School of Nursing

Fundamental Nursing

Sachiko Tanaka, *Professor* Hiroko Yatsu, *Professor* Sumiko Satake, *Assistant Professor* Noriko Sato, *Professor* Chieko Hanyu, *Assistant Professor* Noriko Aoki, *Assistant Professor*

General Summary

Major study areas in basic nursing include: (1) education on physical assessment and supporting techniques, (2) supporting techniques in daily living, (3) history of nursing, (4) supporting patients with progressive motor dysfunction, and (5) nursing diagnosis.

Research Activities

Sachiko Tanaka studied the healthy work environment of nurses in hospitals.

Hiroko Yatsu published a book with 2 co-authors focusing on qualitative research methods. She is researching global nursing by means of an integrative literature review and is writing books on nursing theory and ecological psychology which will be published in 2020.

Chieko Hanyu performed a questionnaire survey of teachers to understand the current status of education on physical assessment accompanying the revision of the 2009 curriculum.

Sumiko Satake studies under the theme of "a reply of autonomic nerve activity to hearing stimulation in patients with long-term lying in bed." In addition, she has worked as a research member of neuroscience nursing and positioning in nursing.

Noriko Aoki studied how intra-abdominal pressure is decreased by changing the head elevation angle while the patient uses a bedpan.

Publications

Aoki N. Sense of Learning Achievement for Excretion Assistance Techniques through On-Campus Training and On-Site Clinical Training for Nursing

Students. Nursing and Primary Care. 2018; 2: 1-7.

Adult Nursing

Misuzu Nakamura, *Professor* Nidori Nagano, *Professor* Miwako Fukuda, *Associate Professor* Tetsuya Myojin, *Assistant Professor* Masami Sato, Professor Ruka Mochizuki, Associate Professor Yoko Murooka, Assistant Professor Wakako Osaka. Assistant Professor

General Summary

Undergraduate students were offered classroom coursework, including an introduction to clinical nursing and 4 areas of clinical nursing based on the level of health (the chronic phase, the perioperative period, cancer, and the acute phase). An educational evaluation was held with an emphasis on the process of learning practical nursing skills through the chronic phase and on a perioperative nursing practicum. As part of their research activities, the faculty members explored cancer nursing topics and nursing care for acutely ill and critically ill patients.

Research Activities

Research on critical care

- 1. Development of a support program utilizing reflection to foster nursing practice capabilities in critical care
- 2. Research on a supporting program for developing practical skills for critical care nursing

The purpose of this study was to develop a program to support the practical capability of nurses working in critical care. Our program comprised 3 monthly sessions consisting of a combination of group reflection and simulation, each lasting for 1 day. We believe that the reflection of a group of nurses working in different environments encourages the rearrangement and rebuilding of pattern recognition and improves metacognition.

Research on the perioperative period

1. A color index of clinical drainage fluid has only recently been established but remains uneven between physicians and nurses because their judgement is based on experience knowing the colors of drainage. We promote the study of the clinical color index of drainage fluid on the basis of its composition, and the color analysis of the blood component in unexplored. The aims of this study are to establish and clinically apply a color index for drainage fluid.

Research on cancer nursing

1. Research on cooperation of pharmacists and nurses for patients with cancer Our pilot study examined a model of collaboration of pharmacists and nurses for patients who have cancer and family members who have gone to a pharmacy. We conducted semi-structured interviews of 7 pharmacists supporting such patients and their families. The results were presented at an academic conference.

2. Research on chemotherapy-induced peripheral neuropathy

In joint research with other facilities, we have been developing educational applications for patients and the model of a comprehensive multisector care system for chemotherapy-induced peripheral neuropathy. This year, we have conducted randomized controlled trials to evaluate a developed application. In addition, to develop a comprehensive care system model, we conducted qualitative research targeting multiple occupations.

3. Research on the support of patients who have cancer and are raising a child The purpose of this research was to develop assessment tools and applications for the concerns of patients who have cancer and are raising a child and to develop comprehensive care models based on indicators. This year, we are planning to conduct Internet surveys.

Research on other topics

1. Research on factors related to the quality of life of ostomates

The aim of this study is to describe the characteristics of patients who have a new ostomy.

2. Characteristics of patients with pressure injuries found during hospitalization

This study aimed to describe the characteristics of patients who have pressure injuries during hospitalization.

3. Research on and development of the use of mini-sheets to improve blood flow and prevent pressure ulcers for patients at home

We collected data on changes in contact pressure and blood flow when mini-sheets were used. The subjects were patients of a hospital's convalescent ward who used wheelchairs on a daily basis. The collected data showed an increase in tissue blood flow and a decrease in contact pressure. In the future, we plan to analyze the data and use it to develop new tools.

4. Measuring pressure and shear force on the heel region and the reduction effect using dressing materials

The purpose of this study was to measure the pressure and shear force on the heel when the head is elevated and to determine whether these variables are reduced when dressing materials are used on the heel. The subjects were healthy volunteers 30 years or older. Pressure and shear force were measured by the angle from the lying position to the elevated head position. Subjects were also divided by film dressing, hydrocolloid dressing, and silicone foam dressings, and the pressure and shear force on the skin surface were measured when these 3 types of dressings were applied on the skin surface with a 3-axis tactile sensor. We plan to proceed with the analysis in the future.

Publications

Nagano M, Ogata Y, Ikeda M, Tsukada K, Tokunaga K, Iida S. Peristomal Moisture-Associated Skin Damage and Independence in Pouching

System Changes in Persons with New Fecal Ostomie. *J Wound Ostomy Continence Nurs.* 2019; **46:** 137-42.

Gerontological Nursing

Fumiko Kajii, Professor

Yoshie Nakajima, Associate Professor

General Summary

The following 4 studies were conducted in 2018: The first study was of the development and evaluation of a fall-detection application and a support program for elderly persons to monitor fall-prevention methods. This study was supported by a Grant-in-Aid for Scientific Research (B). The second study was of the development of an educational program to train unemployed and retired nurses to support persons who live in the community who have dementia and are cared for by family members. This study was supported by a Grant-in-Aid for Challenging Exploratory Research. The third study, a collaborative study by the city of Komae, The Jikei Daisan Hospital, and The Jikei University, was a survey of the problems of caregivers for family members with dementia. This study was supported by the research expenses of the School of Nursing. The fourth study was of the development of a physiological and psychological quantification method of "soothing sensation" using music-combined rehabilitation. This study was supported by a Grant-in-Aid for Scientific Research (C).

Research Activities

Study 1: The subjects were elderly people 65 years or older to whom a fall-prevention lecture was delivered 3 times every alternate week (intervention group, 21 subjects) or was not delivered (control group, 38 subjects). We collected data on the subjects' mental and physical health conditions and lifestyle during the first lecture, 12 weeks later, and 24 weeks later. After Within 24 weeks, the risks of falling, stumbling, and sliding did not differ significantly between the intervention group (0.38, 0.42, and 0.15) and the control group (0.23, 0.47, and 0.09). The risk of any event with a smartphone was higher for the intervention group than for the control group. Hence, the risk of falling, stumbling or slipping was not reduced by the lecture. However, use of a smartphone increased awareness of fall prevention in daily life. This data is now being analyzed.

Study 2: The aim of the educational program was to train potential nurses to support persons with dementia and their families, on the basis of data obtained in 2016.

Study 3: We clarified the support needs and problems of 166 family caregivers of persons with dementia receiving home service or community-based service by care insurance in home care support establishment in the Komae area.

Study 4: The purpose of our research is to establish a self-management program supporting patients with moderate paresis after stroke to engage in everyday rehabilitation and to achieve physical functional recovery. As a first step, we are attempting to verify the outcome of music combined with rehabilitation and to develop a nursing support program. In a preliminary study with healthy volunteers, we investigated the effect of emotion on movement intention and identified factors that affected movement-related cortical poten-

tial in button-pushing movement. When the music presented in combination with rehabilitation had a clear rhythm, comfortable tonality and melody, and an appropriate volume, the amplitude of the movement-related cortical potential increased, suggesting increased preparation for voluntary movement that might enhance the intention to exercise. On the basis of this result, we plan to investigate the relationship between emotion and motor function in patients with moderate paresis.

Mental Health and Psychiatric Nursing

Yasuko Koyano, *Professor* Junko Ishikawa, *Assistant Professor* Mayuko Yamashita, Associate Professor

General Summary

We give lectures to teach students about medical systems and social resources based on the mental health and welfare acts. We also give lectures to teach students about methods to assess patients who have mental problems during treatment.

Research Activities

Analysis of the difficulties of service providers of persons who have autistic spectrum disorder but no intellectual disabilities

A self-administered questionnaire survey was conducted on the difficulties of 141 staff members of psychiatry day-care institutions who provide support to adolescents and adults who have autistic spectrum disorder (ASD) but no intellectual disabilities. Analysis of free-text entries of the survey revealed difficulties in the following areas resulting from a lack of knowledge among support providers: "understanding of ASD characteristics," "concrete responses to be taken," and "planning of tailor-made support." In addition, the analysis revealed that, due to the ASD characteristics of these persons, service providers experience "difficulties in resolving issues."

Theory of self-care for people with mental disability in a community

The purpose of this study was clarification of the elements of self-care for people with mental disability in a community. We extracted the constituent elements of self-care for people with mental disabilities in a community. Self-care was composed of six elements of "stability of mental and physical states," "maintenance of daily life," "ability to accept support," "maintenance and development of human relations," "empowerment," and motivation in life," and 28 element divisions and 86 concrete activities. The elements of self-care are useful indexes to ascertain the self-care necessary to realize the life-style and life desired by people with mental disabilities and to design support.

Publications

Koyano Y, Watanabe H. Analysis of the difficulties experienced by service providers supporting adolescents and adults having autistic spectrum disorder without intellectual disabilities — Survey results from 141 psychiatry day — treatment institute. Bulletin of Juntendo Institute of Mental Health. 2018; 29: 55-8.

Yamashita M., Yabuta A., Iseki T. Elements that

supporters who take root community support recognize as necessary for people with mental disability to live in a local community. Journal of Japan. *Academy of Psychiatric Mental Health Nursing*, 2018; **27:** 82-90.

Yamashita M. Theory of self-care for people with mental disability in a community. *The Journal of Practical and Professional Nursing*, 2018; **2:** 1-6.

Child Nursing

Kinu Takahashi, Professor

Michie Nagayoshi, Assistant Professor

General Summary

The lectures given to undergraduates included an introduction, methods, practice, and an educational evaluation. These lectures promoted the learning of practical abilities in pediatrics through training in outpatient clinics and inpatient wards and the neonatal intensive care unit of The Jikei University and Child Development Center. These educational methods were used to enhance the advocacy of children's rights, to promote the mother-child relationship and family-centered care in clinical situations, and to deal with, practice, and learn nursing skills. Through practical training, the students learned about nursing for hospitalizing children with disease, children living in the community at an acute disease stage, family-centered care, and multidisciplinary collaboration.

Research Activities

Development of the ability scales of regarding child advocacy for pediatric nurses: Analysis of reliability and validity

With this study we aimed to develop a scale assessing the ability of pediatric nurses to achieve practices that advocate children's rights and verify its reliability and validity. The draft scales were extracted from previous studies, and their items and validity were examined by teachers and nurses engaged in pediatric nursing and education. Thirty-one items of the draft scales were prepared. Furthermore, an anonymous self-administered questionnaire survey using these items was conducted with 627 pediatric nurses in 30 healthcare facilities in the Kanto region, including 25 university and 5 pediatric hospitals. The effective recovery rate was 58.2%. On the basis of item and factor analyses, 19 items were classified into 3 factors: "ability to understand and support children and their family," "ability to adjust members of the medical staff who did not advocate children's rights," and "ability to explain to the child and confirming his or her own view." Cronbach's α coefficient for the overall reliability was 0.86, and its content validity was presented. However, additional challenges face studying the items of the scales and the criterion-related validity for another enlarged object of the survey. The scales were confirmed

to be practicable if their accuracy were improved.

Development of a scale to improve the ability of pediatric nurses to advocate children's rights

The ability scale was established to improve the ability of pediatric nurses to achieve practices that advocate children's rights, and its reliability and validity were verified. In stage 1, the scale was prepared. In stage 2, the validity of the scale was examined. In stage 3, a pilot test was conducted. As a result of exploratory factor analysis, 19 items were classified into 3 factors. Factor 1 was named "the relation that they try to understand between children and their family," factor 2 was named "the adjustment of members of the medical staff who did not advocate children's rights, and factor 3 was named "an explanation to a child, and the confirmation of his or her will." The Cronbach's α coefficient for the overall reliability was 0.86, and correlation with the existing scale was confirmed. This ability scale was realized to have a certain level of reliability and to have validity from a viewpoint of criterion-related validity and known-groups validity. The cumulative contribution rate by factor analysis, however, was 43.25%, and further investigation is required.

This study will be presented at the 28th conference of the Japanese Society of Child Health Nursing.

Difficulties and coping-action of childhood cancer survivors in their school life after returning to their school

The purpose of this study was to understand the difficulties faced by children who have recovered from cancer, coping, and support in their development after being discharged from the hospital. A qualitative descriptive analysis was performed of data obtained through semistructured interviews with 9 survivors of childhood cancer. Difficulties identified were composed of 37 subcategories and 14 categories based on 83 codes. These problems were related to school life or work. Fourteen categories were composed for coping strategies. This study found that survivors, because of physical weaknesses and problems, had school lives when they re-enrolled that differed from those of their friends.

This study was presented at the 50th Congress of the International Society of Paediatric Oncology, Kyoto.

A prospective study of relationships between developmental characteristics of 4- to 5-year-old infants after retinoblastoma treatment and parenting stress

This study aimed to clarify the developmental characteristics of patients with retinoblastoma in early childhood. A prospective study using the Strengths and Difficulties Questionnaire (SDQ) and the Parenting Stress Index (PSI) was conducted at a 6-month interval of 20 mothers of 4- to 5-year-old children with retinoblastoma. Twenty dyads were recruited in this study, and all 20 (100%) agreed to participate. No significant differences in PSI and SDQ scores were observed between time points. During the second tests, more mothers showed high-risk scores on PSI's "Mood," which positively corelated with SDQ's "Conduct problems" (p < .001). "More problems/worries" scores were significantly higher than the normative means (p < .05). High need scores on SDQ's "Prosocial"

were shown during the first tests by 6 children (30.0%) and during the second tests by 4 children (20.0%).

This study was presented at the 50th Congress of the International Society of Paediatric Oncology, Kyoto.

Roles of fathers of 0- to 3-year-olds in double-income households, and related factors This study investigated the employment conditions of parents of 0- to 3-year-old children attending nursery school, the role and child-rearing behavior of fathers, and relationships between these factors and child development. A cross-sectional, self-completed questionnaire survey was conducted of 290 fathers, and 57 respondents (19.7%) were analyzed (mean age: 37.2 years [SD = 11.9]). Early Childhood Parenting Scale scores showed significant negative correlations with the PSI child domain ($\rho = -.49$, p < .001) and parent domain ($\rho = -.53$, p < .001). The state of the father's role correlated with the number of hours worked by mothers per week ($\rho = .30$, p < .05). Providing advice and positive feedback on involvement in nurturing to fathers who bring their children to school every day might promote good father-child relationships.

This study was presented at the 16th Congress of the World Association for Infant Mental Health, Rome.

Maternity Nursing

Yasuko Hososaka, Professor

Mayumi Hamada, Lecturer

General Summary

Studies have been performed to examine the various health issues in each of the lifestyle stages of women and to explore how nursing assistance should be extended in maternal nursing

Research Activities

Aspects of the boundary between discipline and abuse by fathers raising infants We examined the specific content of childcare anxiety and abuse anxiety from the narratives of 11 fathers. From the interview data, 497 codes were extracted and classified into 5 categories. We found that fathers had narrow boundaries between discipline and abuse in childcare and that discipline was likely to lead to abuse. These results suggest the need for assistance to prevent the transition from discipline to abuse.

Creation of a Japanese-language version of the Quality Assessment Tool for Quantitative Studies Ensuring Equivalence and a study of its reliability

In the present study, a Japanese-language version of the Quality Assessment Tool for Quantitative Studies (QATQS), a scale used to comprehensively evaluate quantitative

research from the standpoint of the quality of the research, was created while the equivalence of the 2 versions was ensured and the reliability of the Japanese version of QATQS was demonstrated. The equivalence of the Japanese version of QATQS created in the present study was confirmed by the original authors. The results of the reliability study showed that the interrater reliability of the tool was high and indicate that the effectiveness of published studies can be objectively evaluated.

Mothers' experiences of feeding their infants: a meta-summary of qualitative research In this study, we integrated the results of qualitative research on the experiences of mothers feeding their infants. Information from 40 qualitative studies published in Japan from 2000 through 2015 was collected to create a meta-summary. The findings were summarized as 30 statements, with the following 9 topics of experience identified: (1) demonstrating the autonomy needed to make the choice as to method of feeding their infant, (2) independently choosing the method of feeding, (3) making efforts to breastfeed, (4) projecting the mother-child relationship onto the act of breastfeeding, (5) projecting oneself as a mother onto giving breast milk, (6) coping with weaning at different rates, (7) being negative about feeding, (8) feeling happy with the support provided, and (9) feeling disappointed with the support provided. The effects with the highest frequency (frequency rate, 20% to 38%) included experiences of physical and mental pain associated with breastfeeding and pumping, questioning of one's self-worth as a mother, and demonstrating maternal autonomy and determination. Further studies should examine problem situations surrounding breastfeeding mothers, such as physical and mental suffering caused by breastfeeding and their self-worth being shaken, and creating appropriate support that respects the autonomy and wishes of mothers.

Literature review of antenatal breastfeeding education designed to alleviate difficulties in breastfeeding

The aim of the present study was to review studies that have examined methods of antenatal breastfeeding education whose goal is to lessen the difficulties that breastfeeding mothers might experience. Previous studies were identified with literature searches of relevant electronic databases (PubMed, the Cumulative Index to Nursing and Allied Health Literature, Cochrane, and ICHUSHI) and hand searches of reference lists from key studies published in English and Japanese. The main reason studies were excluded from review was that participants were not women in advanced countries. This review included data from 10 studies, mostly from developed countries, including the United States, Australia, Singapore, and Japan. At different research levels, peer counselling, lactation consultation, and face-to-face styles of education during pregnancy appear to increase the duration of breastfeeding. However, no conclusive evidence was found to recommend any specific form regarding antenatal breastfeeding education for lessening any difficulties that breastfeeding mothers may experience. Although several studies of antenatal breastfeeding education examined difficulties in breastfeeding, they evaluated mainly the rate of starting and the duration of breastfeeding. In general, the only indicators of difficulty were nipple pain and mastitis. No studies evaluated the negative effects of antenatal breastfeeding education or mothers' satisfaction levels.

Community Health Nursing

Junko Shimasawa, *Professor* Yumiko Shimizu, *Assistant Professor* Yoshiko Kubo, Assistant Professor

General Summary

The faculty's research has focused on: (1) visiting nursing care to promote continued community life by mentally ill patients living at home, (2) exploring competencies regarding the stress check system among occupational health nurses, (3) the relationship between career anchors and job and home life satisfaction among occupational health nurses (OHNs) in Japan, (4) health and welfare in patients undergoing hemodialysis who live in the community, and (5) nursing intervention for self-care by patients undergoing hemodialysis.

Research Activities

Visiting nursing care for mentally ill patients living at home

The purpose of this study was to clarify the features of assistance provided by visiting nurses to promote the continued community life of mentally ill patients living at home. In this study, such assistance was considered to support and promote the continued life in the community of mentally disabled persons in an individually suitable manner.

Exploring competencies regarding the stress check system among occupational health nurses

This study examined competencies regarding the stress check system by occupational health nurses. Ten occupational health nurses participated in the semistructured interview. Data was analyzed with descriptive qualitative methods.

Relationship of career anchors to job and home life satisfaction among OHNs in Japan This study examined the relationship of career anchors to job and home life satisfaction among OHNs in Japan. The characteristics of career anchors among OHNs resemble those found in previous studies. The OHNs with more experience in their career have higher job satisfaction, and we suggest that many OHNs should be appointed to managerial positions for career development.

Health and welfare in patients who are undergoing hemodialysis and live in the community

This study aimed to clarify problems of health and welfare in patients who are undergoing hemodialysis and live in the community. We analyzed factors associated with a depressive status among patients undergoing hemodialysis.

Nursing intervention for self-care by patients undergoing hemodialysis

This study aimed to clarify the nursing intervention for self-care by patients undergoing hemodialysis.

Publications

Kubo Y, Hatono Y¹, Kubo T², Shimamoto S³, Nakatani J⁴ (¹Kyushu Univ, ²National Institute of Occupational Safety and Health, ³Tokai Univ, ⁴Univ of Occupational and Environmental Health). Relationship between Job and Home Life Satisfaction and Demographic Characteristics among Occupational Health Nurses in Japan. Japanese Journal of Occupational Medicine and Traumatology. 2018; **66**: 289-97.

Sugisawa H¹, Shimizu Y, Kumagai T², Sugisaki H³, Ohira S⁴, Shinoda T⁶ (¹J.F. Oberlin Univ, ²Osaka City Univ, ³Hachioji Azumacho Clinic, ⁴Sapporo Kita Clinic, ⁵Tsukuba International Univ). Barriers to Effective Case Management for Disabled Patients on Hemodialysis. *Therapeutic Apheresis and Dialysis*. 2018; **22**: 133-41. Epub 2017 Dec 28.

Home Care Nursing

Motoko Kita, *Professor* Yuri Sugiyama, *Assistant Professor* Hiroko Toyama, Assistant Professor

General Summary

Since 2011, our undergraduate course, Home Care Nursing, has focused on students acquiring the ability to develop the nursing process based on the characteristics of home care nursing, by studying home care nursing skills and home care nursing practices, which range from theory to practical training. In fiscal year 2018, we are planning to launch an educational assessment study. Also, in fiscal year 2017 we did research on the areas of interest of each member of the teaching staff.

Research Activities

Recognition by students of home health nursing training regarding the management of patient information and subsequent actions

Owing to the Internet and social networking services, a large amount of nonspecific information can now be easily collected and transmitted. Consequently, the need has increased for students to both recognize and properly perform information management. We are doing research to raise recognition by students of information management during home health nursing training and to obtain indications regarding the instructive relationship so that students can safely perform information management. We plan future surveys of how patient information is recognized by students and is managed.

A study of discharge support program construction for elderly persons with dementia at an acute care hospital

An increasing number of elderly persons with dementia are admitted to acute care hospi-

tals to have other diseases treated, and supporting these patients upon discharge is difficult. A study of multiple cases aims to clarify the discharge-support process for elderly patients with dementia involving nurses of an acute hospital's discharge support division and to develop a discharge support model corresponding to the difficulties of dementia.

Unexpected re-hospitalization

In Japan, as medical expenses continue to increase, needed to reduce hospitalization and treatment costs are appropriate assistance for patients and families during hospital discharge, the avoidance of re-hospitalization, and continuation of a safe and comfortable life with medical treatment. Consequently, through a review of literature in Japan and overseas regarding assistance during hospital discharge to avoid re-hospitalization, we are planning to examine research trends, to clearly identify the contents and effects of specific assistance during hospital discharge and future challenges, and to determine the conditions at acute phase hospitals.

Development of a liaison model for pediatric patients using multiple home-visit nursing service facilities

As the number of children with medical complexity living at home increases, so does the demand for home-visit nursing services. However, at present, few facilities and nurses can provide such services. Because the service facilities of home-visit nursing tend to be of a small scale, cooperation among them might strengthen the systems' support of pediatric patients receiving home care and of their families. Therefore, we are conducting a study to develop a cooperative model of multiple home-visit nursing service facilities for pediatric patients.

Inspection/evaluation

Home Care Nursing has introduced active learning into the class. However, the class must be further improved. We will continue our educational assessment to offer more effective education.

Because all research conducted by our instructors involves important subjects in the field of home care nursing, we must support each other and widely publicize our research findings by writing articles.