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Shutoh, Mariko
Sekine, Ryuichi
Hisanaga, Takayuki
Yamamoto, Ryo

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Development of a Consensus Syllabus of Palliative Medicine for Physicians in Japan Using a Modified Delphi Method

Akihiro Sakashita, Mariko Shutoh¹, Ryuichi Sekine², Takayuki Hisanaga³, Ryo Yamamoto⁴

Department of Palliative Medicine, Kobe University School of Medicine, Kobe, Hyogo, ¹Minato Home Care Clinic, Tokyo, ²Department of Pain and Palliative Care, Kameda Medical Center, Kamogawa, Chiba, ³Department of Palliative Medicine, Tsukuba Medical Center Foundation, Tsukuba Medical Center Hospital, Tsukuba, Ibaraki, ⁴Department of Palliative Medicine, Saku Central Hospital Advanced Care Center, Saku, Nagano, Japan

Abstract

Context: Although palliative care is rapidly being disseminated throughout Japan as a result of government policy, a systematic syllabus of palliative medicine for physicians has not been developed. **Aims:** This study aimed to develop a Japanese national consensus syllabus of palliative medicine for physicians. **Design:** We used a modified Delphi method to develop the consensus syllabus. **Methods and Setting:** We created a Delphi panel by selecting 20 expert eligible panelists consisting of Diplomate or Faculty of the Specialty Board of Palliative Medicine and certified by the Japanese Society for Palliative Medicine. We inducted external reviewers from 11 palliative care-related organizations. **Results:** Among 20 experts surveyed, 20 (100%) responded over all rounds. Ten (50%) participated in a panel meeting. In the first round, 179 of 179 (100%) learning objectives were judged to be appropriate and 5 of 179 (3%) learning objectives were judged to be too difficult. In the panel meeting, 25 learning objectives were excluded, three new learning objectives were added, and 15 learning objectives were reworded. In the second round, 18 of 18 (100%) learning objectives were judged to be appropriate. The final version of the syllabus developed consists of 157 specific behavioural objectives and 22 general instructional objectives across 22 courses. **Conclusions:** We have developed the first national consensus syllabus of palliative medicine for physicians in Japan. Based on this syllabus, a training program on palliative medicine will be established by training facilities in Japan, and physicians will be able to practice specific palliative care.

Keywords: Curriculum, Delphi method, education, palliative medicine, syllabus

INTRODUCTION

Improvement in palliative care is an important public healthcare issue worldwide.^[1] According to the World Health Organization, palliative care aims to improve the quality of life of patients and families who face life-threatening illness, by providing pain and symptom relief, spiritual, and psychosocial support from the diagnosis to end-of-life care, and support during bereavement. Further, the WHO recommends that palliative care should become an integral part of healthcare and that all patients affected by a life-threatening disease should have access to palliative care services. This statement is further supported by the European Association of Palliative Care^[2] and is also in agreement with the European Council's guidelines for the European Union member states.^[3] This consensus in favor of integrating palliative care within regular treatment offered to patients with life-threatening disease is supported by a growing amount of evidence indicating the

effectiveness of palliative care in improving quality of life of these patients.^[4-6]

The Cancer Control Act was implemented in 2007 in Japan and emphasized the importance of the early introduction of appropriate palliative care to maintain and improve patient quality of life over the course of illness; however, palliative care is yet to become sufficiently widespread throughout Japan. One of the reasons suggested for this is the lack of appropriate education and support systems enabling the implementation of basic palliative care.^[7] In Japan, it has been reported that only approximately 20% of physicians responded that they

Address for correspondence: Dr. Akihiro Sakashita, Department of Palliative Medicine, Kobe University Graduate School of Medicine, 7-5-1 Kusunoki-Cho, Chuoku, Kobe, Hyogo, Japan. E-mail: meidai@med.kobe-u.ac.jp

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“received sufficient education regarding palliative care” and only approximately 30% responded that they had “sufficient knowledge and skills regarding alleviation of symptoms.” Both of these figures are much lower than those reported in Western countries.^[8-11]

The training curriculum of palliative medicine in Japan comprises the “Training Curriculum for Physicians Aiming to Become Palliative Care Specialists” developed by the Japanese Society for Palliative Medicine in 2009, which is based on the curriculum for multiple disciplines developed by the Japan Hospice Palliative Care Association.^[12] However, it has been reported that specialized palliative care training programs are required and that learning methods for acquiring specialized knowledge remain insufficient.^[13] Therefore, in accordance with clinical needs and to respond to the demands of physicians studying palliative medicine, it appears necessary to revise the training curriculum for physicians.

In this study, we aimed to clarify the essential learning outcomes in palliative care that physicians aiming to become palliative medicine specialists should achieve by the time they graduate from the training program. We used a modified Delphi method,^[14] which is widely used to in developing educational syllabuses.^[15-20]

SUBJECTS AND METHODS

We adopted a modified Delphi method^[14] to develop a consensus syllabus of palliative medicine for physicians.

Development of a provisional syllabus

To develop a provisional syllabus, we adopted the following procedures. First, the authors established the structure and sections of the syllabus based on discussions and literature review.^[12,19-29] Second, one author (A. S.) generated an item pool of learning outcomes under each category of the syllabus based on a literature review. Third, the authors discussed the appropriateness and coverage of the item pool of learning outcomes to reach a consensus regarding their validity, and the provisional syllabus was then formulated.

Expert panel selection

We selected expert and eligible panelists to create a Delphi panel that consisted of Diplomate or Faculty of the Specialty Board of Palliative Medicine and certified by the Japanese Society for Palliative Medicine. We contacted the Japanese Society for Palliative Medicine through mail and asked them to participate in this study and recommend panelists based on the following criteria: (1) physicians with adequate experience as part of a palliative care consultation team; (2) physicians with adequate experience at a palliative care unit; (3) physicians with adequate experience in community-based palliative care; and (4) coordinators of palliative care education at a university-level graduate school of medicine. Each group consisted of five expert panelists, making a total number of 20 expert panelists. All individuals who confirmed that they met the eligibility criteria and expressed a willingness to

participate were included in the Delphi study. The study was conducted in accordance with the Declaration of Helsinki and ethical guidelines with regard to clinical research. This study was reviewed by the Institutional Review Board at Hyogo Prefectural Kakogawa Medical Center, which approved it with waiver of informed consent.

Survey process

Google Forms™ was used to conduct anonymous web-based surveys during the period from September 2016 to March 2017. Our Delphi study consisted of three rounds, each lasting 4 weeks with a 4-week gap between the rounds. Nonrespondents were sent weekly E-mail reminders. No financial incentives were provided.

First, each panelist was asked to review existing syllabi and literature to standardize their knowledge regarding learning outcomes in palliative medicine education for physicians.

Second, 4 weeks later, we implemented a first-round survey, mailing a questionnaire with the outline of the provisional learning outcomes to each panelist. Each member was asked to rate the appropriateness of each learning outcome using a nine-point Likert-type scale (inappropriate 1–3, intermediate 4–6, and appropriate 7–9). In cases where panelists were unfamiliar with items due to their specialty, an “incapable of rating” result was also generated. Panelists, who rated a statement with a score of <6, were asked to provide the reason. In addition, each member was asked to rate the difficulty in each learning outcome using a four-point Likert-type scale: 0 (easy), 1 (adequate), 2 (moderately difficult), 3 (too difficult), and the learning outcomes were reformulated to be more achievable as needed. Panelists who rated the outcome difficulty as 2 or 3 were asked to provide the reason. A consensus in this study was defined *a priori* as agreement (appropriate, 7–9) among a minimum of 75% of the experts. We also collected basic demographic information from the experts including age, gender, type of clinical practice, and years of experience. A summary of the first-round survey was sent to each panelist and author, and disagreements were discussed via E-mail over 2 weeks. We asked the panelists, especially those who would not be able to attend a panel meeting, to provide their opinions.

Third, we contacted 11 palliative care-related organizations [Table 1] through mail in December 2016 and asked them to participate in the study and to recommend a representative in charge of education in palliative medicine as an external reviewer. We mailed them the provisional syllabus, summary of the first-round survey, and description of each panelist. We requested opinions regarding the provisional syllabus and each learning outcome from the external reviewers.

Fourth, following discussions through E-mail, an expert panel meeting was convened on December 24, 2016, in Tokyo to discuss statements causing disagreement in person. At the meeting, a summary of the first-round survey, discussion through E-mail, and opinions from the external reviewers were

distributed. Following the panel meeting, a summary of the meeting and a revised version of the learning outcomes were sent to all panelists to confirm corrections or to determine whether there were additional opinions.

Fifth, we implemented a second-round survey using the same method as in the first-round survey, addressing only the learning outcomes that could not be agreed on in the first-round survey. For learning outcomes considered inappropriate, the relevant panelists were contacted via E-mail individually, and we attempted to reach an agreement.

Sixth, we conducted a third-round survey using the same methods as in the first- and second-round surveys, addressing only the learning outcomes that could not be agreed upon in the first- and second-round surveys. We eliminated learning outcomes that could not be agreed on during the third round.

Statistical analysis

Data analysis was performed using the software Statistical Package for Social Science version 22.0 (SPSS Japan, Tokyo, Japan).

RESULTS

Participant characteristics

The participants' characteristics are summarized in Table 2. Among 20 experts surveyed, 20 (100%) responded

over all rounds. Ten (50%) participated in a panel meeting.

First Delphi round

In the first-round survey, 179 of 179 (100%) learning objectives were judged to be appropriate by more than 75% of the respondents, and 5 of 179 (3%) learning objectives were judged to be too difficult by more than 10% of the respondents.

In the panel meeting, all learning objectives were examined carefully. Subsequently, 3 new learning objectives were added, and 25 learning objectives were excluded, owing to their high difficulty, during the panel meeting. In case of satisfactory statements that included correcting modes of expression, shuffling of learning objectives among courses, and binding similar objectives together, we made revisions based on a discussion among the participants and authors. In addition, we reworded 15 learning objectives judged to be difficult to make them more understandable and achievable. The number of learning objectives was 157 across 22 courses after the panel meeting. Following the panel meeting, a summary of the panel meeting and a revised version of the learning objectives were sent to all panelists to confirm corrections or determine whether there were additional opinions. We revised them based on a discussion among authors, resulting in 18 learning objectives being reworded, and then conducted the second Delphi round.

Second Delphi round

In the second-round survey, all panelists responded with 18 of 18 (100%) learning objectives judged to be appropriate by more than 75% of the respondents. No learning objectives were rated to be unnecessary or unimportant by more than 75% of the respondents. We decided to conclude the Delphi rounds after the second-round survey because most of the stated learning outcomes had achieved consensus. The final version of the syllabus [Appendix] consists of 157 specific behavioral objectives and 22 general instructional objectives across 22 courses [Table 3].

Third Delphi round

We concluded the study with the third-round survey, and no further Delphi round because all of the stated learning outcomes had achieved consensus after the second-round survey.

DISCUSSION

To the best of our knowledge, this study generated the first consensus syllabus of palliative medicine for physicians developed using a modified Delphi method.

The most important finding was that we used innovative processes to develop the syllabus. First, based on the modified Delphi method, we used E-mail discussion and panel meetings between the first and the second rounds of our Delphi study. The participants discussed backgrounds and reasons for their ratings of each learning objective and shared their opinions with each other, with the aim of making the learning objectives more adequate and achievable. Second, in the survey on the

Table 1: List of palliative care-related organizations participating in this study

Hospice palliative care japan
Japan Primary Association
Japan Psycho-Oncology Society
Japan Society of Clinical Oncology
Japan Federation of Cancer Patient Groups
Japanese Society of Cancer Nursing
Japanese Society of Medical Oncology
Japanese Society for Palliative Medicine
Japanese Society of Pharmaceutical Palliative Care and Sciences
The Japanese Academy of Home Care Physicians
The Japanese Association for Clinical Research on Death and Dying

Table 2: Background of panelists in this study (n=20)

	n (%)
Sex	
Male	11 (55)
Female	9 (45)
Age	
30-39	4 (20)
40-49	10 (50)
50-59	6 (30)
Clinical experience (years)	
10-19	10 (50)
20-29	9 (45)
≥30	1 (5)
Clinical experience in palliative care of more than 5 years	18 (90)
Experience in palliative care education of more than 5 years	14 (70)

Table 3: List of courses and general instructional objectives in the consensus syllabus

Courses	General instructional objectives
Comprehensive assessment	To be able to holistically understand patients and comprehend both patients' pain and what constitutes support for these individuals
Pain management	To be able to assess patients' pain and use pharmacotherapy as well as other methods, including nonpharmacological therapy to alleviate pain
Management of physical symptoms other than pain	To be able to evaluate symptoms other than pain and use pharmacotherapy and various other methods including nonpharmacological therapy to alleviate these symptoms
Management of psychiatric symptoms	To be able to evaluate psychiatric symptoms and use pharmacotherapy and various other methods, including nonpharmacological therapy to alleviate these symptoms
Palliative care of noncancer illnesses	To be able to cooperate with specialists to investigate the indications for palliative care for patients with noncancer illnesses and provide appropriate palliative care
Psychological reaction	To be able to evaluate psychological reactions and respond appropriately
Social issues	To be able to evaluate social issues and respond appropriately
Spiritual care	To be able to accurately understand patients' spiritual pain and offer appropriate support
Ethical issues	To be able to understand ethical issues associated with palliative care and respond appropriately
Decision-making support	To be able to support decision-making while considering the wishes of the patients and their families
Communication	To be able to engage in communication while considering patients' personalities
Palliative sedation	To be able to implement appropriate sedation to relieve otherwise intolerable suffering for patients
Disease trajectory	To be able to understand the disease trajectory and predict the prognosis
Care of dying patients	To be able to respond appropriately to patients in the end stages of their lives as well as to their families
Family care	To be able to notice challenges faced by patients' families and implement appropriate care for them
Bereaved family care	To be able to notice reactions of grief to bereavement and loss and respond appropriately
Psychological care for healthcare providers	To be able to provide psychological care for oneself and staff
Team work in medicine	To be able to practice medicine as a team
Consultation	To be able to provide appropriate consultations regarding palliative care
Regional coordination	To be able to coordinate with regional medical facilities and provide medical care appropriate for each region
Oncology	To acquire knowledge of oncology and be able to offer the best medical options for the patient
Education and research	To be able to contribute to the development of palliative care by being involved in education and research as well as constantly updating knowledge as a palliative care specialist

provisional syllabus and the first Delphi round, we evaluated the degree of difficulty for each learning outcome. In general, while developing the syllabus, learning objectives tended to increase in number during the process. We subsequently discussed and rewrote the objectives rated as too difficult by more than 10% of the panelists to make them more achievable and understandable. Third, external reviewers enabled us to be indirectly aware of perspectives from patients, families, and other disciplines, leading to a wider range of opinions regarding the syllabus. Subsequently, 25 learning objectives were excluded and three learning objectives were added. We surmise that these same three innovative processes undertaken to develop the educational syllabus on palliative care could also be adapted for other medical specialties, and indeed for any investigations using a Delphi method.

The second important result of the present study was that palliative care of noncancer illnesses was added as learning objectives. Although palliative care is rapidly being disseminated throughout Japan as a result of government policy,^[7] palliative care is not provided for illnesses other than cancer. In the year 2007, the Cancer Control Act and the Basic Plan to Promote Cancer Control Programs were enacted in Japan, addressing palliative care as one of the major issues in improving cancer care. This program required all government-designated cancer-care hospitals to organize hospital-based palliative care

teams within each institute. However, it was pointed out that palliative care continues to be primarily intended for cancer patients and is less accessible to those with other illnesses, compared to the situation in Western countries.^[30] The syllabus developed here may also be useful as an audit tool. Several institutions have developed palliative medicine curricula and may not wish to extensively revamp them. The syllabus might be used as a benchmark to compare their own programs with a national syllabus produced by an expert body of opinion or to assess the effectiveness of palliative care teaching in institutions.

This study has several limitations. First, the E-mail discussion and the panel meeting between the two Delphi rounds did not protect the anonymity of an individual's views, which might have affected the ratings during the second Delphi round, although the Delphi round itself retained its anonymity. Second, we only surveyed physicians in this study. Experts in other disciplines and patients may have different perspectives that would need to be explored in future studies. The syllabus might not reflect user or consumer perspectives sufficiently because of the panel selection process used. We aimed to overcome this limitation by seeking opinions of external reviewers that enabled us to gather a wider range of opinions regarding the syllabus. It might be useful to also conduct separate focus groups or external reviews involving patients, bereaved families, trainees, or experts in other disciplines. Third, we only surveyed learning objectives in our

study. The education curriculum comprises learning objectives, educational strategies, implementation, and evaluation. Further, we need to examine educational strategies, and implementation and evaluation of training programs on palliative medicine.

CONCLUSIONS

We developed a consensus syllabus of palliative medicine for physicians using a systematic methodology. Based on this syllabus, a training program on palliative medicine will be established by training facilities in Japan, and all physicians will be able to practice specific palliative care. Subsequent steps will involve implementation of this program and assessment of whether this syllabus achieves the desired endpoint, which is enabling qualified physicians with broad knowledge and understanding of the principles and practice of palliative medicine.

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Conflicts of interest

There are no conflicts of interest.

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APPENDIX

Japanese Society for Palliative Medicine

Palliative Specialist

Training Curriculum

2017 Edition

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INTRODUCTION

Development of this curriculum

The Cancer Control Act was implemented in 2007 in Japan and stated the importance of the early introduction of appropriate palliative care to maintain and to improve the patient's quality of life (QOL) over the course of their illness; however, palliative care is yet to become sufficiently widespread throughout Japan. One of the suggested reasons for this is the lack of appropriate education and support systems to enable the implementation of basic palliative care. In Japan, it has been reported that only approximately 20% of physicians responded that they "received sufficient education regarding palliative care" and only about 30% responded that they had "sufficient knowledge and skills regarding alleviation of symptoms." Both of these figures are much lower than the results found in western countries. The training curriculum for palliative medicine in Japan comprises the "Training Curriculum for Physicians Aiming to Become Palliative Care Specialists" developed by the Japanese Society for Palliative Medicine in 2009 based on the curriculum for multiple disciplines developed by the Japan Hospice Palliative Care Association. However, it has been reported that specialized palliative care training programs are required and that learning methods for acquiring specialized knowledge remain insufficient. Thus, in accordance with clinical needs and to respond to the demands of physicians studying palliative medicine, it appears necessary to revise the "Training Curriculum for physicians Aiming to Become Palliative Care Specialists." Therefore, the Working Practitioner Group (WPG) for Specialist Curriculum Planning, Committee on Education and Training in the Japanese Society for Palliative Medicine decided to establish a 2017 Palliative Specialist Training Curriculum.

When setting the training goals, a portfolio used for business and medical education in recent years was used as a reference to respond to the needs of physicians undergoing training in various situations. For the actual training, the trainee will generally set the objectives and strive to achieve them while confirming the progress with the trainer. Although record taking is somewhat complex, it is anticipated that it will aid

the communication between the trainee and trainer as well as with the other staff in the palliative care.

Subjects

This curriculum is meant for physicians aiming to become palliative care specialists.

Trainers and training facilities

1. Trainers: Diplomate or Faculty (tentative), Specialty Board of Palliative Medicine certified by the Japanese Society for Palliative Medicine
2. Training facilities: Institute, Specialty Board of Palliative Medicine, certified by the Japanese Society for Palliative Medicine.

QUALITIES AND ATTITUDE OF PHYSICIANS IMPLEMENTING PALLIATIVE CARE

Definition of palliative care: Palliative care is a type of care that is provided in cooperation with professionals in medical and welfare fields as well as various other disciplines over the entire course of the illness regardless of the place of end-of-life care to improve the QOL of patients with life-threatening and difficult to cure diseases and their families. Palliative care is provided so that the patients and their family can live in an as dignified and comfortable manner as possible. The following five items are required for palliative care:

1. Alleviate pain and other distressing symptoms
 2. Provide high regard to human life and pay respect to the "course of death," which all people will experience
 3. Do not unnaturally prolong life in a manner not desired by the patients or their family and do not intentionally cause death
 4. Offer mental and social support as well as spiritual care and help the patients live their life positively until the end
 5. Help the family to overcome various difficulties throughout the course of patients' illnesses and after they die.
-
1. Physicians should understand that palliative care aims to maintain and/or improve patients' QOL regardless of their life expectancy. Due to the needs of patients and their families are constantly changing, which in turn causes their care objectives to change, constant review is necessary
 2. All patients live various lives before facing death. Rather than simply viewing illness as a disease, physicians should place importance on what significance the illness has in that person's life (i.e., the meaning of the illness). Physicians must view the patient and their family holistically by understanding them mentally, socially, and spiritually rather than just physically
 3. Physicians should understand that the care must be offered not only to patients but also to the people surrounding them
 4. Physicians should understand that what is comfortable for the patient differs greatly amongst individuals, and

importance should be placed on patient autonomy and choice

5. Although the most important requirements of physicians who implement palliative care is excellent medical judgment and skills as a physician, they also need to be able to communicate well. Good communication with patients and their families and among medical team members is required
6. It is critical that physicians offer sufficient explanations of medical care and obtain informed consent from patients and their families based on such knowledge. If necessary, consideration should be given to a second opinion
7. Physicians should work as a member of the palliative care team. They must respect the specialty and opinion of each team member and constantly strive to help the team operate smoothly.

TRAINING ITEMS

The training objectives for physicians aiming to become palliative care specialists have been divided into the following items and presented below:

General Instructional Objectives (GIOs): Each patient's suffering is understood as holistic one (total pain). Palliative care is implemented to improve the QOL of the patients and their families and acquire the ability to provide education and conduct clinical research in this field.

COURSE LIST

- Course 1: Comprehensive assessment
GIO: To be able to holistically understand the patients and comprehend both patients' pain and what constitutes support for these individuals.
- Course 2: Pain management
GIO: To be able to assess patients' pain and use pharmacotherapy as well as other methods, including nonpharmacological therapy, to alleviate pain.
- Course 3: Management of physical symptoms other than pain
GIO: To be able to evaluate symptoms other than pain and use pharmacotherapy and various other methods, including nonpharmacological therapy, to alleviate these symptoms.
- Course 4: Management of psychiatric symptoms
GIO: To be able to evaluate psychiatric symptoms and use pharmacotherapy and various other methods, including nonpharmacological therapy, to alleviate these symptoms.
- Course 5: Palliative care of noncancer illnesses
GIO: To be able to cooperate with specialists to investigate the indications for palliative care for patients with noncancer illnesses and provide appropriate palliative care.
- Course 6: Psychological reaction
GIO: To be able to evaluate psychological reactions and respond appropriately.

- Course 7: Social issues
GIO: To be able to evaluate social issues and respond appropriately.
- Course 8: Spiritual care
GIO: To be able to accurately understand patients' spiritual pain and offer appropriate support.
- Course 9: Ethical issues
- Course 10: Decision-making support
GIO: To be able to support decision-making while considering the wishes of the patients and their families.
- Course 11: Communication
GIO: To be able to engage in communication while considering patients' personalities.
- Course 12: Palliative sedation
GIO: To be able to implement appropriate sedation to relieve otherwise intolerable suffering for patients.
- Course 13: Disease trajectory
GIO: To be able to understand the disease trajectory and predict the prognosis.
- Course 14: Care of dying patients
GIO: To be able to respond appropriately to patients in the end stages of their lives as well as to their families.
- Course 15: Family care
GIO: To be able to notice challenges faced by patients' families and implement appropriate care for them
- Course 16: Bereaved family care
GIO: To be able to notice reactions of grief to bereavement and loss and respond appropriately.
- Course 17: Psychological care for healthcare providers
GIO: To be able to provide psychological care for oneself and staff.
- Course 18: Team-work in medicine
GIO: To be able to practice medicine as a team.
- Course 19: Consultation
GIO: To be able to provide appropriate consultations regarding palliative care.
- Course 20: Regional coordination
GIO: To be able to coordinate with regional medical facilities and provide medical care appropriate for each region.
- Course 21: Oncology
GIO: To acquire knowledge of oncology and be able to offer the best medical options for the patient.
- Course 22: Education and research
GIO: To be able to contribute to the development of palliative care by being involved in education and research as well as constantly updating knowledge as a palliative care specialist.

Specific Behavioral Objectives (SBOs):

- Course 1: Comprehensive assessment
GIO: To be able to holistically understand the patients and comprehend both patients' pain and what constitutes support for these individuals.
SBOs:
 1. To be able to describe the concept of total pain

2. To be able to understand patients' pain from multiple facets
 3. To be able to list management plans for various types of pain
 4. To be able to understand a diverse range of elements, including patients' wishes, beliefs, and values and construct treatment objectives in accordance with patients' wishes
 5. To be able to detect pain quickly and provide appropriate treatment and prevention.
- Course 2: Pain management
GIO: To be able to assess patients' pain and use pharmacotherapy as well as various other methods, including a nonpharmacological therapy, to alleviate pain.
SBOs:
 1. To be able to describe the definition of pain
 2. To be able to describe the causes and mechanisms of pain
 3. To be able to describe pain assessment in specific terms
 4. To be able to explain the types of pain and typical pain syndrome
 5. To be able to explain the World Health Organization (WHO) Cancer Pain Relief Program in specific terms
 6. To be able to explain neuropathic pain
 7. To be able to describe care for pain
 8. To be able to appropriately select pharmacotherapy for pain in accordance with the WHO Cancer Pain Relief Program
 9. To be able to appropriately select opioids in accordance with patients' conditions
 10. To be able to select adjuvant analgesic drugs, if necessary
 11. To be able to appropriately administer drugs orally and by other means
 12. To be able to appropriately prevent and treat any side effects caused by opioids
 13. To be able to understand and respond to a psychological opioid dependency
 14. To be able to consider radiation therapy indications and proceed with such therapy appropriately or consult with and/or refer to a specialist
 15. To be able to consider surgical treatment indications and proceed with such treatment appropriately or consult with and/or refer to a specialist
 16. To be able to consider nerve block indications and proceed with such treatment appropriately or consult with and/or refer to a specialist
 17. To be able to assess and respond to noncancer pain.
 - Course 3: Management of physical symptoms other than pain
GIO: To be able to evaluate physical symptoms other than pain and use pharmacotherapy and various other methods, including non-pharmacological therapy, to alleviate these symptoms.
- SBOs:
- To be able appropriately respond to the following conditions and diseases
1. Fatigue
 2. Anorexia
 3. Cachexia syndrome
 4. Nausea/vomiting
 5. Bowel obstruction
 6. Constipation
 7. Diarrhea
 8. Ascites
 9. Abdominal distention
 10. Hiccups
 11. Dysphagia
 12. Oral/esophageal candidiasis
 13. Stomatitis
 14. Dry mouth
 15. Jaundice
 16. Dyspnea
 17. Cough
 18. Pleural effusion
 19. Excessive airway secretion
 20. Urinary incontinence
 21. Dysuria
 22. Oliguria/anuria
 23. Hydronephrosis (including indications for nephrostomy)
 24. Hematuria
 25. Bedsore
 26. Skin ulcers
 27. Pruritus
 28. Seizures
 29. Myoclonus
 30. Paralysis of the limbs and trunk
 31. Tremors/involuntary movements
 32. Delirium
 33. Edema
 34. Fever.
- Course 4: Management of psychiatric symptoms
GIO: To be able to evaluate psychiatric symptoms and use pharmacotherapy and various other methods, including non-pharmacological therapy, to alleviate these symptoms.
SBOs:
To be able to appropriately respond to the following conditions and diseases:
 1. Depression
 2. Adjustment disorders
 3. Anxiety
 4. Sleep disorders.
 - Course 5: Palliative care of noncancer illnesses
GIO: To be able to cooperate with specialists to investigate the indications for palliative care for patients with noncancer illnesses and provide appropriate palliative care.

SBOs:

To be able to cooperate with specialists to appropriately respond to the following illnesses:

1. Liver failure
2. Respiratory failure
3. Heart failure
4. Kidney failure
5. Neurological/muscular disorders
6. Dementia
7. Acquired immunodeficiency syndrome.

- Course 6: Psychological reaction

GIO: To be able to evaluate psychological reactions and respond appropriately.

SBOs:

1. To be able to recognize psychological reactions (e.g., denial and anger) and respond appropriately
2. To be able to understand that grief and loss reactions are expressed in a variety of situations and in various ways and that this is an important process in healing sorrow
3. To be able to consider psychological defense mechanisms.

- Course 7: Social issues

GIO: To be able to evaluate social issues and respond appropriately.

SBOs:

1. To understand social insurance systems (e.g., healthcare insurance system and nursing care insurance system)
2. To be able to consider the social and economic issues faced by patients and their families
3. To be able to consider issues occurred within the family
4. To be able to appropriately refer to and use resources for the social and economic support of patients and their families.

- Course 8: Spiritual care

GIO: To be able to accurately understand patients' spiritual pain and offer appropriate support.

SBOs:

1. To understand the main categories of spiritual pain
2. To be able to respect the beliefs and values of the patients and their family in medical care
3. To be able to recognize the importance of and the effects of views of life and death of the patients, their family, and healthcare providers on spiritual pain
4. To be able to recognize the fact that spiritual pain as well as religious and cultural background greatly affect patients' QOL
5. To be able to respect patients' and their families' religious views on death.

- Course 9: Ethical issues

GIO: To be able to understand ethical issues associated with palliative care and respond appropriately.

SBOs:

1. To be able to describe basic ethical principles in medical care
2. To be able to explain ethical issues in palliative care
3. To be able to investigate ethical issues in palliative care based on ethical principles with multidisciplinary staff
4. To be able to respect the right of the patients to refuse treatment and to obtain information regarding other treatment options
5. To be able to respond appropriately with regards to stopping or withholding treatment
6. To understand the status of social arguments on dignified death and euthanasia.

- Course 10: Decision-making support

GIO: To be able to support decision-making while adhering to the wishes of the patients and their family

SBOs:

1. To be able to describe the concept of Advance Care Planning
2. To be able to discuss methods of treatment and care with the patients and their family and create treatment and care plans with them
3. To be able to respect and give consideration to the thoughts and wishes of the patients and their family regarding treatment
4. To be able to respect patient autonomy and offer decision-making support
5. To be able to provide the necessary information for determining the location for end-of-life care and offer decision-making support.

- Course 11: Communication

GIO: To be able to engage in communication while being considerate of patients' personalities.

SBOs:

1. To be able to understand patients' communication and coping styles, respond appropriately, and offer support
2. To be able to describe specific methods for conveying bad news to the patients and their families
3. To be able to pay attention to non-verbal communication as well as verbal communication
4. To be able to appropriately convey information pertaining to the diagnosis, prognosis, and treatment strategies to the patients
5. To be able to listen to patients' hopes, wishes, and values
6. To be able to respond to difficult questions from the patients and expressions of emotion.

- Course 12: Palliative sedation

GIO: To be able to implement appropriate sedation to relieve otherwise intolerable suffering for patients.

SBOs:

1. To be able to describe the indications, limitations, and issues associated with sedation used to provide relief from intolerable distress

2. To be able to explain sedation to the patients and their families and offer appropriate sedation when necessary
3. To be able to respond appropriately to consultations regarding sedation from other healthcare providers
4. To understand the status of social arguments on sedation.

- Course 13: Disease trajectory

GIO: To be able to understand the disease trajectory and predict the prognosis.

SBOs:

1. To be able to describe differences in trajectory specific to each disease
2. To be able to understand prognosis prediction tools and also describe their limitations
3. To be able to deliver appropriate explanations to the patients and their families based on prognosis prediction.

- Course 14: Care of dying patients

GIO: To be able to respond appropriately to patients in the end stages of their life as well as their families.

SBOs:

1. To be able to treat the patients as individuals and with respect when they are approaching death and even after death
2. To be able to give consideration to the timing of end-of-life care and the family's psychological state immediately after the patient's death
3. To be able to appropriately judge when it is time for end-of-life care
4. To have sufficient knowledge regarding infusions in the terminal stages and be able to perform such infusions appropriately
5. To be able to respect the wishes of the patients and their families and provide necessary instructions for end-of-life care in accordance with patients' conditions
6. To be able to appropriately explain necessary information before and after death to patients' families.

- Course 15: Family care

GIO: To be able to notice challenges faced by patients' families and implement appropriate care for them.

SBOs:

1. To be able to grasp the family background
2. To be able to understand the communication and coping styles of members of patients' families and respond appropriately
3. To be able to consider the fact that each family member has different opinions and perspectives regarding the patient's condition and prognosis
4. To be able to notice the sense of burden and fatigue of patients' families and respond appropriately.

- Course 16: Bereaved family care

GIO: To be able to notice reactions of grief in response to bereavement and loss and respond appropriately.

SBOs:

1. To be able to describe grief reaction patterns to bereavement and loss
2. To be able to describe conditions (risk factors) that are likely to cause complicated grief reactions
3. To be able to notice anticipatory grief and respond appropriately
4. To be able to support people who have experienced the bereavement
5. To be able to notice complicated grief reactions and respond appropriately
6. To be able to detect depression early and refer the person to a specialist.

- Course 17: Psychological care for healthcare providers

GIO: To be able to provide psychological care for oneself and staff members.

SBOs:

1. To be able to recognize one's own psychological stress and that of team members
2. To be able to understand the importance of requesting help from other staff members for one's own psychological stress
3. To be able to recognize the fact that one's personal opinions and views on death influence patients and staff members
4. To be able to engage in team discussions and overcome feelings of guilt held by oneself or other staff about the possibility that care was inadequate
5. To be able to learn about and implement staff support methodology
6. To be able to understand that staff is constantly confronted with experiences of death and loss and distinguish normal psychological reactions and "burn-out" reactions.

- Course 18: Team-work in medicine

GIO: To be able to practice medicine as a team.

SBOs:

1. To be able to understand the importance and difficulty of team-work in medicine and function as a member of a team
2. To be able to understand the importance of leadership and make efforts to improve the ability of team members
3. To be able to understand functions of staff members and volunteers from other disciplines and display mutual respect
4. To be able to describe basic group dynamics and their importance in team medicine.

- Course 19: Consultation

GIO: To be able to provide appropriate consultations regarding palliative care.

SBOs:

1. To be able to describe consultation opportunities
2. To be able to provide appropriate recommendations and direct care in response to consultation requests
3. To be able to consider the individuality of the patient and their family in recommendations and direct care and provide these recommendations based on treatment guidelines
4. To be able to discuss the details of an assessment and recommendations with the requesting healthcare providers
5. To be able to hold conferences with the requesting healthcare providers if necessary.

- Course 20: Regional coordination

GIO: To be able to coordinate with regional medical facilities and provide medical care appropriate to each region.

SBOs:

1. To be able to describe the roles in the region of one's affiliated organization
2. To be able to collaborate with regional medical facilities to provide palliative care
3. To be able to understand the status of regional medical and social resources
4. To be able to offer support for transition to a location for end-of-life care desired by the patients and their families
5. To be able to coordinate with healthcare providers involved in home care and offer consultations or implement home palliative care.

- Course 21: Oncology

GIO: To acquire knowledge of oncology and to be able to offer the best medical options for the patient.

SBOs:

1. To be able to acquire basic knowledge of oncology
2. To be able to understand the indications for surgical treatment and appropriately consult with specialists
3. To be able to understand the indications for radiotherapy and appropriately consult with specialists

4. To be able to understand the indications for pharmacotherapy to treat cancer and appropriately consult with specialists
5. To be able to cooperate with specialists to appropriately deal with the following oncological emergencies:
 1. Hypercalcemia
 2. Syndrome of inappropriate secretion of antidiuretic hormone
 3. Superior vena cava syndrome
 4. Pulmonary thromboembolism
 5. Massive hemorrhage (i.e., hematemesis, hematochezia, and hemoptysis)
 6. Spinal cord compression
 7. Intracranial hypertension.
6. To be able to describe the current status of cancer treatment in Japan.

- Course 22: Education and research

GIO: To be able to contribute to the development of palliative care by being involved in education and research as well as constantly updating knowledge as a palliative care specialist.

SBOs:

1. To be able to constantly strive to acquire the latest information related to doubts that arise daily at clinical sites
2. To be able to learn basic educational techniques and implement them
3. To be able to perform training, awareness-raising, and promotional activities for palliative care in one's facility and the surrounding region
4. To become aware of the importance of clinical research and be able to participate in such research related to unsolved issues in palliative care
5. To be able to critically appraise medical articles
6. To be able to actively participate in academic meetings and workshops on palliative care and deliver presentations on medical care and clinical research results.