic organs and mechanism.
- e. Explain hemostasis, coagulation, and fibrinolytic system.
- f. Explain blood group (ABO, Rh).

C-3-2-4 Immune system

- a. Explain the immune reaction.
- b. Explain the difference between innate and acquired immunity.
- c. Explain humoral immunity and cellular immunity.

C-3-2-5 External and internal signaling and regulatory mechanism (nervous system, sensory system, endocrine system)

- a. Explain the basic structure and function of the brain and spinal cord.
- b. Explain the functional classification of peripheral nervous system (somatic and autonomic nervous system).
- c. Explain somatic sensory (cutaneous sensation and deep sensation).
- d. Explain the structure and function of visual organs, vestibulocochlear organs, olfactory organs, and gustatory organs.
- e. Explain the structure, function and regulatory mechanism of endocrine systems.
- f. Explain the characteristics and physiological effects of major hormones.
- g. Explain negative feedback.
- h. Explain stress reaction.

C-3-3 Birth, growth/development, aging, and death of human

Goal:

Learn the basic concept of pregnancy, fetal growth, birth, human growth and development process, aging effects, and biological death.

Learning objectives:

C-3-3-1 Pregnancy/delivery/postpartum

- a. Explain the process of fertilization, cell division, and organ formation.
- b. Explain the mental and physical change/characteristics of maternal body associated with week numbers in pregnancy.
- c. Explain the growth/development of fetus associated with week numbers in pregnancy.
- d. Explain the physiological characteristic of fetal circulation/respiration, and change in immediate newborn period.
- e. Explain the mechanism of childbirth.
- f. Explain the mental and physical change/characteristics of maternal body associated with delivery process.
- g. Explain the mental and physical change/characteristics of maternal body in postpartum period.

C-3-3-2 Change due to growth/aging

- a. Explain the physical/physiological characteristics of newborns.
- b. Explain the physical/physiological characteristics and the psychological/motility/social development of childhoods.
- c. Explain the physical, psychological and social change of adolescence.

d. Explain the physical, psychological/social changes associated with aging (including menopause).

C-3-3-3 Death of human

- a. Explain the concept and definition of death.
- b. Explain the difference between a vegetative state and brain death.
- c. Explain the death for human.

C-4 Understanding of diseases and recovery process

Learn the mechanism of diseases to cultivate a better understanding of objects. Also learn the ground knowledge that leads to recovery accelerating nursing care.

C-4-1 Mechanism of pathophysiology and recovery process

Goal:

Learn the transition from normal to pathological condition and its recovery process for nursing care.

Learning objectives:

C-4-1-1 Cell injury/degeneration and cell death

- a. Explain atrophy, degeneration, hypertrophy, and cell death (necrosis and apoptosis).
- b. Outline the causes of cell injury/degeneration and cell death.
- c. Explain morphological changes of tissues.
- d. Explain lifespan of cell, DNA injury/repair.

C-4-1-2 Repair and regeneration

- a. Explain repair and regeneration.
- b. Explain the process of wound healing.

C-4-2 Basic etiology and pathophysiology

Goal:

Learn basic items of causes and biological reactions necessary in understanding of objects.

Learning objectives:

C-4-2-1 Genetic diversity and diseases

- a. Explain the diversity of individuals based on genomic diversity.
- b. Explain major heredity disorders (single-gene disorders, chromosomal abnormality, multifactorial diseases).

C-4-2-2 Nutritional and metabolic disorders

- a. Explain the etiology/pathophysiology of carbohydrate metabolism abnormality.
- b. Explain the etiology/pathophysiology of protein/amino acid metabolism abnormality.
- c. Explain the etiology/pathophysiology of lipid metabolism abnormality.
- d. Explain the etiology/pathophysiology of abnormal metabolism of nucleic acid/nucleotide.
- e. Explain the etiology/pathophysiology of abnormal metabolism of vitamins/trace elements.

C-4-2-3 Circulatory disorders

- a. Explain the difference of blood flow disorders (ischemia, hyperemia, congestion, and bleeding), and the etiology/pathophysiology of each disorder.
- b. Explain the etiology and pathophysiology of thrombosis, embolism, and infarction.

C-4-2-4 Inflammation

- a. Explain the classification of inflammation, morphological change and temporal change (local and systemic change) of tissues.
- b. Explain inflammatory changes due to infection.

C-4-2-5 Tumor

- a. Explain the etiology of tumors.
- b. Explain the distinction between benign tumors and malignant tumors.
- c. Explain the classification, degree of differentiation, grade, and stage of tumors.
- d. Explain the invasion and metastasis of tumors.

C-4-2-6 Infection

- a. Explain the establishment and prevention of infection.
- b. Explain virus, bacteria, fungi, protozoa, parasites and prion.
- c. Explain antimicrobial resistance (multidrug-resistant).

C-5 Understanding of physical/mental reaction of human beings associated with health problems and treatment

Learn the major health problems and their diagnosis and treatment, and understand the physical/mental reaction of human beings associated with examinations and treatments.

C-5-1 Human reaction to illness

Goal:

Understand the overall physical/mental state of individuals suffering from illness.

Learning objectives:

- a. Understand the overall human physical/mental reaction against illness.
- b. Understand the major symptoms (consciousness disorder, convulsion, hematemesis/melena, chest pain, oliguria/anuria/thamuria, pains <including chronic pain>), and the management of symptoms.

C-5-2 Diagnostic examinations and treatments

Goal:

Learn basic items of diagnostic examinations and treatment for nursing care of suffering individuals.

Learning objectives:

- a. Explain basic laboratory tests, physiological function tests, imaging, endoscopic examination, mental/psychological function examination.
- b. Outline drug therapy.
- c. Outline surgical treatment.
- d. Outline radiation therapy.
- e. Outline diet therapy.
- f. Outline rehabilitation.
- g. Outline blood transfusion/infusion.
- h. Outline artificial organs, dialysis, organ transplantation/regenerative medicine.
- i. Outline psychotherapy.
- j. Explain the evidence and positioning of alternative therapies.

C-5-3 Major health problems and human reaction

Goal:

Acquire knowledge of major health problems and understand the human reaction to health problems, and link them to essential nursing functions including observation, medical practice assistance, livelihood support, patient/family education, etc. The following objectives are set to achieve the goal for D, basic technical knowledge as the basis of nursing practice, to be mentioned later.

Learning objectives:

C-5-3-1 Health problems related to cardiovascular system and the human reaction.

Outline the health problems related to cardiovascular system and the human reaction. Heart failure, ischemic heart disease, major arrhythmias, major valvular heart diseases, myocardial/pericardial disease, major congenital heart diseases, arterial disease, venous disease, crush syndrome, blood pressure abnormality, shock, cyanosis, for example.

C-5-3-2 Health problems related to blood/hematopoietic system and the human reaction

Outline the health problems related to blood/hematopoietic system and the human reaction. Anemia, leukopenia, leukemia, malignant lymphoma, multiple myeloma, hemorrhagic diseases, for example.

C-5-3-3 Health problems related to respiratory system and the human reaction

Outline the health problems related to respiratory system and the human reaction. Cough/sputum, respiratory failure, respiratory infections, obstructive/restrictive pulmonary disease, pulmonary circulation disorders, pneumothorax, tumor, etc.

C-5-3-4 Health problems related to digestive system and the human reaction

Outline the health problems related to digestive system and the human reaction. Major oral/pharyngeal diseases, dental caries, periodontal diseases, dysphagia, nausea/vomiting, major gastrointestinal diseases, abdominal pain/distention, ileus, dyschezia, melena/jaundice, major liver/gallbladder/pancreatic diseases, abdominal wall/peritoneal/diaphragmatic diseases, congenital gastrointestinal diseases, for example.

C-5-3-5 Health problems related to endocrine/nutritional/metabolic system and the human reaction

Outline the health problems related to endocrine/nutritional/metabolic system and the human reaction. Major diencephalon/pituitary diseases, major thyroid diseases, major parathyroid diseases, major adrenal cortex/medullary diseases, tumor of endocrine system, metabolic syndrome, obesity, diabetes mellitus, dyslipidemia, hyperuricemia, gout, vitamin deficiency disease, etc.

C-5-3-6 Health problems related to water-electrolyte/acid-base equilibrium and the human reaction

Outline the health problems related to water-electrolyte/acid-base equilibrium and the human reaction. Edema/dehydration, electrolyte abnormality, acidosis/alkalosis, etc.

C-5-3-7 Health problems related to urinary/reproductive system and the human reaction

Outline the health problems related to urinary/reproductive system and the human reaction.

Major upper urinary tract diseases, major lower urinary tract diseases, major dysuria, female reproductive diseases, mammary diseases, male reproductive diseases, reproductive dysfunction, sexually transmitted diseases, sexual differentiation disorders, etc.

C-5-3-8 Health problems related to immune/anti-infection system and the human reaction

Outline the health problems related to immune/anti-infection system and the human reaction.

Major autoimmune system diseases, allergic diseases, immunodeficiency diseases, major viral infections, major bacterial infections, major mycoplasma/chlamydia/rickettsial infections, major fungi infections, parasitic diseases, healthcare associated infection, opportunistic infection, sepsis, etc.

C-5-3-9 Health problems related to sensory/nervous/motor system and the human reaction

Outline the health problems related to sensory/nervous/motor system and the human reaction.

Visual disorder, hearing/equilibrium disorder, olfactory disorder, dysgeusia, skin disorder, major brain and spinal cord diseases, headache, motor disorder (paralysis/ataxia), speech impediment, dementia, major peripheral neuropathies, major bone/joint/bone marrow diseases, etc.

C-5-3-10 Mental/Psychosomatic health problems and the human reaction

Outline the mental/psychosomatic health problems and the human reaction.

Schizophrenia, mood (emotional) disorder, autonomic imbalance, neurotic disorder, stress-related disorder, dietary behavior/eating disorder, sleep disorder, mental/psychosomatic disorders in childhood/adolescence, personality/behavioral disorder of adult/senile, gender identity disorder, postpartum depression, various dependence, etc.

C-5-3-11 Pediatric-specific health problems and the human reaction

Outline the pediatric health problems and the human reaction.

Growth retardation, congenital disorder, cerebral infantile palsy, developmental disorder, child abuse, etc.

C-5-3-12 Health problems related to physical and chemical factors/agents and the human reaction

Outline the health problems related to physical /chemical factors and the human reaction.

Food poisoning, major intoxications, disorders caused by high temperature, disorders caused by low temperature, burn, trauma, pressure sores, etc.

C-5-4 Human reaction due to drug and radiation

C-5-4-1 Human reaction due to drug and radiation

Goal:

Learn basic concepts necessary for appropriate drug therapy (pharmacological action, adverse events, and precautions on administration) and nursing practice.

- a. Explain point of pharmacological action (receptors, ion channels, enzymes, and transporter).
- b. Explain the defining factors of pharmacological action (dose-reaction, affinity, etc.) and pharmacokinetics (absorption, distribution, metabolism, and excretion).
- c. Explain the accumulation, tolerance, dependence, habit-forming effect, and addiction to drugs.
- d. Outline drug interaction and polypharmacy.
- e. Explain the characteristics of administration method (oral, sublingual, skin, mucosa, rectum, injection, inhalation, eye drop, nasal drop, etc.) and each nursing practice.
- f. Explain the precautions on drug administration and nursing practice in childhood, perinatal, old age, organ damage, mental/psychosomatic disorder.

- g. Explain the effects, mechanism, adoption, adverse events, and nursing practice for major therapeutic drugs (drugs that act on peripheral nervous system; central nervous system; cardiovascular system; blood; respiratory system; gastrointestinal system; endocrine/metabolic system; renal/urinary tract system; sensory system; reproductive system; and immune system, vaccinations, anti-infective drug, antiseptic solution, anti-allergic drug, anti-inflammatory drug, antineoplastic drug, molecular target drug, medical narcotic, anesthetic, major oriental medicine < kampo medicine>).
- h. Outline the relationship between drug effectiveness/safety and genomic diversity.
- i. Explain the basic knowledge and precautions on drug management.
- j. Outline the phytotoxicity.
- k. Explain occupational exposure to drugs.

C-5-4-2 Human reaction due to medical application of radiation

Goal:

Learn the medical application of radiation (radiological diagnosis, radiation therapy, irradiation of blood for transfusion, etc.), the effects of radiation on human and the impact/risk on health, and the protective measure against radiation exposure for medical professionals.

- a. Explain the significance of radiological diagnosis and radiation therapy.
- b. Explain the mechanism of radiation on human body.
- c. Explain the relationship between health effects/risk of radiation and radiation dose.
- d. Explain the adverse events (side effects of contrast medium, etc.) associated with radiological diagnosis.
- e. Explain the risks and nursing care associated with radiation diagnosis.
- f. Explain the adverse events (side effects) and nursing care associated with radiation therapy.
- g. Explain the protective measures against radiation exposure for medical professionals.
- h. Understand the anxiety over radiation exposure, and appropriately handle together with related professions.

D Specialized basic knowledge underlying nursing practice

Nourish abilities to execute (practice) nursing adapted to the needs of a person as a nursing object on the basis of understanding human beings, environment, health, and nursing that is comprised of the concepts of nursing science, with basics such as problem-solving techniques in mind. Learn the abilities of nursing practice adapted to the needs of the object person characterized by the stage of health and development, and acquire roles of nursing profession in the organization and the way of object-centered collaboration.

D-1 Basis of implementing the nursing process

D-1-1 Building of personal relationships as a basis for nursing

Goal:

Learn significance and method to build the relationship with an object of nursing.

Learning objectives:

- a. Have an interest in an object with sense of purpose of nursing.
- b. Build relationship through interaction with an object using verbal and nonverbal communications.
- c. Build relationship corresponding to various characteristics and diversity of an object.

D-1-2 Multisided assessment and needs grasping along experience and wish (intention) of an object Goal:

Collect a variety of information of an object (aspects of a living person, biologically common physical and mental aspects, aspect of the relation with environment, and aspects of growth and development), integrate it from a nursing view point, and learn the method to assess while sharing experience and wish (intention) of an object.

Learning objectives:

- a. Collect information necessary for nursing corresponding to the situation of an object.
- b. Sort information obtained systematically and continuously, and assess it.
- c. Draw a full picture of an object based on assessment.
- d. Share the experience and wish (intention) of an object (an object or family, depending on the situation) and tie them to grasp of needs.
- e. Find the needs of an object drawing a full picture as well as determining their priority.

D-1-3 Plan drafting/implementation

Goal:

Learn the method to draft an individualized nursing care plan based on the assessment and the nursing practice based on the plan.

- a. Indicate goals corresponding to needs of an object found out from nursing view point.
- b. Show requirements for achieving goals and draft a nursing care plan.
- c. Set and show evaluation schedule according to goals and requirements.
- d. Adapt basic nursing skills to the needs of an object and apply them to individual nursing practice.
- e. Support the process that an object chooses for a better way.
- f. Think of the experience and wish (intention), strength, and wellness of an object (an object or family, depending on the situation) in relation to selection of treatment and life.

D-1-4 Evaluation of conducted nursing

Goal:

Learn to evaluate the outcomes of nursing practice by reflecting the whole nursing process.

Learning objectives:

- a. Understand the significance of evaluating nursing practice.
- b. Evaluate nursing practice.
- c. Evaluate the state of achievement of goal accurately based on evaluation criteria.
- d. Modify nursing care plan based on evaluation.
- e. Through the reflection on nursing practice, understand characteristics of one's own nursing, clarify learning tasks, and modify the practice.

D-2 Basic nursing skills

D-2-1 Essence of nursing skills

Goal:

Learn that nursing skills are actions aiming for the safety/comfort/independence of an object of nursing based on expert knowledge of nursing.

Learning objectives:

- a. Explain aims/characteristics of nursing skills as nursing action.
- b. Explain that nursing skills are acts aiming for safety/comfort/independence of an object.
- c. Explain methods to evaluate nursing skills.

D-2-2 Common basic nursing skills of nursing practice

Goal:

Acquire common basic skills of nursing practice.

Learning objectives:

D-2-2-1 Observation/assessment

- a. Observe the object person from the nursing view point.
- b. Perform physical assessment.
- c. Assess the object person from the basic living activity's point of view.
- d. Integrate collected information and assess health status.
- e. Assess social environment surrounding the object person.
- f. Grasp human beings through integration both of the aspect of a living person and biologically common physical/mental aspects.
- g. Assess the family from aspect of the family function.
- h. Assess the mental function.

D-2-2-2 Nursing skills to protect safety

- a. Explain safe environment of recuperation.
- b. Prevent infection.

D-2-2-3 Nursing skills to aid comfort

- a. Understand standard posture and aid comfort.
- b. Devise to maintain the mental well-being.
- c. Acquire the relaxation skills.

D-2-2-4 Communication skills

Acquire the communication skills in nursing.

D-2-3 Supporting skills of daily life

Goal:

Learn the basic nursing skills to support the safe and comfortable recuperation.

- a. Acquire the skills of environment adjustment.
- b. Acquire the skills for helping with a meal.
- c. Acquire the skills for helping with excretion.
- d. Acquire the skills for helping with activity/rest.
- e. Acquire the skills for helping with cleanliness and clothing.
- f. Acquire the skills of respiratory/circulatory regulation.

D-2-4 Supporting skills accompanying diagnosis/treatment

Goal:

Learn the basic skills to provide medical treatment safely and comfortably on the scene of diagnosis and treatment.

Learning objectives:

- a. Acquire the skills associated with helping with tests.
- b. Acquire the skills of wound management.
- c. Acquire the skills of medication.
- d. Acquire the skills of emergency life-saving treatment.
- e. Acquire management skills of symptoms/living body at risk.

D-3 Nursing practice characterized by developmental stages

D-3-1 Nursing practice for the people in reproductive age/perinatal period

Goal:

Learn the nursing practice to support health based on the features of sex (gender) and reproduction from the reproductive health/rights point of view. Especially, people in reproductive age are required to adapt to the physical/mental/social changes and the change of family. Based on these characteristics, learn the nursing practice for the object person and family in the periods of pregnancy/delivery/postpartum/newborn.

- a. Understand various concepts of maternity nursing.
- b. Understand the health issues in each stage of women's life cycle and explain the nursing.
- c. Understand and assess sexual diversity.
- d. Understand and assess the physical/mental/social characteristics and the physiological changes in the periods of pregnancy/delivery/postpartum/newborn.
- e. Understand health promotion of the object person in the periods of pregnancy/delivery/postpartum/newborn, and nursing practice.
- f. Understand the mechanism and the impact of abnormality in pregnancy/delivery/postpartum/ newborn periods on the object person, and explain the nursing for safety and comfort.
- g. Understand the social issues regarding reproductive health/rights of people, and explain the nursing to support the social life of the object person.
- h. Understand the healthy life of mother and child, and explain the postpartum care, child care and maternal and child health system supporting it.
- i. Understand the developmental issues such as attachment of parent and child, formation of bonds and role development which a family in perinatal period has, and explain the nursing to support development of a family.
- j. Understand the nursing to support a newly formed family based on its characteristics, and the cooperation/collaboration with various professions.

D-3-2 Nursing practice for the people in childhood

Goal:

Childhood is a stage of remarkable growth/development from the neonatal period to early childhood/school period/puberty, and moreover, adolescence.

Understand the development of self-concept formation, acquisition of self-care and adaptation of social life based on attachment building with a family, and learn the nursing practice for children to be able to implement lives they want to live by forming the health behavior of family and child, raising and life coordination in proportion to health status, and keeping the safety/comfort, etc.

Learning objectives:

- a. Understand the importance of the advocacy of child's rights, and practice nursing care.
- b. Assess the growth/development of a child.
- c. Find the methods of nursing practice suited to the stage of growth/development, as well as nursing practice to support the growth/development such as acquisition of self-care with family.
- d. Grasp the needs of the object person corresponding to settings such as hospital, home, and school and explain the nursing, as well as integrate growth/development of children and their health issues.
- e. Understand the impacts that disease and hospitalization exert upon children and explain nursing which is based on relief of pain and maintenance of safety/comfort.
- f. Understand the nursing skills specific to children and explain practicing in suitable methods to the object person.
- g. Understand the characteristics of children (including medically cared-for children) corresponding to various stages of disease/symptoms/treatment, and explain necessary nursing.
- h. Explain the features of health issues of specific to childhood, which are easy to occur depending on developmental stage and necessary nursing.
- Understand the impacts that a sick child and hospitalization exert on family, and explain the nursing for the whole family corresponding to medical conditions, developmental stages, and characteristics of family.
- j. Understand characteristics of child and family in special situations such as abuse and the necessary nursing.
- k. Explain the nursing for continuation of medical treatments in the adult transition period and implementation of their own life.

D-3-3 Nursing practice for the people in adulthood

Goal:

Adulthood is the age when people work as a member of society, raise a new family or friendship, and establish new roles and works. Physically, their reproductive functions mature as well as physiological conditions of the body including basal metabolism stabilize. Also, adults become conscious of their own characteristics and values through the roles of workplace, family and the community. On the other hand, they begin to become conscious of the decline of physical functions. Based on such developmental issues, learn the nursing practice to support self-care along the individual life design and recuperation in proportion

to the level of health status.

Learning objectives:

- a. Explain physical/mental/social characteristics of adulthood.
- b. Assess comprehensively the health issues of people in adulthood from physical/mental/social information knowing their developmental tasks.
- c. Assess comprehensively the health issues such as Adolescent and Young adult (AYA) and transition knowing the continuity from childhood and their impacts on future life/living.
- d. Regarding the necessary recuperation and self-care, understand how to help so they can coexist with working life and family life, from the view point of job and life demanded in society.

D-3-4 Nursing practice for the people in old age

Goal:

Old age is when the individual lives are cumulated until now and people's identities further stand out. Also, it is the age to live the final stages of life. Learn the nursing practice corresponding to the level of health knowing the physical/mental/social changes, spirituality, and developmental tasks while respecting their identities which have been cultivated until now.

Learning objectives:

- a. Assess elderly people comprehensively knowing the physical/mental/social changes, individual living process, values, and spirituality, peculiar to them.
- b. Assess health problem risks of elderly people (fall, pain, delirium, decline in cognitive function, depression, low nutrition, swallowing disorder, bedsore, and so on) and explain the nursing to prevent them.
- c. Assess self-care abilities of elderly people and their family, and understand the support methods to maximize the abilities they have capitalizing on their identities.
- d. In order for elderly people to live the way they like, consider cooperation/collaboration with various professions and related organizations in proportion to various levels of health.
- e. Consider the nursing in the final stage of life knowing individuality, values, family, and social background of elderly people.
- f. Explain the nursing and characteristics of elderly people with dementia.
- g. Understand the types and features of elderly abuse and roles of nursing profession.
- h. Consider the nursing to support dignity and quality of life (QOL) of elderly people.

D-4 Nursing practice adapted to the stage of health

D-4-1 Nursing practice for the people who need preventative care

Goal:

Understand the objects (individuals/family/group, etc.) who need preventative care, and learn the nursing practice aiming for health promotion, promotion of independency, and so on.

- a. Draw out the strengths of the object person and practice the nursing to promote health and independency.
- b. Understand behavioral change of the object person, assess the state of interest and motivation, and practice the necessary nursing.
- c. Explain the concepts of frail, sarcopenia, and locomotive syndrome and practice the preventive nursing.
- d. Explain the examination system necessary for early detection, early diagnosis, and early treatment and its application for mental and physical disorders.
- e. Explain educational activities for the accurate understanding of mental and physical disorders.
- f. Explain the system to support mental and physical health promotion and the life of the handicapped in the community.

D-4-2 Nursing practice for the people in acute phase

Goal:

Understand characteristics of the person in acute phase, serious state, and perioperative period in proportion to each age such as child, adult, and elderly, and learn the nursing practice for life support, reduction of physical risks, symptom relief, and maintenance of safety and comfort, and so on.

- a. Explain the physical/mental/social characteristics of the person in acute phase and serious state.
- b. Assess the person in acute phase and serious state.
- c. Explain the nursing for the person in acute phase and serious state knowing the priorities.
- d. Practice the nursing to support the understanding of test/treatment and decision making of the person who receives major tests/treatments (blood collection, electrocardiogram, X-ray, CT, MRI, echography, endoscopy, etc.).
- e. Assess the person who has an operation.
- f. Practice the nursing to support the understanding of surgical therapy and decision making of the person who has an operation.
- g. Understand observation items corresponding to diseases and treatments (surgical therapy, drag therapy, chemotherapy, radiotherapy, etc.), and detect the abnormal signs early, and practice the necessary nursing.
- h. Explain the nursing to prevent postoperative complications.
- i. Understand the reaction to acute phase treatment of the person who has features of declining cognitive function and mental disorders, etc., and explain the nursing to protect their safety and comfort.
- j. Assess psychology of the person in acute phase and serious state and their family, and attempt relief of the anxiety.
- k. Explain the nursing along anticipated recovery process and discharge.

D-4-3 Nursing practice for the people in recovery phase

Goal:

Understand the mental and physical recovery process of the person in recovery phase, and learn the nursing practice to support the living depending on individual characteristics and to improve the QOL.

Learning objectives:

- a. Explain the nursing in accordance with the mental and physical recovery status and its assessment.
- b. Understand the concepts of rehabilitation and International Classification of Functioning, Disability and Health (ICF).
- c. Assess the motivation and willingness toward recovery.
- d. Explain the nursing to support willingness toward recovery and to accomplish more independent recovery process.
- e. Assess the situation of family supporting the person in recovery phase and support them.
- f. Share the necessary information and goals with related professions and organizations for the person in recovery phase to live a life depending on individual characteristics.
- g. Assess life dysfunction (body, intelligence, higher function, mind and development), and explain the necessary nursing from the normalization point of view.
- h. Explain the support of working in cooperation with social resources that can be utilized for the person in recovery phase to live a life depending on the degree of handicaps.

D-4-4 Nursing practice for the people in chronic phase

Goal:

Understand the feelings and life of the person who lives with disease and of the family as well as the treatment process, and learn the nursing to support the social life accompanying the self-care.

- a. Understand the features and treatment process of chronic disease.
- b. Assess the current status and issues of self-care from the conditions of disease awareness and self-control, value of examinations and so on.
- c. Understand theories/concepts as a basis of support for the people with chronic disease.
- d. Judge the efficacy and side effects of treatments such as drug therapy.
- e. Understand causes of acute exacerbation and respond preventively.
- f. Understand the symptoms such as chronic pain and consider pain and anxiety of the object person.
- g. Explain social resources necessary for realizing of the objects' lives worthy on their own by their self-care.
- h. Think and support how disease affects family's life and its relationship with the object.
- i. Understand characteristics of the support necessary for various chronic diseases and tie it with

- appropriate people/organization depending on the disease.
- j. Explain palliative care from the point of whole view of patients in chronic phase.

D-4-5 Nursing practice for the people in final stage of life

Goal:

Learn nursing practice for the person in final stage of life to live a life with dignity depending on individual characteristics. Also, learn the nursing practice for the family of the person in the final stage of life.

Learning objectives:

- a. Explain physical changes of the person in the final stage of life.
- b. Draw out the value, outlook on life, and view of life and death of the person in the final stage of life, and explain how to build the supporting relationship to think of the way to spend the terminal period.
- c. Understand the importance to tie up related organizations/professions for the person in the final stage of life to live their own life.
- d. Understand the methods to assess and control the pain of the person in the final stage of life, and explain the total care of pain relief.
- e. Explain the process of accepting death and mental care for the objects and their families.
- f. Explain the characteristics of decision-making process of the person in the final stage of life and the method to support.
- g. Explain family care (grief care) after death.
- h. Explain the significance of care after the death with dignity.

D-5 Nursing practice for the people who need mental care

Goal:

The concept of mental health is on a continuous line from a healthy condition to a state of disease/disorder. Diverse mental care is necessary to better keep mental health. Learn the nursing practice necessary to support prevention, early detection, treatment, and recovery of mental health problems while utilizing the strengths of the parties concerned.

- a. Explain the concept of mental health.
- b. Explain the developmental tasks and situations of mental crisis in each period of life cycle.
- c. Explain the support to improve the mental health at home, school, workplace, and so on.
- d. Explain the support to keep the mental health of mothers in perinatal period and their families and to encourage the development of a healthy mind of children.
- e. Explain the support to assess developmental disorders and to provide the appropriate environment.

- f. Explain the support for the objects and the parties concerned to prevent a suicide.
- g. Explain the support for people with addictions and their families.
- h. Explain support systems for early risk assessment of mental disorders and early provision of proper treatment.
- i. Understand the nursing for the person with mental disorder depending on stages of recovery from admission to discharge.
- j. Explain the necessity and methods of collaboration with the parties concerned regarding support for community life of a person with mental disorder.

D-6 The role of nursing in an organization

D-6-1 Nursing activity and improvement of quality of care in an organization

Goal:

Learn the functions of nursing, the way of nursing activities, and efforts to manage and improve the qualities of nursing in an organization.

Learning objectives:

- a. Explain the role of nursing in an organization.
- b. Explain the organization of nursing, nursing system, and functions of nursing in a medical institution.
- c. Understand the way of role sharing in an organization.
- d. Understand information management system in an organization.
- e. Understand the necessity to evaluate qualities of nursing and its method.
- f. Understand the significance of cost effectiveness in nursing administration.
- g. Understand the significance and method to improve nursing activities using PDCA cycle.
- h. Understand the significance of leadership and membership in nursing activities.

D-6-2 Risk management

Goal:

Understand the risk management in medical care and nursing, and learn the necessary activities for it.

- a. Explain the risks in medical care.
- b. Explain the preventive methods of risk management and adverse events (accidents, tipping/falling, bedsore, drug error, etc.).
- c. Explain the significance to work as a team aiming for the formation of culture of safety in medical care.
- d. Explain the efforts of medical institution and roles and activities of nursing such as medical safety measures in an organization.

- e. Explain the significance to form the safety management system of drugs/medical equipment and safe medical environment.
- f. Understand the measures of prevention of infection in an organization and put them into effect.
- g. Explain prevention, response at the occurrence, analysis and evaluation after the outbreak, of a medical accident.
- h. Understand the purpose of an incident (close call) report and explain its necessity.

D-6-3 Cooperation and collaboration in health care/medical care/welfare team

Goal:

Learn the cooperation and collaboration in health care/medical/care/welfare team.

- a. Explain the function and expertise of health care/medical care/welfare team members and the role of nursing in team-based health care.
- b. Explain how to build an object-centered team.
- c. Explain the mutual respect/cooperation/collaboration in team-based health care.
- d. Explain the methods to have effective discussions in team-based health care.
- e. Explain the activities and roles of nursing including cooperation/collaboration among health care/medical care/welfare organizations, to promote home care.
- f. Explain the nursing assistance methods to form collaborative relationship with related organizations in the community, including continuing nursing and support/coordination of discharge.
- g. Understand the necessity of appropriative communication with other members of the team and communicate under the guidance.
- h. Understand the necessity of report/contact/consultation and perform as a team member under the guidance.

E Required basic knowledge for nursing practice in various settings

The settings where nursing is provided are diverse such as medical institutions, home, health organizations, welfare facilities, industry/workplace, schools, and research institutions, and so on. Moreover, globalization has increased the opportunity of cross-border nursing practice such as healthcare/medical activities for foreigners living in Japan or, in foreign countries. Understand various settings where these kinds of nursing are needed as well as nursing practice by acquiring the specialty knowledge necessary to respond to the objects' needs and recognizing the complexity of situations reflecting characteristics of the object person.

E-1 Nursing adapted to characteristics of various settings

E-1-1 Characteristics of various settings

Goal:

Learn the characteristics of various settings and living places where nursing is provided.

Learning objectives:

- a. Explain the types and characteristics of medical institutions.
- b. Explain home care organizations such as visiting nursing station, nursing multifunctional long-term care in a small group home, district comprehensive support center, district comprehensive support center for families with small children, and their characteristics.
- c. Explain providers of facility services, home services and community-based services related to the long-term care insurance, and their characteristics.
- d. Explain welfare facilities (admission/outpatient) designated for mothers and children, elderly people, psychosomatic/mentally handicapped children/persons, etc., and their characteristics.
- e. Explain the characteristics of industrial settings where people work.
- f. Explain the characteristics of the school settings where children/pupils study.
- g. Explain the characteristics of administrative agencies such as national and local governments.
- h. Explain the characteristics of living places (home, facility, etc.) and the community.
- i. Give an outline of international health/medical cooperation (United Nations<UN>), World Health organization (WHO), Japan International Cooperation Agency (JICA), Official Development Assistance (ODA) and Non-Governmental Organization (NGO).

E-1-2 Nursing practice adapted to various settings

Goal:

Learn nursing practice adapted to diverse settings.

- a. Understand the modalities and methods of nursing knowing the roles that each organization plays in a medical care plan.
- b. Understand the modalities and methods of nursing in home, medical institutions and in-home care

agency.

- c. Understand the modalities and methods of nursing in service providers related to the long-term care insurance.
- d. Understand the modalities and methods of nursing in welfare facilities (admission/outpatient) designated for mothers and children, elderly people, psychosomatic /mentally handicapped children/persons, etc.
- e. Understand the modalities and methods of nursing in industrial health.
- f. Understand the modalities and methods of nursing in school health.
- g. Understand healthcare activities in administrative agencies.
- h. Understand the modalities and methods of nursing reflecting the difference in living places (such as home and facility) and regional characteristics.
- i. Understand the nursing considered the cultural backgrounds of foreign residents in Japan.
- j. Understand the needs of nursing/healthcare of foreign countries, and ways of support and international cooperation in foreign countries.

E-2 Nursing practice in the community-based integrated care

E-2-1 Community-based integrated care and nursing

Goal:

Learn the service providing organizations for the people in various developmental stages, level of health and living places to continue living where they have lived, such as for medical care/nursing/long-term care/prevention/housing/living/support of child care.

- a. Understand the concept of the community-based integrated care.
- b. Understand the necessity of self-help/mutual aid/mutual assistance/public assistance in the community-based integrated care.
- c. Explain the necessity of health support for the people in various life cycles and health levels in the community where they have lived long.
- d. Enumerate and explain the care service providers related to the community-based integrated care.
- e. Understand the collaboration and cooperation of various organizations and professions in the community-based integrated care.
- f. Enumerate various social resources in the region, and understand who to apply those to.
- g. Understand the supports for self-care.
- h. Understand the supports for normalization.
- i. Understand the needs of objects and of where they live.

E-2-2 Roles of nursing in the community-based integrated care

Goal:

In order for the people to have the care needs of healthcare/medical care/welfare to be able to continue living their own lives in the community where they have lived long, acquire abilities to collaborate and cooperate with various professions and the local people, and to exert the role of nursing in the community-based integrated care,

Learning objectives:

- a. Assess the health conditions, characteristics and care needs of the people, home treatment patients and their families living in the region, knowing values of people, regional features and culture.
- b. Explain the supports for self-determination (decision making) of people and home treatment patients living in the region.
- c. Explain the supports to draw the strength and independence of people, home treatment patients and their families living in the region, and to exhibit their self-care abilities.
- d. Understand social resources that people, home treatment patients and their families living in the region need.
- e. Explain the nursing role in the support plan for people, home treatment patients and their families living in the region,
- f. Understand the methods of multi-professional conference in the region.
- g. Understand the needs to create new nursing care in order to deal with the needs of people, home treatment patients and their families living in the region.

E-3 Nursing practice in time of disaster

E-3-1 Understanding the nursing preparation for health crisis in time of disasters such as natural and unnatural disasters inclusive of radiation 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.

- a. Understand the kinds of disaster, disaster cycle, local disaster prevention plan and support system.
- b. Understand the phases (ultra-acute, acute, subacute, chronic and calmness) of medical relief activities and the nursing of each phase in time of disaster.
- c. Understand the methods to grasp the effects of disaster status and radiation disaster on health.
- d. Understand CSCATTT (Command and Control, Safety, Communication, Assessment, Triage, Treatment, Transport) as a basic of medical relief activities in time of disaster.
- e. Understand health care (disaster base hospitals, Disaster Medical Assistance Team <DMAT>, Disaster Psychiatric Assistance Team <DPAT>, Japan Medical Assistance Team <JMAT>, Disaster Health Emergency Assistance Team <DHEAT>, Disaster Acute Rehabilitation Team <DART> and The Japan Dietetic Association-Disaster Assistance Team <JDA-DAT> and the roles of nursing in time of

disaster.

E-3-2 Understanding the provision of safe care environment in time of disaster

Goal:

Understand the provision of safe care environment in time of disaster.

- a. Understand helping with daily living such as meals, excretion, sleep, cleanliness and physical/mental health management, in places of disaster nursing activities (first aid stations, shelters, welfare shelters, temporary housing, damaged medical institutions, etc.).
- b. Understand the nursing for people to be considered and to be supported in evacuation behavior.
- c. Understand the necessity and methods of nursing by collaboration and cooperation with people in disaster areas and various professions.
- d. Understand the necessity to continue the provision of safe care environment by collaboration and cooperation with various professions and local people while responding to changes in disaster cycle.
- e. Understand the occurrence and risk of secondary disaster.
- f. Understand the stresses of and mental care for victims and rescuers.

F Practical training

Clinical and regional training practice is one of the educational methods to integrate the knowledge and skills of nursing and to nourish the abilities to apply those to practice. With basic qualities and abilities required of human resources for nursing constantly consciously in mind, the students will attend the training practice where various settings and people become the objects. Through the training practice, they are to make efforts to integrate the knowledge and skills, to develop interpersonal skills and ethics necessary for forming the relationship with nursing care receivers and in team-based healthcare, as well as to acquire abilities to reflect on oneself how one should be as a nursing professional.

F-1 Learning in clinical and regional training practice

F-1-1 Learning in clinical and regional training practice

Goal:

Conduct the clinical and regional training practice with "A Basic qualities and abilities required of human resources for nursing (nursing profession)" (repeated below) constantly consciously in mind.

Professionalism

- a. Knowledge of nursing science and nursing practice
- b. Evidence-based problem-solving abilities
- c. Communication skills
- d. Collaboration in healthcare/medical care/welfare
- e. Quality of care and safety management
- f. Expansion of nursing roles demanded by society
- g. Scientific inquiry
- h. Attitudes of continuing study for a lifetime

F-1-2 Learning modality (characteristics) in clinical and regional training practice

Goal:

Know the reality of treatments of people, places of living and social resources supporting them, and integrate and apply the knowledge/skills/attitudes of nursing science to practice while building relationships with people.

- a. Integrate the learned knowledge/skills/attitudes of nursing science, and practice evidence-based and individualized nursing.
- b. Understand the reality of various lives (reference B/D/E) in various places.
- c. Explain the significance of social resources involved in the life of people who receive nursing by observing the actuality of various social resources, services and systems (reference B/E).

- d. Understand that necessary nursing varies depending on places and people who receive nursing, and consider the roles of nursing profession creatively, through the accumulation of the training practice.
- e. Reflect the meanings and issues of nursing practiced from the receiver-centered point of view and in ethical perspectives.
- f. Reflect the way of self as a nursing professional through the review of practice, and develop one's self towards the improvement of qualities of nursing.

F-2 Participation in care

Nourish basic abilities to respond to care receivers having various needs in various settings, and nurture attitudes to act as a team member.

F-2-1 Practice of care based on nursing process

Goal:

Acquire basic abilities to provide appropriate care to receivers who have various needs in various settings. Additionally, learn the importance of assessment in nursing process which is a cyclic series of processes.

Learning objectives:

- a. Assess the needs of care receivers.
- b. Plan the necessary nursing based on scientific evidence.
- c. Clarify the nursing that students can perform in the drafted plan.
- d. Participate in the care using knowledge/skills listed in B through E, and practice nursing with necessary assistance provided.
- e. Report/communicate/consult the results of nursing that students themselves observed/performed to/with the appropriate counterpart.
- f. Record accurately the nursing that students themselves observed and performed.
- g. Evaluate the nursing provided to care receivers.
- h. Respect the intentions of care receivers as the subject, in all phases of nursing process.

F-2-2 Maintenance of safe care environment

Goal:

Recognize the importance of maintaining the safe care environment in various settings and perform preventive actions. Moreover, understand the necessity and significance of reporting and report appropriately in case of an incident (close call).

- a. Plan and perform the preventive measures for adverse events such as tipping/fall, and bedsore.
- b. Perform the measures for prevention of infection appropriately.

- c. Explain the system of incident (close call) reporting in training practice.
- d. Report/communicate/consult rapidly when encountering incidents (close call).
- e. Explain respective cause and recurrence prevention measures when encountering incidents (close call).

F-2-3 Participation in care as a team member

Goal:

Participate in the care as a team member with guidance from team members. Also, nourish basic abilities to respond to people having various needs in various settings through the collaborative learning with the group members of the training practice. More, nurture the attitude to be able to work as a team member.

- a. Explain the objectives of care-providing team and roles of each member.
- b. Explain one's own roles in the team.
- c. Perform nursing and report/communicate/consult under the supervision of team members (leader and so on).
- d. Express one's own opinions in a conference and listen to opinions of other team members.
- e. Raise and discuss issues concerning the advocacy of care receiver's rights.
- f. Explain basic attitude and method to form a team.

G Research of nursing science

Outcome of nursing science research is returned to people who are the object of nursing, as the basis of nursing practice. It also demonstrates the necessity of nursing in society and make explanation of nursing possible. For that, the research becomes a basis to construct a system of nursing science, and contributes to a development of expertise of nursing science. Further, it improves problem solving abilities for exploring better nursing, through conducting research of nursing science. In a bachelor's degree program, the focus is on building a basis of various research activities in the future.

G-1 Ethics of nursing research

Goal:

Learn the necessity of ethics in nursing research and examples of material consideration in order to build a basis of nursing research activities in the future.

Learning objectives:

- a. Explain the necessity of ethics in nursing research.
- b. Understand material examples of ethical consideration in nursing research and rationale behind them.
- c. Draft a plan regarding ethical considerations in nursing research with support.
- d. Understand researcher's ethics (inclusive of knowledge necessary to advocate the human rights of object person and avoiding wrongdoing in research).

G-2 Inquiry for nursing practice through the nursing research

G-2-1 Inquiry for nursing practice

Goal:

Learn the necessity of inquiry of nursing practice and nursing research as a means of inquiry.

Learning objectives:

- a. Understand the necessity of research for the inquiry of nursing practice.
- b. Think of nursing phenomena logically and critically towards the inquiry of nursing practice

G-2-2 Application method of research outcome

Goal:

Learn methods to interpret research outcome and application.

- a. Acquire information and statistics literacy.
- b. Perform literature search of research outcome, statistical data, practice report, proposals of experts and so on, by understanding retrieval methods.
- c. Possess knowledge of basic research methods, read literature/statistical data and the like, and interpret

the outcome with support.

d. Understand the outcome with support, upon knowing there are boundaries and limits of applicability for research outcome.

G-2-3 Practice of research activities

Goal:

Learn method of nursing research to build the basis of nursing research activities in the future.

- a. Understand the series of process of extracting research subject, drafting of research plan and conducting.
- b. Plan and conduct researches such as literature study, case study, and experiment/survey, with guidance.

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