

ORAL PRESETATION

O-001 The Development and Effects of Evidence based Vascular Access Port Management Education Program for Oncology Nurses in South Korea

Yunjin Lee, [Juhye Lee](#), Meeyoung Cho, Yoonjung Shin, Soyoung Bae, Jiseon Lee, Jungim Bae, Kyunghi Lee, Keunhwa Lee, Eunhee Lee, Sooyoung Han, Yunkyung Kil *Yonsei Cancer Center, Yonsei University Medical Center, South Korea*

Purpose: This study is aimed to develop evidence based vascular access ports management education program (EBVMEP) and evaluate the nurses' knowledge and practice working on a cancer center in university hospital, South Korea.

Methods: This study was composed of 2 stages. 1st stage was methodological study to develop EBVMEP focused on evidence based nursing practice guideline for central venous-port management. 2nd stage was experimental, one group pretest-posttest design with a convenience sample to compare nurses' knowledge and practice as the effect of EBVMEP. The participant of this study were 40 clinical nurses working in one of Cancer center and self-reported questionnaire of the knowledge and practice of central venous-port management were collected before participating EBVMEP, right after participating EBVMEP and after 30 day. Data was analyzed utilizing Repeated Measure ANOVA and Wilcoxon signed-rank test. Results: There were significant differences in of the nurses' knowledge ($F=9.391, p<.001$) and practice ($Z=1.967, p=.049$) between pretest, posttest and follow-up test. **Conclusions:** EBVMEP was effective to improve the nurses' knowledge and practice, and contribute to reduce the gap of practice between nurses and to enhance quality of clinical nursing.

O-002 Creating Nursing Program that Promotes the Ability of Patients to Manage Oral Anticancer Agent Dosage in line with their Lifestyles

[Harue Arai](#)¹, Keiko Tazumi², Akiko Hatakeyama³, Sena Yamamoto¹ *¹Osaka University Graduate School of Medicine, Osaka, Japan, ²Osaka University Hospital, Osaka, Japan, ³Nissei Hospital, Osaka, Japan*

Purpose: Although oral anticancer agents have the advantage of being able to be simply administered at home, this means that patients must manage dosage themselves. The present study clarified elements of dosage management ability in line with the lifestyles of patients taking oral anticancer agents and developed a practical nursing program to achieve continuous oral anticancer agent treatment in accordance with dosage management ability. **Methods:** We conducted the following procedures to develop a nursing program in line with the ability to manage dosage. 1) Clarification of the ability of patients receiving oral anticancer agents. We prepared a structured summary of literature. 2) Clarification of factors that constitute the ability to manage dosage from the nurse perspective by interview. 3) A survey of dosage management was conducted by self-recorded questionnaires to patients and their family members. 4) Clarification of the validity of the content in the patient educational resources by physicians, pharmacists, and cancer nursing specialists. This study was approved by the institutional committee. **Results:** We found that the dosage management ability (faith in the medicine, problem-solving ability, decision-making ability, self-medication ability, self-monitoring ability, resource utilization ability, and self-management skills) and the knowledge and skills required in patients and their family members. The nursing program includes the essential patient educational resources and an assessment of the patient's ability to manage dosage. **Conclusions:** This program able to support for manage of oral anticancer agent in line with the lifestyle of patients and their family members.

O-003 A Test of the Interaction Effects of the Practices in Safekeeping of Opened Single-Use Ampules in Two Environments

[Elmer D. Bondoc](#)¹, Maria Irma C. Bustamante², Merlyn Nino C. Alvarez³, Benedict Baluyut⁴ *¹Graduate School of Nursing-St. Paul University Manila, College*

of Nursing, Angeles University Foundation, Philippines, ²Graduate School of Nursing, St. Paul University Manila, Philippines, ³College of Allied Medical Profession, Angeles University Foundation, Philippines, ⁴Angles University Foundation Medical Center, Philippines

Purpose: Observed in today's health care setting, ampules, which were designed for single-use were still persistently reused when there was a drug left-over in order to aid the patients lessen the cost of health care by using practices in safekeeping, either leaving the ampules exposed, covered with a micropore or cotton plug in the patient's immediate bedside, which were believed to be beneficial in controlling contamination. There were 180 ampules included in the study, which were contains drugs labeled as antibiotics, H2 blocker, anti-emetics, anti-pyretics and anti-spasmodics. It aimed to test the interaction effects of the practices in safekeeping of opened single-use ampules and the use of an intervention, a closed plastic container, in two environments. **Methods:** A true experimental research design, specifically, Factorial Design, was utilized in order to provide substantial answers to the research problem. The specimens were collected form the ampules' neck after 6 hours of exposure, which were then cultured and later counted the resultant colony forming units and identified specific microorganisms. **Results:** The interaction effects of the practices in safekeeping, use of a closed plastic container and the two environments, rendered absence of beneficial effect in eradicating contamination among the ampules, however, considering the main effects, the use of closed plastic container and the cold environment showed a potential control as evidenced by the limited and regulated number of observed colony forming units, specifically, gram-positive microorganism were identified, with predominance on the specie, *Staphylococcus epidermidis* and *Staphylococcus aureus*. **Conclusions:** Although there were indications of lesser counts of colonies and identified microorganisms, these are not recommended for adoption since the mere presence of the contaminants can still potentially place the health of the recipients at risk for further complications.

O-004 The Effect of an End-of-Life Care Training on Registered Nurses' Knowledge, Attitude in Caring for Neurological End-of-Life Patients

Anchoen Chailoratr *Prasat Neurological Institute Department of Medical Services Ministry of Public Health Thailand*

Purpose: To evaluate the effect of the end of life nursing care training course for neurological end of life patient on knowledge and attitude of the registered nurses. **Methods:** Study design: Quasi- experimental with one group pre-post test evaluation. 237 Registered nurses in Prasat Neurological Institute are the population. Quota sampling in 12 wards of general neurological and intensive neurological wards are achieved. The participants are 32 registered nurses who meet the criteria. The participants are evaluated the knowledge and attitude of end of life nursing care before and after providing the end of life nursing care course. **Results:** The registered nurses have higher level of knowledge and attitude after the training by paired *t*-test, mean \pm SD=3.781 \pm 2.848, $p<.001$; mean \pm SD=3.86 \pm 0.629, $p<.05$, 95%CI: 0.613-0.1595, respectively. **Conclusions:** The end of life nursing care training course is effective to enhance knowledge and attitude of the registered nurse in neurological area.

O-005 Nursing Experience of Biliary-Cardiac Reflex in the PTCD Performed in Patients with Malignant Obstructive Jaundice

[Lina Zhu](#), Guixiu Dong, Wenxia Dong, Guirong Shen *Minimally Invasive Department, Baotou Cancer Hospital, China*

Purpose: To research the clinical manifestations, risk factors and prevention measures of biliary-cardiac reflex in PTCD performed in patients with malignant obstructive jaundice. **Methods:** This research retrospectively analyzed the cases with malignant obstructive jaundice who got biliary-cardiac reflex during the PTCD in minimally invasive department of Baotou Tumor hospital from 2009 to 2014. 142 patients with malignant bilious obstruction were performed

Access the abstract online

Quick Response Code:



Website: www.apjon.org

DOI: 10.4103/2347-5625.172974

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

PTCD therapy. There was the incidence of biliary-cardiac reflex in 12 cases characterized by the symptoms, heart rate decreasing, chest discomfort, blood pressure dropping and even the cardiac arrest. Pausing the operation and removing the incentives were adopted immediately. Symptomatic treatments were also used at once, including sedation, analgesia, oxygen inhalation, raising blood pressure and psychological counseling. **Results:** The patients with biliary-cardiac reflex were all relieved rapidly and recovered to normal. **Conclusions:** Biliary-cardiac reflex is a common complication during the PTCD and it is lethal sometimes. The doctors and nurses have to be acquainted with its manifestations, control measures and receive professional training. Timely discovery and disposing will decrease the incidence rate of adverse consequences in biliary-cardiac reflex.

O-006 Prevention and Care of Post-Operative Vessel Crisis after Free Flap Repairing the Defect of Head and Neck Region

Xianghua Xu, Yongyi Chen, Jie Chen *Head & Neck Plastic Surgery Department, Hunan Cancer Hospital, China*

Background: With the wide application of free flap transplantation to repair tissue defect in clinical, especially for head and neck tissue defect repair and functional reconstruction, the free tissue flap gradually plays an important role in improve the survival rates of malignant tumor patients and improve the patient's quality of life. Although the success rate of free skin flap has raised from 70% -80% in 1970s to 95%, there are still a minority of patients with free tissue flap necrosis because of various reasons. The affected patients suffers great pain for this reason, even influence life safety of patients. Therefore, the proper prevention and right care of post-operative vessel crisis is very critical to post operation care of free flap repairing the defect of head and neck region.

Purpose: To analyze the post-operation vessel crisis after free flap repair the defect of head and neck region and summarize the observation and nursing experience of prevention and dealing of vessel crisis vessel crisis to improve free flap repairing technique's achievement ratio. **Methods:** 308 cases of free flap transfers were performed from April 2004 to April 2008. 17 cases with vessel crisis were selected and reviewed. Data concerning each case included time, type and reason of vessel crisis. Dealing methods and survival rate of free flaps were also described in our research. **Results:** Among 308 cases of free flap transfers, the survival rate of the free flap is 97.08%. 17 cases of vessel crisis were happened. The incidence rate of vessel crisis is 5.5%. 8 cases with vessel crisis completely survive after operation, 7 cases totally necrosis and 2 cases partly necrosis. **Conclusions:** Early exploration is the only way to save the free flap with post-operative vessel crisis. Stoma thrombus, periphery tissue crushing and hematoma which compressed blood vessel stalk and flap can lead to vessel crisis. So comprehensive observation and critical thinking in clinical nursing is of great importance to early detection and treatment of vascular crisis.

O-007 Chemotherapy-Related Symptoms Experienced by Cancer Patient and their Self Care in Indonesia

Haryani^{1,2}, Yu-Yun Hsu¹, Malina², Khudazi² *¹Institute of Allied Health Science, College of Medicine, National Cheng Kung University, Taiwan, ²Universitas Gadjah Mada, Indonesia*

Purpose: Chemotherapy is commonly treatment for cancer. However, it will bring various treatment-related symptoms. Strategies and resources to overcome chemotherapy-related symptoms will be influenced their culture. Since there are not provided data about various chemotherapy-related symptoms and their strategies how to manage it among cancer patients in Indonesia. Therefore, information about it is important to design educational strategies for cancer patients in Indonesia. This research is conducted to explore various chemotherapy side effects and their strategies to manage those side effects. **Methods:** Cross sectional study. 48 adult cancer patients who got chemotherapy more than once were respondents in this research. Chemotherapy Side Effects Patient Questionnaire is used. This research was held from November to December 2011. Distribution frequency is used to analyse the data. **Results:** Respondents were 68.8% were female, 93.8% married, length of diagnose 10.25 month, and 45.8% were on stage II. The most side effect was fatigue (95.8%). Many of them used non pharmacology strategies (60.5%), did nothing (23.2%), and took drug (16.4%). Resources of their strategies 47% were themselves, 32% were their families, 15% were healthcare providers, and 5% were their friends. **Conclusions:** The most chemotherapy-related symptom experienced by cancer patient is fatigue. Nonpharmacology strategies are mostly used by cancer patient to resolve chemotherapy side effect. Mainly the resources of their strategies come from themselves and their family. Family partnership in cancer

patient care is needed for patient undergoing chemotherapy.

O-008 The Effectiveness of an Integrated Body-Mind-Spirit-Social Model Care for Breast Cancer Survivors: A Pilot Study

Xiangyu Liu¹, Yongyi Chen¹, Sally L. Maliski² *¹The Affiliated Cancer Hospital Xiangya Medical School of Central South University, China, ²School of Nursing, University of California, USA*

Purpose: To evaluate the effects of integrated body-mind-social-spirit group invention (BMSSGI) of Chinese women with breast cancer over a 12-months follow-up period in the hopes of developing a supportive management strategy of breast cancers survivors. **Methods:** The intervention group received both the usual care and the integrated body-mind-spirit-social group interventions (BMSS) in the form of individual face-to face times interaction, group sessions, and telephone/ internet participation. The group session were held three per week on Monday, Wednesday, and Thursday afternoons, lasting more than 3 hours. Participants could take any of the sessions. An intervention team included physicians, breast cancer nurse specialist, clinical spiritual giver, and breast cancer volunteers. The participants were counseled and received education in face-to face meetings during follow-up visits or through a special intervention internet site. Observation group participants received usual care. Measures included Functional Assessment of Cancer Therapy Breast (FACT-B). Data were collected at baseline (completion of treatment), 3 months, 6 months, and 12 months. **Results:** After adjusting for covariates, results showed that both groups had significant increases in the subscales of FACT-B at 12-month follow-up compared with baseline. In addition, the intervention group showed improvement ($p < .001$) on the FACT-B Physical Well-being, Emotional Well-being, Spiritual Well-being, Functional Well-being, and Breast Cancer subscales. There were significant mean differences in FACT-B scores in the intervention group compared with the observation group. **Conclusions:** The BMSS components of our intervention effectively enhanced the holistic health of breast cancer survivors.

O-009 Effect of Oxaliplatin-Induced Peripheral Neurotoxicity on Patients' Quality of Life: A Longitudinal Study

Caiyan Ding, Zhenqi Lu, Mei Xue, Hongbin Wu *Fudan University Shanghai Cancer Centre, China*

Purpose: To investigate the effect of chemotherapy (oxaliplatin)-induced peripheral neurotoxicity (CIPN) on patients' life quality. **Methods:** 113 patients with colorectal cancer who received oxaliplatin treatment were studied. The Patient Neurotoxicity Questionnaire (PNQ) was used to evaluate the peripheral neurotoxicity severity, and the Quality of Life Questionnaire of the European Organization for Research and Treatment of Cancer-CIPN20 (EORTC QLQ-CIPN20) was used to assess patients' life quality with cumulative doses of 200 mg/m², 540 mg/m² and 850 mg/m². **Results:** The severity of peripheral neurotoxicity showed a distribution difference between patients being at different stages of their chemotherapy regimens ($p < .05$). During chemotherapy, the peripheral neurotoxicity became more severe with time, with a more important effect, both in incidence and severity, on the sensory nerve injury than on the motor nerve injury. Different cumulative doses also resulted in a different impact on patients' life quality ($p < .001$). Oxaliplatin-induced peripheral neurotoxicity was positively correlated to patients' life quality in association with different cumulative doses. **Conclusions:** Oxaliplatin-induced peripheral neurotoxicity, characterized by a prolonged duration and symptoms evolution, may significantly affect the life quality. Such symptoms should receive attention during clinical assessment, and health guidance should be provided to identify effective interventions.

O-010 The Investigation of Symptom Distress and its Related Factors in Esophageal Cancer Patients Undergoing Radiotherapy

H Xue, AF Meng, Aifeng Meng *Nursing Department, Jiangsu Cancer Hospital, China*

Purpose: To investigate the status and its related factors of symptom distress, anxiety and depression level and coping mode in esophageal cancer patients undergoing radiotherapy in cancer hospital. **Methods:** 60 esophageal cancer patients were recruited from May to November in 2014. The average radiation dose they were treated was (27.84±5.96) Gy when they were investigated. They were investigated with the self-designed demographic questionnaire, the M.D. Anderson Symptom Inventory (MDASI), the Hospital Anxiety and Depression Scale (HADS) and the Medical Coping Modes Questionnaire (MCMQ). **Results:**

The average score of symptom distress in esophageal cancer patients was 2.37. The main symptoms included nausea, lack of appetite, dry mouth and fatigue. The analysis showed that patients' gender, the main source of their medical cost and combined chemotherapy were related factors. The average score of anxiety and depression was 11.71. The confronting and surrendering coping mode were used more than avoiding coping mode in esophageal cancer patients undergoing radiotherapy. The symptom distress was positively correlated with anxiety and depression and confronting coping mode respectively ($p=0.05$). **Conclusions:** The symptom distress is common in esophageal cancer patients undergoing radiotherapy. Health professionals should pay more attention to patients' mental health. Nurses should try their best to relieve patients' symptom distress and help them cope with cancer positively.

O-011 Effects of Music Medicine on Anxiety and Sleep Quality in Patients with Thyroid Cancer Undergoing Surgery

Changlian Chen, Jiayan Cao *Head and Neck Neoplasms Department, Tianjin Medical University Cancer Institute and Hospital, China*

Purpose: To evaluate the effect of music medicine on anxiety and sleep quality in patients with thyroid cancer undergoing surgery. **Methods:** A randomized controlled design was used. A convenience sample of 120 hospitalized patients was selected. Participants were randomized to a control group ($n=60$) or an experimental group ($n=60$) whose members listened to recorded music with headphones for 30min twice a day from the day before surgery to discharge. Music choices included classical music, light music, nature melodies and Chinese folk music. Effect of music on anxiety was measured by the Chinese version of the State-Trait Anxiety inventory (STAI), while effect on sleep quality was measured by the Pittsburgh Sleep Quality Index (PSQI) on the first day of admission, the morning of surgery and the day before discharge. **Results:** The pretest score revealed that 68% of the participants had a moderate level and 16% had a severe level of state anxiety. Using ANCOVA, there were significant lower levels of anxiety and a greater increase in improved sleep quality in the music versus the control group at each post-test measurement, $p<0.001$. More participants (51%) chose Chinese folk music. **Conclusions:** Music medicine can improve the anxiety and sleep quality in patients with thyroid cancer undergoing surgery. It is important to offer a choice of familiar, culturally appropriate music.

O-012 Self-Reported Cognitive Problems: A Comparison between Breast Cancer Patients Receiving Hormonal Therapy with and without Prior Chemotherapy

Sena Yamamoto¹, Eiko Masutani², Namiki Kitada³, Yoshio Tanji⁴, Satomi Kitagawa⁵, Harue ARAO¹ *¹Division of Health Sciences, Osaka University Graduate School of Medicine, Japan, ²Cancer Education and Research Center, Osaka University Graduate School of Medicine, Japan, ³Osaka City General Hospital, Japan, ⁴Morinomiy Hospital, Japan, ⁵Osaka University Hospital, Japan*

Purpose: Patients with breast cancer are at risk of cognitive problems during treatment. We compared self-reported frequency of cognitive problems between patients receiving hormonal therapy (HT) with and without prior chemotherapy (CT). **Methods:** Participants completed an anonymous, self-administered questionnaire. The completed questionnaire was returned by mail and considered as consent. The questionnaire consisted of demographic data and a 30-item scale regarding cognitive problems, which we developed based on previous studies. A 6-point Likert scale was used to assess the frequency of cognitive problems. Using SPSS version 19, we conducted a factor analysis and two-way analysis of variance including the history of CT and length of HT as independent variables. A significance level of 5% was used. The institute's ethics committee approved this study. **Results:** Of 876 patients, 510 (58.2%) responded. We analyzed the data from 347 patients who began receiving HT within 5 years. Patients in the HT and CT+HT groups were 220 and 127 in number, respectively. The HT group was significantly older. Types of medications for HT were not significantly different between the groups. Three factors of cognitive problems were reported: difficulty managing short-term memory, difficulty performing several parallel functions, and difficulty maintaining concentration and attention. For the third factor, the CT+HT group had a significantly higher score. **Conclusions:** HT with prior CT may increase the risk of cognitive problem particularly in maintaining concentration and attention. Further studies are required for examining other factors. Treatment history should be considered for assessing cognitive problems.

O-013 Building Capacity among Nurses in China to Promote Smokefree Environments

Linda Sarna¹, Stella Bialous², Marjorie Wells¹, Jenny Brook¹ *¹School of Nursing, University of California, Los Angeles, USA, ²School of Nursing, University of California, San Francisco, USA*

Purpose: To evaluate a web-based educational program on changes in nurses' interventions and attitudes related to promotion of smokefree home environments, as part of a larger project to enhance nurses involvement in tobacco control and cessation interventions, in two cities in China. **Methods:** Prospective single group design with pre-, 3- and 6-month follow up after the educational program evaluated the feasibility of conducting a web-based educational program. **Methods:** A convenience sample of nurses from 8 hospitals Beijing and Hefei, China in 2012-2013 using a reliable and valid questionnaire to assess nurses' frequency of interventions. **Results:** 1,386 nurses (610 Hefei, 776 Beijing) had baseline, and/or 3 and 6 month data (from 2,466 who completed the baseline survey). Over 97% of the nurses were never smokers. At baseline, the majority of nurses agree that it is important of nurses to be involved in tobacco control, with no changes at follow-up. At 6-months post intervention, nurses were significantly more likely to usually/always recommend smokefree home environments (OR 2.07, CI 1.67, 2.55). There was a significant improvement in attitudes about nurses as smoke-free role models and in nurses' involvement in helping smokers quit ($p<0.001$). **Conclusions:** Long-distance smoking cessation education for Chinese nurses is feasible. Nurses receiving web-based smoking cessation education significantly increased frequency of recommending creation of smokefree home environments to support quit attempts and improved attitudes about nurses' role in cessation. Nurses, most of whom are non-smokers, could be further motivated to support ongoing efforts to implement smokefree policies in China.

O-014 Comparison of the Use of Colorectal Cancer Test between Ethnic Minorities and the General Population in Hong Kong

Winnie So, Kai-Chow Choi, Joanne Man-Ting Chen, Chieh Grace Lau, Lee, Chi-Wai Paul, Carmen Wing-han Chan *The Nethersole School of Nursing, The Chinese University of Hong Kong*

Purpose: The purpose of this study was to identify the independent and interactive factors associated with the uptake of colorectal cancer test among 2327 South Asians and Chinese older adults. **Methods:** A self-report survey was carried out by research staffs via telephone or face-to-face interview. Stepwise multivariable logistic regression analyses were used to determine the independent and interactive factors that associated with the uptake of colorectal cancer test. All statistical tests were two-sided, and the level of significance was set at 0.05. **Results:** The uptake rate of colorectal cancer test in South Asians was significantly lower than the Chinese population in Hong Kong. Health professional's recommendation, perception of visiting doctor regularly, use of complementary therapy, ethnicity, perceived susceptibility to cancer, comorbidities, and education were independent factors that associated with the colorectal cancer test uptake. Besides, a significant interaction between ethnicity and health professional's recommendation was shown after adjusted for the identified main independent effects. Health professional's recommendation serves a positive contribution to increase the use of colorectal cancer test in South Asians. **Conclusions:** Efforts should be made on educating the public about the benefits and importance of conducting colorectal cancer screening, as well as increasing their awareness of colorectal cancer. Besides, an ethnic-specific health promotion strategy should be developed to increase the rate in the view of ethnic differences.

O-015 Awareness and Knowledge of Hepatitis B among North Korean Immigrants

Hyo Jeong Song *Department of Nursing, Jeju National University, South Korea*

Purpose: Hepatitis B virus (HBV) infection is an important cause of liver cirrhosis and liver cancer. The purpose of this study was to identify the awareness and the knowledge on HBV infection among North Korean immigrants who had resided in South Korea. **Methods:** This was a cross-sectional, community based study. Data were collected from a convenience sample of 196 North Korean immigrants aged 20 years old through 65 years old among those who had attended community centers, and local churches and gatherings located in Incheon, Gyeonggi-do, Seoul, and Jeju. The questionnaire included 15 items about participant's knowledge on HBV infection and its consequences, mode of transmission and preventive measures. **Results:** The mean age of the participants was 33.8 years (± 11.9), about 70% of whom were female. The mean score of HBV knowledge was 6.3 \pm 3.8. The percentage of correct answer

for each items; over 60% of the respondents knew that HBV; 'there is blood screening for hepatitis B infection', 'Hepatitis B can be transmitted through sharing use of needles'. The score of knowledge of HBV was significantly different with 'immunization status', 'whether he/she had been tested for HBV', and 'received education on HBV infection and prevention'. One significant predictor related to HBV knowledge was found—received education on HBV infection and prevention ($p < .001$). **Conclusions:** The results showed that North Korean immigrants with education on HBV infection and prevention were more likely to know HBV knowledge.

O-016 A Study of a cute Pressure Ulcer Assessment on Tumor Patients with Surgery

Hui Song *Operating Room, Tianjin Medical University Cancer Institute and Hospital, China*

Purpose: The objectives of this study are to compare the predictive value of the RAS scale of the cancer patients with Waterlow's scale, provide evidence for the measurements of preventing acute pressure ulcer. **Methods:** According to collect 290 patients' data from a major hospital related to both the new scale and Waterlow's scale from January 2012 to December 2013. During the preoperative visit, two trained registered nurses independently evaluated each patient under the natural light. Meanwhile, the new scale and Waterlow's scale were scored respectively. The incidence of pressure ulcer was recorded immediately after operation. Two additional nurses input data into SPSS 19.0. The sensitivity and specificity of these two scales were tested through Logistic regression for binary data and ROC under curve area. **Results:** The Receiver operating characteristic (ROC) showed a larger Area under Curve (AUC) in new scale (AUC=0.701) than in Waterlow scale (AUC=0.615). A score of 18 was identified as the critical value of predicting the incidence of acute pressure ulcer after surgery by using the new scale. **Conclusions:** The result supported the new scale has a better prediction of pressure ulcer than Waterlow's scale. The implement of this new scale is also simple and convenient. By using this new scale for the assessment of high risk of pressure ulcer, clinicians could find the risk factors of patients then formulate optimal measures to prevent and reduce the occurrence of pressure ulcer.

O-017 Sexual Function in Cervical Cancer Patients: Psychometric Properties and Performance of a Chinese Version of the Female Sexual Function Index

Huayun Liu¹, Juping Yu³, Gaoming Liu¹, Pingping He², Lianqing Zhou¹, Xinhui Tang¹, Xiangyu Liu¹, Xuying Li¹, Yanping Wu², Yuhua Wang¹ *Department of Nursing, Hunan Cancer Hospital and The Affiliated Cancer Hospital of Xiangya School of Medicine, Central South University Changsha, China, ²School of Nursing, University of South China, China, ³Faculty of Life Sciences and Education, University of South Wales, UK*

Purpose: This study aimed to examine the psychometric properties and performance of a Chinese version of the Female Sexual Function Index (FSFI) among a sample of Chinese women with cervical cancer. **Methods:** A cross-sectional survey design was used. The respondents included 215 women with cervical cancer in an oncology hospital in China. A translated Chinese version of the FSFI was used to investigate sexual functioning of the women. Psychometric testing included internal consistency reliability (Cronbach's alpha coefficient and item-total correlations), test-retest reliability, construct validity (principal component analysis via oblique rotation and confirmatory factor analysis), and variability (floor and ceiling effects). **Results:** The mean score of the total scale was 20.65±4.77. The Cronbach values were 0.94 for the total scale, 0.72-0.90 for the domains. Test-retest correlations over 2-4 weeks was 0.84 ($p < .05$) for the total scale, 0.68-0.83 for the subscales. Item-total correlation coefficients ranged between 0.47 and 0.83 ($p < .05$). A five-factor model was identified via principal component analysis and established by confirmatory factor analysis, including desire/arousal, lubrication, orgasm, satisfaction, and pain. There was no evidence of floor and ceiling effects. **Conclusions:** With good psychometric properties similar to its original English version, this Chinese version of the FSFI is demonstrated to be a reliable and valid instrument that can be used to assess sexual functioning of women with cervical cancer in China. Future research is still needed to confirm its psychometric properties among a large sample.

O-018 Impacts of Innovated Topical Formula (ITF) to Reduce of Psycho-Socio-Spiritual Problem in Breast Cancer Wound

Kemala Rita Wahidi, Teguh Aryandono, Iwan Dwiprahasto, Ely Nurachmah Gajah Mada University, Dharmas National Cancer Centre (DNCC), Indonesian

Oncology Nurse Association (IONA), Indonesia

Purpose: The aim of this study was to test the effect of the wound care using innovated topical formula (ITF) on the score of the psycho-socio-spiritual response of the patients. **Methods:** One group pre- and post-test design was used in this study. Forty breast cancer patients with malignant wound were participated in the study. The psycho-socio-spiritual perception of the patient were measured by numeric rating scale at before and after wound care with the application of ITF. The data were then analyzed using paired *t*-test. **Results:** The results showed that the average of the psycho-socio-spiritual perception. It comprised of the perception on depression (15.18±7.00) vs (6.78±3.56) $p = .001$, self concept (10.63±6.03) vs (6.51±4.32) $p = .001$, body image (16.05±7.48) vs (6.85±3.84) $p = .001$, social relation (10.05±4.98) vs (6.40±3.41) $p = .001$ and spiritual activity (5.90±3.70) vs (4.06±2.62) $p = .004$ in the pre intervention compared to the post intervention. **Conclusions:** It was concluded that lower of psycho-socio-spiritual score response after the ITF wound treatment may have good impact the quality of life of the patients with breast cancer malignant fungating wound.

O-019 Sexual Functioning and Quality of Life amongst Gynecological Cancer Patients in Hong Kong

Ka-Ming Chow¹, Carmen W. H. Chan¹, Chung-Yi Wong², Lok-Lam Shek², Kai-Chow Choi¹ *¹The Nethersole School of Nursing, The Chinese University of Hong Kong, Hong Kong, ²Prince of Wales Hospital, Hospital Authority, Hong Kong*

Purpose: The study aims to evaluate sexual functioning and its impact on quality of life among gynecological cancer patients in Hong Kong. **Methods:** Women who had completed treatment for gynecological cancer were recruited. The Chinese versions of the Sexual function-Vaginal changes Questionnaires (SVQ) and 36-item Short Form Health Survey (SF-36) were used. **Results:** A convenience sample of 225 Hong Kong Chinese women with gynecological cancer was recruited. Only 50.6% of the participants were sexually active in the past one month although 76.9% had sexual partners and 62% had completed cancer treatment for more than 6 months. Most of the participants had no or low interest in sex (76.9%), and the most common problems they encountered during sexual intercourse were vaginal dryness and dyspareunia, 63.6% and 63.4%, respectively. Among the 5 subscales of SVQ, all were found to be positively correlated with respective subscales of SF-36, indicating better sexual functioning was associated with better quality of life. **Conclusions:** Hong Kong Chinese women with gynecological cancer experienced sexual dysfunction after the diagnosis and treatment for the disease. Sexual functioning was found to be associated with all aspects of quality of life. Provision of appropriate interventions and counseling for improving sexual functioning in gynecological cancer patients is expected to achieve better quality of life.

O-020 Spirituality of Colorectal Cancer Patients with Fecal Ostomy in the Early Postoperative Phase

Mary Grace Anne P. Batalla *College of Nursing, University of the Philippines Manila, Philippines*

Purpose: The study aimed to (1) describe the spirituality of CRC patients with fecal ostomy; and (2) identify patterns of the spiritual experience in the early postoperative phase. **Methods:** The study utilized a cross-sectional, descriptive design. Purposive sampling of CRC patients from two tertiary government hospitals ($n = 93$) who were at least three days post-surgical formation of fecal ostomy was performed. Face-to-face interview was done and patients were asked about their spirituality during this phase. Qualitative analysis was performed using the QSR NVivo7 software. **Results:** Spirituality is the least prioritized aspect of QOL during the early postoperative phase and that either it did not change or was strengthened in conjunction with the belief in a higher power. Five patterns of spirituality were identified: (1) presence of stoma as a barrier to observing religious practices; (2) general belief that the condition will be cured, (3) stronger faith in God, (4) belief in God's healing power, and (5) acceptance of the medical condition through faith. **Conclusions:** Spirituality can be positively or negatively affected in the presence of a fecal ostomy in CRC patients. More research is needed in order to measure such changes and ensure evidence-based and holistic cancer patient care by performing appropriate nursing interventions.

O-021 Quality of Life and its Influencing Factors among Permanent Colostomy Patients with Rectal Cancer

June Zhang *School of Nursing, Sun Yat-sen University, China*

Purpose: To explore the Quality of Life (QoL) and its influencing factors among permanent colostomy patients. **Methods:** Totally 219 permanent colostomy patients with rectal cancer were recruited by convenient sampling method from January 2013 to December 2014 from three tertiary Grade A hospitals in Guangzhou and investigated by Stoma Quality of life-Chinese Version (Stoma-QoL-C), Stoma self-efficacy Scale (SSES), Stoma Self-care Scale -general version (SSCS-GV), and demographic questionnaire. Data were analyzed using the Statistical Package for the Social Sciences for Windows, version 17.0. **Results:** The mean score of Stoma-QoL-C among permanent colostomy patients was (54.86 ± 12.17) , which showed a dynamic V-type change as time went by. The QoL of patients with colostomy for 1 to 3 years was especially low $(50.46 \pm 13.77, p < .01)$. The influencing factors of quality of life among permanent colostomy patients included self-efficacy, body image change, family members' acceptance of stoma except their spouses and self-care ability, while self-efficacy was the most important influencing factor. **Conclusions:** The enterostomal nurses should pay more attention to the quality of life of the patients who have had colostomy for 1 to 3 years, enhance the patients self-efficacy and self-care ability, and help the patients to accept their body image changes and their family members' acceptance of stoma to improve their quality of life.

O-022 QOL Study on the Long-Term Survival Ostomates in Japan

Atsuko Maekawa¹, Kazue Yoshida², Michiko Ito³, Rumi Takei⁴, Naoko Hori⁵
¹Nagoya University Graduate School of Medicine, Dept. of Nursing, JAPAN, ²Mie University, ³Tokyo Yamate Medical Center, ⁴Sugiyama Women's College School of Nursing, ⁵Chubu University

Purpose: To clarify the QOL and life satisfaction after the illness and Stoma operation. **Methods:** We carry out the postal survey in March 2014, under the informed consent. We used Self rating questionnaire that consisted demographic data, ostomy related items and health conditions. Participants were 250 member of Japanese Ostomy Association and Bouquet Ladies Group. **Results:** The questionnaire assumed return (collect rate 78%), all an analysis subject from 195 people. As for the subject, male were 84 (43.1%), female were 111 (56.9%), average age was 65.9 (SD 12.9, 27-90) y/o. Ostomy life span was average 17.1 (SD 9.9, range 5-62) year. Type of the stoma: Intestinal was 137 (70.3%), Urinary was 36 (18.5%), Double stoma was 11 (5.6%), 7 (3.6%) Unknown and 4 (2.1%) non-answer. The ratio of pre-ostoma site marking was 67.2% and dissatisfaction of the stoma site position was 7(3.6%). A subjective feeling of the life satisfaction score (0-10 point): pre operation time was average 5.3 (SD 2.8) VS present was average 6.0 (SD 2.0). There was no significant difference between age group, stoma type and length of ostomy life. Living with Stoma: From the free opinion, "I had some inconveniences of managing stoma but this was the way my life has been lived." "I had new life since operation, therefore I treat a new life with care." "My life was positive changed with peer support." **Conclusions:** QOL score of Japanese long-term survival Ostomates looks quite good by WOC Nursing and peer's support.

O-023 The Quality of Life of Indonesian Women Treated for Gynecological Cancer

Afiyanti Yati¹, Evi Marta², Andrijono³, Ice Yulia Wardani¹ ¹Faculty of Nursing University of Indonesia, ²Faculty of Public Health University of Indonesia, ³Faculty of Medicine University of Indonesia, Indonesia

Purpose: Quality of life (QOL) are a fundamental consideration for cancer patients and a multi-dimensional concept which defines physical, mental and social well-being. The purpose of this study was to assess the quality of life of women with gynecologic cancer who treated radiation and chemotherapy. **Methods:** Utilizing a cross-sectional descriptive design, 82 women who signed an informed consent and completed questionnaires were included in the study. Quality of life was evaluated during undergoing at the last treatment cycle. The study employed using questionnaires: EORTC QLQ-C 30 and QLQ-CX 24. The study protocol was approved by the Faculty of Medicine Committee at University of Indonesia. **Results:** Based on EORTC QLQ-30 it was found that global health status on general well-being and quality of health of the patients were found to be 65.23 ± 20.03 . In the sub groups of the EORTC-QLQ-C30 index, the study determined that fatigue (71.04 ± 20.26) , appetite loss (68.59 ± 27.16) , financial difficulties (63.71 ± 29.17) and physical (54.08 ± 20.26) and role (52.59 ± 28.37) were the three symptoms and the two functions status most reported to have a negative effect on quality of life. Furthermore, based on QLQ-CX 24 questionnaires it found that menopause (44.51 ± 26.06) and lymphedema (43.59 ± 18.45) were the two symptoms most reported to have a negative effect on quality of life. **Conclusions:** The cancer itself, adjuvant therapy and their side

effects together had an effect on quality of life and enables provision of a more comprehensive and higher quality of care.

O-024 Nursing Approaches in Women with Cervical Intraepithelial Neoplasia: A Randomized Controlled Trial Study

Yu-Yun Hsu¹, Ya-Ming Cheng², Keng-Fu Hsu² ¹Department of Nursing, College of Medicine, National Cheng Kung University, Taiwan, ²Department of Obstetrics and Gynecology, National Cheng Kung University Hospital, National Cheng Kung University, Taiwan

Purpose: The study aimed to examine three nursing approaches that are related to reducing psychosocial stress for CIN women receiving advanced medical management. **Methods:** The study was a prospective, randomized controlled trial design. The participants were women who received advanced medical treatment for their CIN disease. The women were randomized assigned into three groups which included variant nursing approaches: health education, health-psychosocial consultation, and usual care. The approaches were provided to women before they received an advanced medical treatment for their CIN. Furthermore, a psychosocial consultation via face-to-face was provided to women who were at the group of health-psychosocial consultation after receiving advanced treatment. All participants completed assessments related to psychosocial adjustment during baseline and follow-up at 1-month after treatment. The assessments included stress, anxiety, and quality of care. **Results:** A total of 87 women participated in the study. Their age ranged from 22 to 64 years old. The women in the group of "health-psychosocial consultation" perceived less stress at the follow-up 1 month after receiving medical treatment. No group difference was found in quality of life and anxiety at the follow-up 1 month after receiving medical treatment. **Conclusions:** The nursing approach of health education and psychosocial consultation can relieve stresses related to disease and treatment among women with cervical intraepithelial neoplasia.

O-025 Addressing Hopelessness to Improve Quality of Life in Acute Lymphoblastic Leukemia with Multiple Organ Infiltration: A Case Study

Mary Grace Anne P. Batalla, Ma. Josefa Bañares, Keith Roger R. Serrano
 College of Nursing, University of the Philippines Manila, Philippines

Purpose: The study aimed to (1) describe hopelessness in a patient with ALL; and (2) identify nursing interventions to address hopelessness within the context of the illness. **Methods:** The study utilized a case report of a 19 year-old male patient admitted in a tertiary referral center taken under the care of senior nursing students supervised by a faculty from April to May 2015. The nursing process model was applied in the care of the patient. **Results:** Hopelessness was identified following verbalizations of a lack of positive outlook for the future, lack of identified alternatives for resolving his current condition, and objective cues for deficient diversional activities. Analysis showed that hopelessness resulted from physiological limitations and contextual realities brought about by the course of the disease. Nursing interventions included instilling hope by assisting the patient to verbalize own feelings, enhancing coping and spirituality, and targeting physiological problems related to hematopoietic dysfunction and other complications. **Conclusions:** Hopelessness may come as a result of the disease and may not necessarily be a primary psychological characteristic of patients with ALL. This presents an opportunity for the oncology nurse for early identification of hopelessness and prompt implementation of individualized nursing interventions.

O-026 The Informational Needs of Caregivers of Pediatric Oncology Patients in Hong Kong: A Qualitative Study

Winnie P.Y. Tang, Carmen W.H. Chan
 The Nethersole School of Nursing, The Chinese University of Hong Kong, China

Purpose: The objective of this study is to explore the informational needs of the caregivers of paediatric cancer patients in Hong Kong. **Methods:** This study adopted qualitative study design. The participants were the informal caregivers of children medically diagnosed with any form of cancer. Inclusion criteria included: 1) aged older than 18, 2) children being cared for are aged ≤ 19 , 3) able to communicate in Chinese. Participants were recruited by purposive sampling. The interviews were recorded and transcribed verbatim. Content analysis was used to analyze the data. **Results:** Thirteen parents recruited from 5 public hospitals were interviewed. The informational needs were classified into 5 aspects: 1) disease knowledge, 2) food regimen, 3) experiences from other parents and patients, 4) practical information, 5) supportive information. Slight differences were found across the disease spectrum. As the disease

progress, caregivers demanded information on how to prevent recurrence and rehabilitation rather than disease nature. However, information on food regimen remained area of concern throughout the disease spectrum. **Conclusions:** Caregivers demand specific and detailed information related to their children's disease. Differences regarding the informational needs were found as the disease evolved.

O-027 Investigation of Information Needs of Cancer Chemotherapy Patients and their Caregivers

Shuxiang Zhang *Medical Oncology, Cancer Institute & Hospital Chinese Academy of Medical Sciences, China*

Purpose: This study sought to characterize the need for information about diagnosis, treatment, prognosis and others among cancer patients and their caregivers and explore the amount of information and content of health education. **Methods:** Information Preference Questionnaire for Cancer Patients (IPQCP+2) was utilized to collect data from 180 inpatients with cancer and their caregivers. **Results:** A high proportion of patients and caregivers reported information needs in four contents (71.1%-99.4%). The most frequent information need in patient was information about recovery (95.0%). The means of IPQCP total score and dimensions of diagnosis, treatment, prognosis and other scores are 2.44 ± 0.64 , 2.45 ± 0.64 , 2.52 ± 0.62 , 2.46 ± 0.62 , 2.35 ± 0.67 . The rank sum test found that caregivers' needs of 16 items are significantly higher than patients' ($p < .05$). The chisquare test found that there was statistical difference between patients and caregivers in both of two additional questions ($\chi^2 = 25.748$, $p < .01$; $\chi^2 = 23.075$, $p < .01$). **Conclusions:** These findings suggest that nurse should provide enough information and should provide follow-up care according to patients' demand. Caregivers have more needs than patients. Thus, health education should focus on both of them.

O-028 An Ethnography of End-of-life Decision Making in Cancer Patients

Minjeong Seo *College of Nursing, Yonsei University, South Korea*

Purpose: In the present study, attempts have been made to interpret what context has been formed by end-of-life medical decision making processes in South Korea that underwent rapid modernization. **Methods:** This study used a postmodern ethnographic method involving patients, family members, physicians, and nurses, who are major axes of end-of-life decision making. The study was centered on the outpatient clinic and ward rounds in an acute hospital. Participants included 11 patients, 13 family members, 6 physicians, and 7 nurses. **Results:** End-of-life decision making in cancer occurred in six phases: confirmation of end-of-life, deterioration, verbal do-not-resuscitate (DNR) orders, confirmation of impending death, official DNR, and death. End-of-life cancer patients' decision making usually centered on DNR decisions. Most communication centered on physicians and family members, who usually made decisions on behalf of patients and the time was focused on DNR when patients' physical and cognitive ability prevented them from doing so. **Conclusions:** Patients and families communicated healthcare providers as a unit. For patients being the main end-of-life decision makers, agreement on appropriate timing and methods should be preceded among healthcare providers considering the cultural context. Institutional support is also necessary to harmonize treatment goals between healthcare providers, patients, and family members in acute care settings in Korea.

O-029 The Influence of Spiritual Care to Esophageal Cancer Patients with Depression

Zhiqin Sun, Caiyan Ding *Nursing Department of Changzhou No.2 People's Hospital, China*

Purpose: To explore effectiveness of spiritual care on mitigating the depression of patients with esophageal cancer to increase their quality of life during the advanced stage. **Methods:** 50 esophageal cancer patients with depression were randomly assigned into control group and intervention group with 25 patients in each group. Patients in intervention group attended 1 month's spiritual care given by psychological team in addition routine care, while the control group received the routine care only. All the patients were measured with Beck depression rating scale before and after intervention. **Results:** The severity changing of depression in three groups were significantly different before and after intervention. The scores of Beck depression rating scale were no significantly different among two groups before intervention ($p = .118$), and were significantly different after intervention ($p = .000$). Before and after intervention, the control group showed no significant difference ($p = .497$), while intervention

group had significant difference ($p = 0.000$). **Conclusions:** Psychological team to offer spiritual care can significantly improve the patients' depression and help reconstruction in patients with self, right front, and accept death comes, mitigate negative emotion, so as to improve the quality of life in cancer survival.

O-030 Palliative Care among Clients with Prostate Cancer: An Ethnographic Study

Glenn A. Guira *Department of Nursing, St. Paul College of Ilocos Sur, Philippines*

Purpose: This study is focused on determining the palliative care rendered by family members to four various symptoms experienced by the client with prostate cancer during the remaining six months of life. Each qualified respondents manifest various symptoms. But the researcher chooses four of these symptoms which are the focus of the study. **Methods:** This is an ethnographic research. It is a qualitative research primarily to gather the practices of the respondents in caring for clients diagnosed of prostate cancer. The practices of the respondents were obtained from the last six months of life of the clients. Twelve patients with prostate cancer were included in the research. Face to face audiotaped interview was done to the family members to gather the needed data. The interview was transcribed to elicit the palliative care done to the clients. The sampling process used to select the respondents is basically convenience sampling. The researcher visited three local hospitals of Ilocos Sur who are caring for prostate cancer. The oncologists who diagnosed the disease were the source of the information on the whereabouts of the respondents. The oncologist introduced the researcher to the clients and family members. The collection of the data happened at the residence of the respondents. **Results:** Table 1 below presents the various palliative care rendered by members of the family with regards to the symptoms felt by the client in an advanced prostate cancer. These palliative cares were elicited through a face-to-face interview with all family members who are involved with the direct care of the clients with prostate cancer.

Table 1. Palliative care rendered by family members to clients with prostate cancer with regards to various symptoms.

Symptoms of Clients with Prostate Cancer	The Palliative Care
Pain	Listening to native Ilocano songs and songs from the 60s, 70s, 80s Singing native Ilocano songs and original Filipino music Playing sungka, dama and card games Gentle lower back rubs, knee, ankle massages Sleeping in a side-lying position Warm water bath with fresh guava and dangla leaves Don't touch
Weakness and fatigue	Offering guava, apples, coffee, tea and squash Offering native chicken soup, malunggay soup Offering molasses, honey and chocolates Giving papaya shake, buko shake and dragonfruit shake Offering carrot juice, tomato juice, grape juice and calamansi juice Sleep, bed rest and taking naps
Stress and depression	Visit from old friends, batch mates in grade school, high school and college, visit from relatives with babies/children and neighbors. Watching telenovela, classic Filipino movies Showing old pictures and memorabilia such as medals and certificates Warm bath with dangla Attentive listening and care Walking with loved ones at the beach, around the house and barangay streets.

Vomiting	Exposure in a clean environment such as under the tree, rice fields, garden in an open air Gargling with warm water and warm water with lemon Offering raw cucumber and peppermint tea Relaxation through music Smelling honey and oregano Placing fresh makahiya, mango, banana and malunggay leaves in the chest Gentle back rubs, chest rubs and joints
----------	--

Conclusions: The data gathered from the respondent family members show that there are practices that are done to care for the prostate cancer clients. Though, the client will eventually die, family members still employ practices to assist the client who experiences various symptoms. As to the symptom of pain, there are palliative practices employed by the respondents to the prostate cancer clients. Data gathered shows that they applied the following palliative care practices: (1) listening to music, (2) singing songs, (3) use of games, (4) application of massage, (5) sleeping, (6) warm bath and (7) do not touch as a way to alleviate their pain. As for weakness and fatigue there are also palliative practices employed by the respondents. There were six themes identified that were practiced by the respondents. These includes (1) visitation, (2) watching variety of movies (3) showing memories of the past (4), warm bath, (5) attentive listening and (6) walking with loved ones. For stress and depression, there were six themes identified that were practiced by the respondents. These includes (1) visitation, (2) watching variety of movies (3) showing memories of the past (4), warm bath, (5) attentive listening and (6) walking with loved ones. Lastly, for vomiting, he researcher identified seven themes that were applied to this symptom. These include (1) environmental exposure, (2) oral care (3) offering food and drinks, (4) relaxation (5) smelling substances (6) leaves in the chest and (7) gentle rubs. As outlined previously, the palliative care were identified and presented. These palliative care are focused on the four symptoms namely pain, weakness and fatigue, stress and depression and vomiting. Although further research is needed to gather more data on how family members provide palliative care for the prostate cancer clients, the findings indicate that there are varied care that family members are practicing.

O-031 Multiple Malignant Tumors of the Orbit: Retinoblastoma

Dobra Zina *Ophthalmological Clinic, ClujNapoca, Romania*

Purpose: To analyze the clinical evolution of the patients and the treatment applied, starting from the analysis of the Retinoblastoma cases that appeared in the Ophthalmological Clinic from ClujNapoca, Romania, between the years 2010-2014. It also presents investigations that have been made for diagnosing the illness and the specific aspects of nursing these patients. **Methods:** There were 18 children with clinical signs, suggesting the possibility of tumor existence. The observation form was provided with the information of age, first clinical signs of the illness and paraclinical data. During the period of 5 years, 18 patients were clinically observed and paraclinically diagnosed as having tumors. In only 10 patients, enucleation process of the ocular globe has been made, so that the histological examination of the tumor was possible. **Results:** From the 18 patients observed, 42.8% have been females and 57.14% males. The age of the patients was between 5 months and 6 years old, and the most often affected patients are those between the age of 1 and 3 years. I also observed that 78.5% had only one eye affected and 21.4% had them both. **Conclusions:** The Retinoblastoma is the most frequent tumor of the early childhood. The clinical signs that determined the necessity of an examination were mostly due to the complications that appeared after the volume of the tumor has increased itself. So, it is absolutely necessary to examine any eye enucleate from an anatomopathological point of view. Very important is the education of all the parents: if they have any suspicion about any ocular sufferings, they have to come to the doctor immediately, even from the first months of life. So, a life can be saved even if an eye is lost and these patients can be socially and esthetically integrated using a single artificial eye.

O-032 The Effect of Turning Head during the Insertion on Preventing the PICC Ectopic in Jugular Veins

Yanxia Li, Liying Wang, Hongqin Dai, Mei Xue *Fudan University Shanghai Cancer Center, China*

Purpose: To investigate the effect of turning head during the placement on the

preventing PICC ectopic in jugular veins. **Methods:** Totally 1000 patients were randomly divided into two groups, 500 in each group. The entrance of jugular veins was blocked during PICC placement by using the turning head in group A, while the patients in group B did not to turning their heads during the PICC placement procedure. The catcher ectopic rate was compared between the two groups. **Results:** The catheter ectopic rate had no significant difference between the two groups ($P=0.05$). While the open-ended catheter was associated with a significantly higher incidence of catheter ectopic rate than Groshong catheter. **Conclusions:** The traditional method of turning heads during PICC placement cannot help to prevent PICC ectopic in jugular veins.

O-033 Application of Deming Cycle for Improving Nursing Care Quality of Cancer Patients

Minhui Chiu *Chi Mei Medical Center, Taiwan*

Purpose: The aim was to apply Deming Cycle (PDSA) to continue improving nursing care quality and studying to maintain cancer patients' safety. **Methods:** This was a quasi-experimental study. A hospital locates in southern Taiwan. A Nursing Care Quality Committee was composed of a nursing supervisor and many head nurses to improve the nursing care quality. They set up three process and three outcome quality control plans. The commissioner practiced PDSA cycles to continue improve the quality and studying of nursing care. It included (1)P (plan): make sure standard operating procedures (SOP), design six quality control plans, how to feedback the data, and design monitor instruments, (2) D (do): record the problems, analysis the data, and administer the plans, (3) S (study): complete data analysis, compare the data with references, pick up key issues to discuss with multidisciplinary chemical therapy safety team, and organize studying information, (4)A (Act): check and make sure change of plans, and go into the next PDSA cycle. The nurses responsible for chemical therapy monitor practicing process. The three check lists were used included the process of medication, the prevention nursing activities of extravasations, and dealing with the wastes. Set the definition of Chemical Therapy Errors included extravasations and medicine error. They have to be reported and discussed case by case. **Results:** Three process and three outcome quality control plans were set up from December, 2012 to July, 2013. The process indicators included the correct rate of chemical therapy medicine, prevention of extravasations, and dealing with the wastes. The process indicators included incidence rates of extravasations, spillage, and medicine errors. The completion rates of plans design were 100%. Three to eight PDSA cycles were practiced, and 100% transcended the control threshold. On July, 2013, it was approved by the audit of Health Promotion Administration, Ministry of Health and Welfare, Taiwan. **Conclusions:** Deming cycle is useful for improving the quality of nursing care for cancer patients.

O-034 Peripherally Implanted Central Venous Port Catheter in Cancer Patient

Xiaoxia Qiu *Cancer Center, Renji Hospital, School of Medicine, Shanghai Jiaotong University, Shanghai, China*

Purpose: To evaluate central venous ports totally implanted in the upper arm in terms of safety, technical success, and catheter-related complications retrospectively. **Methods:** Fourteen patients (mean, 48.29 ± 4.33 years, range, 18-74 years) received a peripherally implanted central venous ports (SlimPort, Bard Inc., USA) from Feb 2014 to Jan 2015. Among them, there are 3 male and 11 female. The insertion procedure was performed with ultrasound guidance at an interventional radiology suite. **Results:** In fourteen patients, a total of 14 devices were implanted. Of these 14 procedures, complete datasets were available during follow-up. All procedures were completed without complications. The technical success rate was 100%. The totally indwelling time is 1591 patient days (mean, 113.64 ± 26.13 days; range, 10-322 days). One patient complicated with wound dehiscence. No Phlebitis, catheter related infection, catheter-related thrombosis and catheter dislodgment occurred. **Conclusions:** Central venous ports implantation in the upper arm is a safe procedure. This method is effective for delivery of chemotherapy, nutrition support, and frequent IV medication.

O-035 Introduction of SBAR into Nursing Practice: A Prospective Study

Meera S. Achrekar *Nursing, Advanced Centre for Treatment, Research and Education in Cancer, Tata memorial Centre, Kharghar, Navi Mumbai, 410210., Maharashtra, India*

Purpose: All patients have a right to effective care at all times. SBAR communication method is an evidence-based strategy for improving not

only inter professional communication, but all communication specially when combined with good assessment, clinical judgment and critical-thinking skills. In India, no such data was available. Therefore the aim/purpose of the study was to introduce and evaluate the compliance to documentation of SBAR form.

Methods: Twenty nurses involved in active bedside care were selected by simple random sampling. Use of SBAR was illustrated thru Self Instructional Module (SIM). Content validity and reliability were established. The SBAR form was disseminated for use in clinical setting during shift handover. A retrospective audit was undertaken at 1st week (A1) and 16th week (A2), post introduction of SIM. Nurse's opinion about the SBAR form was also captured. **Results:** Majority of nurses were females (65%) in age group 21-30 years (80%). There was a significant association ($p=.019$) between overall audit scores and graduate nurses. Significant improvement ($p=.043$) seen in overall scores between A1 (Mean: 23.20) & A2 (Mean: 24.26) and also in "Situation" domain ($p=.045$) as compared to other domains. There was only a marginal improvement in documentation related to patient's allergies & relevant past history (7%), while identifying co-morbidities decreased by 40%. Only 70 % of nurses had documented plan of care. Most (76%) of nurses expressed that SBAR form was useful but 24% nurses felt SBAR documentation was time consuming. Assessment was easy (53%) to document while Recommendation was the difficult (53%) part. **Conclusions:** SBAR technique has helped nurses to have a focused and easy communication during transition of care during handover. Importance & relevance of capturing information need to be reinforced. An audit to look for reduced number of incidents related to communication failures is essential for long-term evaluation of patient outcomes.

O-036 The Practice of Multidisciplinary Case Management Holistic Care Team for Head and Neck Cancer Patients

Xianghua Xu, Yongyi Chen, Jie Chen *Head & Neck Plastic Surgery Department, Hunan Cancer Hospital, China*

Purpose: Explore influence of the multi-disciplinary holistic care case management team of head and neck cancer on the quality of care and patient satisfaction. **Methods:** Establish a multidisciplinary case management holistic care team for head and neck cancer patients, including the case manager, Clinical medical professionals, dietitian, psychologist and colostomy wound healer, pain care experts, tumor rehabilitation experts, etc. Case manager carry out continuous track toward head and neck cancer patients from diagnosis, pre-operation, post-operation to discharge. They observe and record the patient's condition in the process of care, referral patients to corresponding multidisciplinary domain experts, launch team discuss, providing professional consulting, health education and psychological support in different stages, etc. **Results:** Patients get continuity of care both in hospitalization and after discharge, can, the quality of the care improved, the patients' satisfaction enhanced. **Conclusions:** Based on a multidisciplinary team, the case management towards head and neck cancer patients by professional medical service, patients get appropriate treatment. A holistic, omni-directional, whole family, whole team, whole society continuous care can meet both physical, psychological, social and spiritual needs for head and neck cancer patients, no cracks in the whole process of care.

O-037 Knowledge and Attitudes of Oncology Nurses on Extravasation

Yunjin Lee, Nan Young Jung, Kyunghi Lee, Yoonjung Shin, EunHee Lee *Yonsei University Health System, Yonsei Cancer Center, Division of Nursing, South Korea*

Purpose: The Extravasation Clinical Practice Guideline (ECPG) was developed is to prevent extravasation and guide how to manage extravasation for patients' safety in 2009 at Yonsei University Health System, Severance Hospital. This study was to examine oncology nurses' knowledge and Attitudes on Extravasation. **Methods:** A descriptive correlational study. Convenience sample of 178 nurses in a cancer center at a university hospital participated in the study to evaluate Knowledge and Attitudes of Extravasation. Data was collected with self-reported questionnaire from March to April 2015, and analyzed using independent t-test, correlation, multiple regression by the SPSS 20.0. **Results:** The mean score for nurses' knowledge of Extravasation (NKE) was 15.87 ± 3.07 (range:0-25), (percentage of correct answers: 63.48%). The mean score of nurses' attitude of extravasation score (NAK) $3.15 \pm .46$ (range:1-4). But the mean score of sub-items, 'Etiology and Symptoms of extravasation' and 'Risk factors for extravasation' in NKE was 4.92 ± 1.23 (range:0-10), $2.12 \pm .73$ (range:0-4). There was significant difference between NAK and education level ($F=3.40$, $p=.019$) and participation of education program ($F=4.32$, $p=.006$). And difference between NAE and participation of extravasation education was found significantly ($t=-2.85$, $p=.005$) Significant correlations were found between NAE & participation in education programs ($r=.299$, $p=.016$). Factors affecting scores for NKE were 'Etiology and Symptoms of extravasation', 'Strategy to minimize tissue injury of extravasation', 'age'. **Conclusions:** Results indicate that nurses have a medium level of understanding of knowledge of extravasation, and higher level of NAE than NKE. To identify the influence of extravasation knowledge through the education program in cancer hospital, further research for long term effect is needed. In addition, a research is needed to identify how the knowledge of extravasation management gained from this program influence clinical outcomes regarding extravasation incidence rate, severity of affected tissue injury.

O-038 Analysis of Variables Affecting Thyroxin Compliance in Postoperative Thyroid Patients

Jiayan Cao *Head and Neck Neoplasm Department, Tianjin Medical University Cancer Institute and Hospital, Tianjin, China*

Purpose: The objective of the study was to analyze the prevalence of compliance and find out significant factors affecting compliance in postoperative thyroid patients. **Methods:** Observational cross-sectional study was conducted on 100 postoperative thyroid patients who had discharged from hospital for at least one week. The Morisky questionnaire was used to assess the compliance. Basic information included gender, age, education, marriage, place of residence, duration of medication, living with family or not. Multiple linear regression was used to analyzed the data. **Results:** Prevalence of good compliance was 68%, moderate compliance as 25% and 7% as poor compliance. Age, education, duration of medication and family supervision were found to be significant factors affected patients' compliance. **Conclusions:** To improve the compliance in postoperative thyroid patients, a better understanding of the effectiveness and necessity of thyroxin is needed. Meanwhile, nurses should provide continuing care after patients discharged from hospital. In addition, family supervision in taking thyroxin is encouraged.

POSTER PRESENTATION

P-001 Middle-Aged Women's Lived Experience during Chemotherapy after Mastectomy

Yu-Chen Liao¹, Li-Fen Wu², Dah-Cherng Yeh³ ¹Department of Nursing, Taichung Veterans General Hospital, Taiwan; ²Department of Nursing, National Taichung University of Science of Technology, Taiwan; ³Center for Breast Surgery, Taichung Veterans General Hospital, Taiwan

Purpose: The incidence and mortality rate of breast cancer in Taiwan increased every year, and become the first common cancer of women. After treated by mastectomy and chemotherapy, patient always developed anxiety, fear, helplessness and uncertainty, and fear of disease recurrence. In literature, women over the age of 50 years old often cause interpersonal difficulties after cancer surgery. So breast cancer in middle-aged women need to pay more attention by health care workers. **Methods:** The study discovers the chemotherapy women's life experiences that are breast cancer after mastectomy. This research use phenomenology research technique. Semi-structural interview direction will be used. Study cases are from a medical center, outpatient clinic and chemotherapy room, patient process the end of chemotherapy. It is 16 cases, the actual size of the sample size data analysis will be no new case presented as the standard. The selection criteria were as follows: breast cancer after surgery, chemotherapy, conscious clear, can talk in Mandarin or Taiwanese language, no mental illness, willing to participate in study and share life experience of adult women. **Results:** The major finding summarized four themes: fighting for life, guilt and appreciation toward family, respect for deities, sharing emotions with other patients experiencing the same disease, provide understanding of the experience of living in the process of breast cancer chemotherapy. **Conclusions:** It can be used as the application with reference to provide clinical nursing care. It presents the new structure of the concepts of care, and have noteworthy value in nursing knowledge development and practical application.

P-002 E-DA Hospital Grief and Healing Model of Home Hospice Care-From Bereavement Preparation to Follow-up Care

Y. J. Chen¹, Y. F. Wang¹, M. L. Shy¹, S. P. Tsai², W. P. Yang³ ¹Nursing Department, E-DA Hospital, Taiwan; ²Lecturer of Language Education Center, Fooyin University, Taiwan; ³Department of Nursing, Fooyin University, Taiwan

Background: To fulfill patients and their family wishes dying at home, E-DA Hospital helps them do home preparation and comfort the mourners. **Purpose:** Loss of loved ones causes the greatest pain and grief which pervades every aspect (physical, emotional, social, spiritual) of persons experiencing the loss of a significant one. For saying goodbye with calm minds and living a good life, patient's family have to take good care of the dying patient. **Methods:** Four stages of grief healing model of home hospice care: (1) Dying preparation: Evaluate patients and their families' wish for the rest of lives. Sooth patients' symptoms and prepare a nice clean place for them. Instruct home care of dying patients and their dead bodies. Link up resources and strengthen supportive systems. (2) Predict anticipatory grief: Guide patients and their families to express gratitude, apology, love and leaving. (3) Manage acute grief and mourning: Devastating grief comes at the moment of saying goodbye, so home nursing care provides 24-hrs crisis line for families. (4) Follow up bereavement care: the final stage referring to fourteen days or one month after patients passes away is their significant people or families' journey through grief. **Results:** 36 out of 240 patients' families examined as high-risk grievers from 2011 to 2013 received acute grief management and follow-up bereavement care (averagely 4 phone visits for each individual). **Conclusions:** 2011-2013 Operating with Annual Amendment From patients' physical aspect psychological, social and spiritual care is provided to patients and anticipatory grief and follow-up care for their families.

P-003 Difficult Choices ~ Ethical Dilemma in the Use of Artificial Nutrition and Hydration for Patients of Terminalstage Colon Cancer

S. F. Sung^{1,2}, I. L. Chen¹, W. P. Yang², Y. P. Hou¹ ¹Department of Nursing, Kaohsiung Municipal Siaogang Hospital, Taiwan; ²Department of Nursing, Fooyin University, Kaohsiung, Taiwan

Purpose: The Exploratory of ANH to maintain living quality has been regarded as a controversial medical treatment and worth medical staffs to and solve this ethic dilemma. **Methods:** The research analysis method mainly is to select patients who can provide a wealth of life experience as example. Indepth interviews to get six copies of transcripts, in the interview process while writing experience reflection, until the patient died after the conduct narrative analysis. **Results:** This article describes the experience sharing and ethic consideration about that s patients, who terminal colon cancer, accepts HTPN. They had been provided TPN since staying in hospital. Due to their stable medical condition, the doctor suggests they should leave hospital and start to eat few liquid and soft food via mouth after returning home. At this time, this patients starts feeling unease and sad and stated they feels like they has been given up. Their families also feel helpless and worry they would death. Medical teamwork and decide process and analyze the relations hip of ethics, through the following stages: 1. Hesitation period: yes and do not yes a dilemma. 2. Defeat: vain are still not giving up. 3. Reflection period: In retrospect or repent. **Conclusions:** However, it puts the nursing staffs in a dilemma of personal ethic principle and character demand. They need evidence as an consideration for judging and acting and expect medical staffs can familiar more about how to deal with terminal cancer TPN medicine.

P-004 Effects of Acupressure on Symptom Clusters in Patients with Advanced Cancer

Jie Jiao, Zhiqin Luo ^{Department of Integrated Chinese and Western Medicine, Tianjin Medical University Cancer Institute and Hospital, Tianjin 300060, China}

Purpose: The aim of the present study was to explore the effect of acupressure on symptom clusters in patients with advanced cancer. **Methods:** From December 2013 to July 2014, 100 advanced cancer patients selected from the department of Integrated Chinese and Western Medicine were randomly divided into a control group and an experimental group, with 50 patients in each group. The patients in the control group were given routine nursing interventions, while the patients in the experimental group received acupressure besides routine nursing interventions. The interventions lasted 2 months. The symptom clusters were compared before and after the intervention and the results were analyzed. **Results:** Before the intervention, there was no significant difference in the severity of the symptom clusters between the two groups ($p>.05$). After the intervention, the differences in the scores of group 1 symptom clusters and group 2 were significantly different ($p<.05$), and the score of experimental group was lower. There was no significant difference in the score of group 3 between the two groups. **Conclusions:** The acupressure could alleviate some symptoms of patients with advanced cancer, and was approved to be effective in controlling symptom clusters.

P-005 The Analysis of Symptom Clusters, Adverse Effects and its Influencing Factors in Patients with Lung Cancer during Radiotherapy

Xiaocen Chen ^{Radiotherapy Department, Tianjin Medical University Cancer Institute and Hospital, Tianjin 300060, China}

Purpose: To analyze the adverse effects of patients with lung cancer during radiotherapy and identify the influencing factors of adverse effects and establish symptom clusters for lung cancer patients during radiotherapy. **Methods:** We included lung cancer patients during radiotherapy Before radiotherapy, a questionnaire designed by the investigators was administrated to evaluate the patients' demographic characteristics and clinical data. We assessed the 12 adverse effects of patients with lung cancer during radiotherapy. A multivariate logistic regression analysis was performed to identify the potential factors leading to adverse effects. MDASI-C was used to assess the frequency and intensity of clinical symptoms in the past 24h to analyze the influencing factors of symptom clusters. Descriptive analysis is used to describe MDASI-C scale score and Spearman correlation analysis for MDASI-C symptoms. **Results:** A total of 182 patients were enrolled. Univariate analysis showed that there were significant differences in fatigue, fever, astriction, and vomiting. By logistic regression analysis, surgical history, high blood pressure, nutritional support, depression and pain were significant risk factors that contributed independently to adverse effects. The analysis of three principal component of MDASI-C showed that there were three symptom clusters. The three symptom clusters

had high internal reliability. The coefficient of Cronbach's alpha is 0.82, 0.83 and 0.82 respectively. **Conclusions:** Based on the symptom clusters established in our study, health care providers can propose adverse effects risk screening and intervention program for lung cancer patients during radiotherapy and chemotherapy.

P-006 Primary Caregivers' Experiences on Caring for Patients with Cancer-Related Pain: A Qualitative Study

Yanhui Wang, Fengqi Dong *Hepatology Department, Tianjin Medical University Cancer Institute and Hospital, Tianjin 300060, China*

Purpose: To elucidate primary caregivers' experience when caring for cancer patients with pain. **Methods:** A qualitative, descriptive, semi-structured research was used in this study. Nineteen primary caregivers, who had taken care of cancer relatives with cancer-related pain, were purposely recruited and interviewed. Colaizzi's analytical method was adopted to analyze the data for significant statements and phrases, which were then in turn organized into themes and subthemes. **Results:** The primary caregivers confronting cancer-related pain experienced a series of psychological and emotional changes, including worry, fear, anxiety, sadness, helplessness and powerlessness. Their physical and mental health, life and philosophy of life were also affected. Female caregivers were more prone to negative psychological and emotional changes than male ones. The caregivers with higher education level demand more pain-related knowledge and information. The cancer patient's pain expression, pain intensity and discomfort increased the primary caregivers' emotional burden and psychological changes. **Conclusions:** The findings of this study indicate that it is necessary for nurses to pay high attention to primary caregiver's knowledge and information needs for pain education, which might help cancer patients cope with pain and then in turn improve their quality of life. Besides, coping strategies and effective communication with health professionals may decrease primary caregivers' emotional burden and strengthen family support for cancer patients.

P-007 Research on Sleep Quality and Job Burnout among Cancer Hospital Nurses

Ting Liu, Fengqi Dong *Hepatology Department, Tianjin Medical University Cancer Institute and Hospital, Tianjin 300060, China*

Purpose: The aim of this study was to investigate the state of sleep quality and job burnout among cancer hospital nurses, examine the relationship between them and analyze the influence factors. This study can provide some intervention suggestions for the hospital management department to improve the nurses' quality of life and nursing level. **Methods:** 325 nurses in cancer hospital were investigated by using the chart of Pittsburgh Sleep Quality Index (PSQI) and Maslach Burnout Inventory (MBI). **Results:** The PSQI score of nurses in cancer hospital was 9.52 which was higher than normal group. Each factor score of MBI was higher than norm ($p < .05$); Sleep quality had highly positive correlation with emotional exhaustion area and depersonalization area in job burnout ($p < .05$). **Conclusions:** The sleep quality and job burnout of nurses in cancer hospital were poor. There are some correlations with sleep quality and job burnout. Thus, not only the nursing managers should provide corresponding measures for the nurses to improve nurses' sleep quality and reduce the job burnout but also the nurses themselves should reasonable arrangement work and rest, which would promote nurses' physical and mental health and improve the quality of nursing.

P-008 Correlation between Oncology Nurses' Psychological Contract, Professional Identity Level and Turnover Intention

Lei Chen *Hepatology Department, Tianjin Medical University Cancer Institute and Hospital, Tianjin 300060, China*

Purpose: To determine the correlation between cancer nurses' psychological contract, professional identity level and turnover intention. **Methods:** 270 nurses in Tianjin Cancer Hospital were recruited and investigated with the psychological contract scale, professional identity rating scale and turnover intention scale. The relationship between the three was analyzed. **Results:** Among all factors of psychological contract of oncology nurses, the factor score of hospital responsibility was higher than the score of nurses' responsibility and the difference was statistical ($p < .05$); the score of professional identity scale was 104.54 ± 17.63 ; the score of turnover intention scale was 16.54 ± 3.14 ; 59.4%

of nurses' turnover intention was stronger; the correlation analysis showed that oncology nurses' psychological contract and professional identity into significant negative correlation; and turnover intention into significantly positive correlation ($p < .05$). **Conclusions:** Nursing managers should pay attention to the psychological contract of oncology nurses, take corresponding measures to improve the nurses' psychological contract, professional identity, reduce the nurse turnover intention.

P-009 Effect of Individualized Music Intervention Combined Pressure Auricular Therapy on Sleep Quality in Patients after Thoracotomy

Yongsheng Sha, Qingqing Kong, Hao He, Meng Duan, Xiaoxiao Sun, Guanjun Bian *Pulmonary Medicine Department, Tianjin Medical University Cancer Institute and Hospital, Tianjin 300060, China*

Purpose: A total of 240 lung cancer patients were divided into four groups. The patients in the control group received routine postoperative care, the patients in the music group received increasing individualized music intervention, the patients in the ear intervention group received increasing auricular acupressure, while the patients in the music combined ear group received increasing music intervention and auricular acupressure. The patients' sleep quality were assessed with Pittsburgh sleep quality index (PSQI) in the night before surgery and on the day of discharge. **Methods:** A total of 240 lung cancer patients were divided into four groups. The patients in the control group received routine postoperative care, the patients in the music group received increasing individualized music intervention, the patients in the ear intervention group received increasing auricular acupressure, while the patients in the music combined ear group received increasing music intervention and auricular acupressure. The patients' sleep quality were assessed with Pittsburgh sleep quality index (PSQI) in the night before surgery and on the day of discharge. **Results:** The PSQI scores in the night before surgery of the 4 groups patients were no significance ($p > .05$). Compared with the control group, each dimension of PSQI score was significantly lower in the music group, the ear group and the music combined ear group ($p < .05$). There were no significant difference between music group and ear group, music group and music combined ear group, ear group and music combined ear group ($p > .05$). **Conclusions:** Individualized music intervention, auricular acupressure, and music combined auricular acupressure can improve the quality of sleep patients after thoracotomy. But the music combined auricular acupressure has no superior than music intervention alone or auricular acupressure alone.

P-010 Application of an Evaluation Form before Central Venous Access Device Placement in Lymphoma Patients with Chemotherapy

Jing Chen *Hematology Department, Tianjin Medical University Cancer Institute and Hospital, Tianjin 300060, China*

Purpose: The aim of this study was to design and apply an evaluation form before central venous access device (CVC or PICC) placement, and to evaluate the effect by the patient satisfaction and one-time success rate of catheter. **Methods:** Adopt the case-control and history case-control study, Ninety-nine lymphoma patients who will indwell CVC or PICC were recruited in the observation group from June to October 2014, and randomly select 81 lymphoma patients with CVC or PICC as control from June to October 2013. The evaluation form was taken carefully by the patient. The catheter type and insertion position were decided for the operator according to the results. The patient satisfaction degree and the one-time success rate of catheter were recorded. **Results:** The satisfaction of lymphoma patients on central venous access device and one-time success rate of catheter in the observation group were significantly higher, when compared with those of the control group ($p < .05$). There was no significantly different in age, gender, catheter type between the two groups ($p > .05$). **Conclusions:** Application of the evaluation form before CVC or PICC will make the central venous access device safer and more effective with the improvement of satisfaction and increase the one-time success rate of catheter.

P-011 Transference in the Nurse-Patient Relationship: A Case Report on Prostate Cancer Suffering from Transference Syndrome

Min-Chia Wang¹, Shu-Chan Chang¹, Wen-Tsung Huang² ¹Cancer Center, Chi Mei Medical Center, Liouying, Taiwan; ²Division of Hemato-Oncology, Chi-Mei

Medical Center, Liouying, Taiwan

Introduction: This article explores the dilemma posed with regard to a prostate cancer patient suffering from transference syndrome. Transference is generally recognized as an unconscious inevitable part of relationships. Both nurse and patient "transfer" their past emotional and psychological needs into present situations and react accordingly. **Purpose:** This paper describes the meaning of transference and their importance in the therapeutic nurse-patient relationship. **Methods:** We developed a case management model to provide cancer patients as a consultation corner. Additionally, in an attempt to improve the quality of life of cancer patients, this model encourages medical personnel to discuss sexual, belonging and love problems with patients and hold attitudes of professionalism, composure, caring, and solemnity. Belonging and love need is a basic need of human beings. **Results:** For patients with prostate cancer, this basic need cannot be satisfied, even professionally trained medical personnel have difficulty directly addressing this problem. **Conclusions:** This paper describes the meaning of transference and their importance in the therapeutic nurse-patient relationship. Finally, development of greater insights into the nurse-patient relationship will help nurses use those insights to improve the quality of patient interactions and care.

P-012 Can Physician Adherence to Treatment Guidelines Improve Patient Survival? A Population-Based Analysis of Genitourinary Cancer in Taiwan
Min-Chia Wang¹, Shu-Chan Chang², Wen-Tsung Huang² ¹Cancer Center, Chi Mei Medical Center, Liouying, Taiwan; ²Division of Hemato-Oncology, Chi-Mei Medical Center, Liouying, Taiwan

Purpose: Taiwan's healthcare increasingly advocate physician adherence to clinical protocols that have been shown to improve outcomes. Treatment guidelines have been encouraged in recent years for treatment in Taiwan. The aim of this study was to evaluate the relationship between adherence to treatment guidelines and survival of all stages of genitourinary cancer patients. **Methods:** Participants: From August 2007 to December 2013, patients with genitourinary tumors who were treated and tracked in a teaching hospital in southern Taiwan were recruited as the research participants. Data Collection: Phone interviews and hospital visits were conducted to inquire about the treatment and survival for 2007-2013 genitourinary cancer cases. **Results:** Adherence to treatment guidelines case: one-year survival: 98.4%, two-year survival: 98.4%, three-year survival: 97.2%, four-year survival: 95.7%; five-year survival: 95.2%; six-year survival: 95.2%. not adhere to treatment guidelines case: one-year survival: 87.4%, two-year survival: 78%, three-year survival: 72%, four-year survival: 58.2%; five-year survival: 49.9%; six-year survival: 39.7%. **Conclusions:** The major findings from this 721 patient study were that: a closer relationship was existed in adherence rate and survival rate, the patients who received treatments in adherence to treatment guidelines had a higher survival rate than those who did not adhere. This study confirmed that the implementation of core measures indicators of Genitourinary cancer can improve patient's survival rate, demonstrated the importance of team work and the process indicators.

P-013 Impact on the Quality of Life of Lymphoma Patients Who Using the Follow-Up Path Table Outside the Hospital during the Intermittent Chemotherapy

Yaping Zhang Senior Ward, Tianjin Medical University Cancer Institute and Hospital, Tianjin, China

Purpose: This study aims to improve the life quality of lymphoma patients with multi-cycles chemotherapy during the intermittent chemotherapy outside the hospital. **Methods:** According to the period that complications may occur after chemotherapy to the cancer patients, the intermittent chemotherapy is divided into several stages. On the basis of complications and problems that may exist at different stages. We formulated a "follow-up path table of lymphoma during the intermittent chemotherapy". According to the even-odd medical record number, Eighty-three patients were randomly divided into experimental group and control group. We have a test group of 43 and control group of 40 patients. The test group used the "follow-up path table of lymphoma during the intermittent chemotherapy" to conduct a phased-in telephone follow-up, including: psychology, life, society, adverse reactions, catheter maintenance and other related content. Strictly in accordance with the classification stage

of follow-up path table. The control group used the style of telephone follow-up weekly and the contents were the same to the test group. We followed up all the content repeatedly every week. Two groups of patients used the quality of cancer patients life scale (EORTC QLQ-C30) to survey during the intermittent chemotherapy, in the third interval of chemotherapy prior to enrollment and post-enrollment respectively. **Results:** The quality of life in the test group was higher than the control group patients. Accordance with the "follow-up interval of lymphoma chemotherapy path table", We can get a conclusion that the way of phase type follow-up is better than the way of following-up once a week. **Conclusions:** Using the "follow-up path table of lymphoma during the intermittent chemotherapy" to conduct a phased-in telephone follow-up, there are plans and purposes to provides support continuously and care continuity for the patients outside the hospital during the intermittent chemotherapy, thus can reduce toxicity response and improve the quality of life of lymphoma patients during the intermittent chemotherapy.

P-014 Application of QFD Method to Improve the Health Expectations of Cancer Patients

Qing Chang Tianjin Medical University Cancer Institute and Hospital/National Clinical Research Center for Cancer, Key Laboratory of Cancer Prevention and Therapy of Tianjin, Tianjin 300060, China

Purpose: To explore the quality control methods to improve the personalized cancer care for cancer patients. So humanistic diversified care can play a role in maximizing the potential effectiveness in the field of patient expectations. **Methods:** The Quality Function Development (QFD) method was correctly used to analyze the expectations and perceived needs of these patients. The patient's health care needs were converted into care design requirements and personalized patient files were established. Personalized nursing was applied based on their demands. Service design requirements were converted into care process requirements. Enthusiastic reception, etiquette operation, health education, listening complaint and extended service are the methods to improve service processes. Care process requirements were converted into nursing services operating requirements. Nursing services operation was improved from refining the form of signature treatments. Nursing services operating requirements were converted into quality control requirements. All patients take actively participate in quality control, continuous improvement, supervision and inspection to promote quality control construction. **Results:** QFD method can introduce scientific quality management methods which can be used in clinical, integrating the quality control process into the service designs. **Conclusions:** QFD methods created the humanized service on the basis of "satisfactory service" and the value added service which has exceeded patient's health expectations. It can better meet the growing diversification health needs of cancer patients and promote the development of clinical care.

P-015 Establishing a Case Management Model That Improves Patient Motivation to Wishes for Treatment

Minchia Wang Cancer Center, Chi Mei Medical Center, Liouying, Taiwan

Purpose: Case management models have been encouraged in recent years for treatment in Taiwan. Case management combines disease management with the coordination of patient care services. Integrated and coordinated utilization of resources, and the emphasis on continuous care. The aim of this project was to apply case management to increasing the rate of follow-up for genitourinary cancer cases. **Methods:** 1. Participants: From August 2007 to December 2012, patients with genitourinary tumors who were treated and tracked in a teaching hospital in southern Taiwan were recruited as the research participants. 2. Data Collection: After implementing a case management system from 2010, Phone interviews and hospital visits were conducted to inquire about the needs for 2007-2012 genitourinary cancer cases of a health information consultation. 3. Data Collection: Between January 1, 2010 and December 31, 2013, data were retrospectively collected frequency for regular treatment and follow up rate. **Results:** After implementing a case management system from 2010, the rate of refuse treatment for genitourinary cancer cases was decrease from 29.5% to 2.5% and the rate of loss follow-up for genitourinary cancer cases was decrease from 11.2% to 9.3%. And the revisit rate was elevating from 37.9% to 57.6%. **Conclusions:** In this study, we discussed whether the attitudes of nurses and the contents of medical information influenced the wishes at

which patients with genitourinary tumors for Treatment. The application of the case management was able to significantly increase the follow-up rate for genitourinary cancer cases as well as improving the actual outcomes for the follow-up patients. The Case management Model is to elevate the quality of care and improve on the cost effectiveness, while simultaneously strengthen the multidisciplinary team with respect to integration, communication and cooperation.

P-016 A Prospective Evaluation of Lymphedema-Specific Quality of Life Outcomes Following Vascularized Lymph Node Transfer

Chia-Yu Lin *Chang Gung Memorial Hospital, Taiwan*

Purpose: Microsurgical techniques for the treatment of lymphedema rapidly increased in popularity. Although surgical success with vascularized lymph node (VLN) transfer has been demonstrated, limited studies have investigated the influence of microsurgical treatments on health-related quality of life (HRQoL) parameters. This study was to prospectively evaluate changes in HRQoL following VLN transfer for upper and lower extremity lymphedema using a validated instrument. **Methods:** An IRB-approved prospective study was performed of patients who underwent vascularized lymph node transfer for symptomatic upper (ULL) or lower limb (LLL) lymphedema. A validated lymphedema-specific questionnaire, LYMQOL, was utilized to assess specific quality of life parameters at multiple time points during the 12-month perioperative period. For a comparison with HRQoL metrics, limb circumference measurements were obtained to assess circumference differentiation. **Results:** Twenty-five patients met the study criteria. Limb circumference analysis revealed significant early improvements following VLN transfer with continued improvement during the study period (ULL: 24.4% and, LLL: 35.2%). These improvements were mirrored by improvements in all HRQoL domains and overall quality of life ($p < .01$). The function, body appearance, symptom, and mood domains were all found to be significantly improved during the post-operative evaluation, with continued improvement being reported throughout the study period ($p < .01$ within each domain). **Conclusions:** Microsurgical treatment of lymphedema with VLN transfer procedures effectively decrease limb circumference. This improvement is mirrored by improvements in patient-reported outcomes and quality of life. These changes can be observed as soon as one month post-operatively, and continued steady improvement can be expected.

P-017 Meta-Analysis of Psychosocial Interventions on Survival Time in Patients with Cancer

Pok-Ja Oh¹, Sung-Rae Shin², Hyeong-Sik Ahn³, Hyun-Jung Kim⁴ *¹Department of Nursing at Sahmyook University in Seoul, South Korea; ²Department of Nursing at Sahmyook University in Seoul, South Korea; ³Department of Preventive Medicine, College of Medicine, Korea University, Seoul, South Korea; ⁴Institute for Evidence-based Medicine, The Korean Branch of Australasian Cochrane Center, Department of Preventive Medicine, College of Medicine, Korea University, Seoul, South Korea*

Purpose: The aim of this study was to evaluate the effects of psychosocial interventions on survival in adult patients with cancer. **Methods:** MEDLINE via PubMed, Cochrane Library CENTRAL, CINAHL, and Korean electronic databases (KMBASE, KOREAMED, RISS, KISS, and NANET) (up to February 2014) were searched. Methodological quality was assessed using Cochrane's Risk of Bias for randomized studies. The RevMan 5.3 program of the Cochrane library was used for data analysis. **Results:** Fifteen randomized controlled trials met the inclusion criteria, with a total of 2940 participants. Overall, psychosocial interventions was not associated with better survival (HR=0.83, $p = .06$, I²=64%). In subgroup analysis, based on six trials with 1448 subjects, psychoeducational interventions for cancer patients with nonmetastasis at intervention implementation resulted in a 41% reduction in the risk of dying of cancer (HR=0.59, 95%CI [0.49, 0.71], $p < .001$, I²=0%). For psychoeducational intervention, significant survival benefit were found when health staff delivered the intervention (HR=0.56, $p < .001$, I²=0%) and at a follow-up time of more than 10-years (HR=0.58, $p < .001$, I²=11). **Conclusions:** Use of psychoeducational interventions for cancer patients at early stage appeared to have beneficial effects on survival, preferably for delivering of health staff. However, conduct of further psychosocial studies with adequate power will lead to better

understanding of the effects of treatments on survival outcome.

P-018 Pain Nursing Project: Improving the Accuracy of Pain Assessment

Chia-Hui Lin *Nursing Department, Chi-Mei Medical Center, Liouying, Taiwan*

Purpose: In order to provide cancer patients with complete pain management, we examined how nurses assess pain. The accuracy rate was 74.8%, below the threshold, leading to the implementation of strategies for improvement. **Methods:** As of May 2013, the following measures were implemented: 1. On-the-job training in pain management and training of pain management teachers in each department; 2. Uniform pain assessment tools; 3. Instituted the three-factor nursing criteria in each department: methods of assessing pain, pain management criteria and pain management quality indicators. 4. Continued monitoring through random sampling of each department on a monthly basis in accordance with the "pain assessment table"; results were provided to each department for feedback and further improvement. **Results:** From May to December we studied 285 nurses; the accuracy rate of pain assessment increased from 74.8% to 93%, an increase of 18.2%. Accuracy also exceeded the threshold value each month. **Conclusions:** Pain is the most common symptom of cancer and this hospital treats a large number of cancer patients; therefore, we must ensure that nurses are accurately assessing pain and developing appropriate strategies to help patients manage pain, in order to maintain their quality of life.

P-019 An Exploratory Study on the Relationship between the Physical Symptoms of Terminal Cancer Patient and the Care Burdens of their Family at the End-of-Life Period

Eriko Hayashi¹, Masako Shomura² *¹Department of Nursing, Fujisawa Shonandai Hospital, Japan; ²Department of Nursing, School of Health Sciences, Tokai University, Japan*

Purpose: To clarify the relationship between the physical symptoms of terminal cancer patient and the care burdens of their family member at the time of decision making admission to palliative care unit (PCU). **Methods:** We enrolled eight family members from June to July of 2014. All subjects answered the self-reported questionnaires, the Caregiver Reaction Assessment-Japan (CRA-J) and face-to-face interviews. We assessed patient symptoms by using the Support Team Assessment Schedule-Japan (STAS-J), and analyzed all data by descriptive statistics. This study was approved ethically by the Institutional Review Board of Fujisawa Shonandai Hospital. **Results:** Eight patients with various cancers were 5 males. Family caregivers were six females. From the patients, we interviewed five children, two spouses and one daughter-in-law, four families lived with patients. Median scores were total STAS-J 23 and total CRA-J 53. Families who lived with the patients and experienced patient's admission at PCU presented worse conditions on CRA-J score 8 vs 5, respectively ($p = .03$). The spouses expressed significantly higher economic burden compared with Children, 10 vs 6 ($p = .04$). There were no differences in terms of patient age and STAS-J score by Mann-Whitney U test. The female families showed the worse score in the acceptance of care than male, 13 vs 7 ($p = .6$). **Conclusions:** At the time of decision making admission to PCU, Japanese families who lived with the patient and experienced imminent admission of PCU showed severe care burden. Nurse should take care for family caregiver's physical and psychosocial health, especially at the time of admission to PCU.

P-020 Life Style and Quality of Life of Stomach Cancer Survivors

Eun-Sook Wi, Jung-Hun Lee, Je-In Seon, Hee-Youn Kim, Su-Youn Lee, So-Eun Choi, Kwang-Sung Kim *Cancer Center, Seoul St. Mary's Hospital, The Catholic University, South Korea*

Purpose: The aim of this descriptive study was to define quality of life and life style for health maintenance. It will be useful for develop education program and maintenance for stomach cancer survivor in the future. **Methods:** The data surveyed from the 6th August to the 1st November 2013 to use questionnaire of Function Assessment Cancer Therapy-General Cancer (FACT-G) and life style. The recipients were 118 patients with stomach cancer after 5years end of treatment. **Results:** The survivors after 5 years with stomach cancer well carried out times of diet, preferred food, cooking method of diet habit, sleeping hours, times of exercise following recommendation of cancer prediction. However, it

did not carry out in part of smoking, solution for stress as a positive method, regular check up and protection from sunscreen. Total score of quality of life in survivor with stomach cancer was 82.28 of 108 point. The highest one was 24.30 in Physical domain, 19.76 in Functional domain, 19.41 of emotional domain, 18.33 of Social/family domain. The quality of life following general characteristics was significantly difference in monthly salary ($F=2.77, p=.031$). In personal characteristics, the optimistic group was significantly higher than the critical group ($F=5.29, p=.007$). In trait related to disease, non past disease history group was significantly higher than past disease history group ($t=-2.05, p=.043$). **Conclusions:** A nurse should develop nursing intervention strategy to strengthen of positive life style to prevent from secondary cancer and improvement of emotional, social family domain in quality of life.

P-021 Study on Nursing and Support when Terminal Cancer Patients Transit to Palliative Care

Miyuki Hoshina *College of Nursing, Kanto Gakuin University, Japan*

Purpose: The purpose of this study is to elucidate various aspects of nursing and support for terminal cancer patients who require assistance in hospital discharge at the time of transition to palliative care, and their families. **Methods:** Subjects of this survey were 9 nurses and 11 medical social workers (MSWs) involved with terminal cancer patients. In the interviews, we focused on what kind of nursing and support should be provided. We analyzed the interview data in the M-GTA approach for ethical considerations, we explained to the participants that they were taking part in the study on their free will. **Results:** As for the results, 18 concepts and 6 categories were generated regarding nursing assistance in the period of transition to terminal stage. The three points below were considered. (1) Nurses and MSWs need to fully share information. (2) Timing cannot be overlooked when changing hospitals. (3) It is important to cooperate so that both nurses and MSWs can mutually perform their roles in full. **Conclusions:** If there is not sufficient cooperation between nurses and MSWs, this will be perceived by the cancer patients, and could become a cause of delay in transition to palliative care. To address this, opportunities for discussions between nurses and MSWs should be offered. MSWs should also participate in team conferences conducted by nurses.

P-022 Importance and Satisfaction of the Role of Oncology Advanced Practice Nurse

Hye-Dan Kim *Solid Tumor Center, The Catholic University of Korea Seoul St. Mary's Hospital, Korea, Republic of*

Purpose: This descriptive study conducted to identify importance and satisfaction of the oncology advanced practice nurse in a cancer center. **Methods:** The subjects were 100 cancer patients and 100 oncology nurses. We used Job evaluation tool of oncology nurse after modification and supplementation which was developed by Kim and Park (2007). The tool for a patient composed 56 items which were 10 items related to disease, 5 of general characteristics, 41 of importance and satisfaction of oncology APN. The tool for a nurse composed 46 items which were 5 of general characteristics, 41 of importance and satisfaction of oncology APN. **Results:** In the role of oncology Advanced practice nurse, at the patients' side, the most importance role was consultation and collaboration and the most satisfaction was application of nursing practice. At the nurses' side, the most importance role was education and advice and most satisfaction role was consultation and collaboration. The difference of importance and satisfaction of oncology advanced practice nurse's role between patient and nurse was higher patient than nurse. The oncology advanced practice nurse's role recognized by nurses was high in importance however low in satisfaction. In general characteristics, the importance of oncology advanced practice nurse's role was higher by age and the satisfaction was high following service carrier. **Conclusions:** The importance and satisfaction of oncology advanced practice nurse by patient were high. The importance was high; however the satisfaction was low by nurse. There is a need to make a higher of satisfaction and extend role of oncology advanced practice nurses.

P-023 A study in Chinese Oncology Nurses of Understanding and Self-Evaluation with Oncology Advanced Practice Nurse (OAPN)

Yiyuan Zhao *Beijing Cancer Hospital, Beijing, China*

Purpose: To evaluate the understanding of Oncology Advanced Practice Nurse (OAPN) in Chinese nurses. **Methods:** Self-designed questionnaire was conducted in a cancer hospital. 127 nurses with bachelor or master degree were investigated in this research. **Results:** The five roles of clinical practitioner, educator and consultant, coordinator, manager, researcher, were supposed to be essential roles in OAPN. Clinical practitioner, educator and consultant, in the meanwhile, were considered to be vital roles. However, a great majority of the surveyed, who were supposed to be the future OAPN, were not satisfied with their ability so far. **Conclusions:** Even though Chinese cancer nurses attach importance to the OAPN roles, further training for them is urgent and of great importance.

P-024 Study on a Chinese Version of a Likert-Type Death Anxiety Scale in Colorectal Cancer Patients

Hong Yang, Jie Zhang, Yuhuan Lu, Ming Li *Nursing Department, Peking University Cancer Hospital & Institute, China*

Purpose: To evaluate and validate a Chinese version of a likert-type death anxiety scale on colorectal cancer patients. **Methods:** The study investigated 50 colorectal cancer patients by convenience sampling method. Death anxiety were assessed with the Chinese version of a likert-type Templer-death anxiety scale (CL-TDAS) on the first day of admission, the second day after operation and the day before discharged. **Results:** Most respondents finished the whole scale in 3 to 5 minutes, and the recovery rate was 94.0%. The internal consistency reliability evaluated by Cronbach's α was 0.821 for the whole 15 items and the correlation between the CL-TDAS and the CL-TDAS was 0.79 ($p<.05$). The mean score of the CL-TDAS was 36.16 ± 9.99 (The first day of admission). **Conclusions:** We validate that the CL-TDAS has reliable performance and could be a good instrument on evaluation of the cancer patients' death anxiety. Death anxiety varied during different period and by gender.

P-025 Effects of Cognitive Rehabilitation Interventions on Neuropsychological Outcomes and Symptoms in Chemotherapy-Treated Cancer Patients: A Meta-Analysis

Pok-Ja Oh¹, Ji-Hyun Kim² *¹Nursing Department, Sahmyook University, South Korea; ²College of Nursing Graduate School, Korea University, South Korea*

Purpose: This study was done to evaluate the effects of cognitive rehabilitation interventions on neuropsychological outcomes and psychosocial distress in chemotherapy-treated cancer patients. **Methods:** PubMed, Cochrane Library CENTRAL, EMBASE, CINAHL and several Korean databases were searched. The main search strategy combined terms indicating cognitive rehabilitation intervention, presence of neoplasm and study design. Methodological quality was assessed using Cochrane's Risk of Bias for randomized studies. Data were analyzed by the RevMan 5.3 program of Cochrane Library. **Results:** Fourteen clinical trials met the inclusion criteria with a total of 889 participants. Cognitive rehabilitation intervention was conducted for a mean of 8.50 weeks, 16.46 sessions and an average of 59.29 minutes per session. Cognitive rehabilitation interventions had a significant effect on attention ($ES=-0.42, p=.04, I^2=68\%$) and cognitive function ($ES=-0.18, p=.05, I^2=0$). For fatigue and depression, cognitive rehabilitation interventions were not effective. **Conclusions:** Results support findings that cognitive rehabilitation interventions can assist chemotherapy-treated cancer patients in improving cognitive functions. Further cognitive rehabilitation interventions will lead to better understanding of the effects of treatments on neuropsychological outcomes.

P-026 Spiritual Well-Being among Adult Cancer Patients

Yuko Kamijo¹, Hanako Momose², Sayaka Ito² *¹Faculty of Nursing, Yamanashi Prefectural University, Japan; ²Cancer Center, Shinshu University Hospital, Japan*

Purpose: This study examined the importance of spiritual well-being and related factors among adult cancer patients. **Methods:** A cross-sectional questionnaire survey was administered to 176 adult cancer patients who received chemotherapy at an outpatient clinic at a specialized cancer hospital in rural Japan. The survey included items from the Functional Assessment of Chronic Illness Therapy - Spiritual Well-Being scale (FACIT-Sp), which was developed in the United States to assess quality of life in relation to spirituality. Demographic

data were collected for performance status, cancer stage, age, marital status, occupational status, persons in household, pain intensity, and sleeping status. **Results:** Overall, 75% of patients were female, 48.9% were stage IV, 79% were married, 31.2% were employed, and 10.5% were living alone. The mean age was 60.2 ± 12.9 years. The mean spiritual well-being score on the FACIT-Sp was 30.0 ± 6.3 (range, 4 to 48). The spiritual well-being score showed a strong relationship with age ($p = .0024$), as older patients were more likely to express, "I know that whatever happens with my illness, things will be okay." Furthermore, the mean total FACIT-Sp score was 107.0 ± 23.9 (range, 32.2 to 147.8). FACIT-Sp showed strong relationships with age ($p = .0014$), sleeping status ($p = .0136$), and pain intensity ($p = .029$), and severe pain reduced spiritual well-being. **Conclusions:** To maintain spiritual well-being for cancer patients, nursing interventions should facilitate patients' sleeping status, and pain management. Furthermore, younger patients may need additional assistance to meet spiritual needs.

P-027 Self Concept and Quality of Life of Postoperative Colorectal Cancer Patients Undergoing Adjuvant Chemotherapy

Yun-Yi Wang¹, Lih-Mih Chen², Tzu-Hui Liu¹, Jen Chin³, Yu-Lan Lee¹ ¹Nursing, Kaohsiung Armed Forces General Hospital, Taiwan; ²School of Nursing, Kaohsiung Medical University, Taiwan; ³Colon and Rectal Surgery, Kaohsiung Armed Forces General Hospital, Taiwan

Purpose: Adjuvant chemotherapy is the main treatment for postoperative colorectal cancer and may disturb the patients' self-concept and quality of life. Lack of related researches was noted. The aims of this study were to explore the characteristics and the trajectories of self-concept and quality of life for postoperative colorectal cancer patients undergoing adjuvant chemotherapy. **Methods:** This study was a longitudinal and co-relational study design. Eighty-four adults with colorectal cancer were purposively recruited in four hospitals. Four self-reported questionnaires (i.e. Demographic/Medical Records, FAP, EORTC QLQ-C30 and CR29) were answered by participants on one week before chemotherapy and 24–48 hours after 4 times of chemotherapy. Data were analyzed by descriptive statistics and generalized estimating equations (GEE). **Results:** The results indicated that the mean scores of self-concept at after 1st time chemotherapy was the highest. For the three factors of self-concept, the stigma had the highest scores, followed by the mastery and the self-esteem. The participants who were single, received LAR/AR surgery and took Xelox as regimen had significantly lower scores of self-concept ($p < .05$). No significant changes on the participants' self-concept scores were noted over time. The functional status of EORTC QLQ-C30 ($p < .001$) and the symptom/problem status of EORTC QLQ-C30 ($p < .05$) were significantly higher over time. The self-concept scores were significantly correlated with the global health status of EORTC QLQ-C30 ($p < .001$) and the functional status of EORTC QLQ-CR29 ($p < .001$) as well. **Conclusions:** The results remind the importance to assess patients' self-concept status in adjusting their stress and improving their quality of life in series courses of adjuvant chemotherapy.

P-028 The Developmentxxxx

Wenli Xiao, Winnie KW So, Doris YP Leung, Carmen WH Chan *The Netherlands School of Nursing, The Chinese University of Hong Kong, Hong Kong, China*

Purpose: The Chinese version of the M. D. Anderson Symptom Inventory - Head and Neck Module (MDASI-HN-C) has been linguistically validated. However, its psychometric properties have not been established yet. The purpose of the study was to psychometrically validate the MDASI-HN-C in Chinese patients with nasopharyngeal carcinoma (NPC). **Methods:** 130 NPC patients from a large cancer center in China who were undergoing radiotherapy participated in the study. They completed the MDASI-HN-C and the Chinese version of the Functional Assessment of Cancer Therapy - Head and Neck Scale (FACT-H&N-C). Repeated administration of the MDASI-HN-C took place three days later on a subsample of 66 patients to evaluate the test-retest reliability. **Results:** Cronbach alphas ranged from 0.85 to 0.91 for the two symptom severity subscales and the symptom interference subscale. The 3-day test-retest reliability was acceptable with intraclass correlation coefficients ranged from 0.52-0.71. The content validity index was satisfactory (0.97). For the construct validity, subscale scores of the MDASI-HN-C were negatively correlated with the total score of the FACT-H&N-C as hypothesized ($r = -0.48$ to -0.56 , $p < .01$).

Further, the means of the subscales were differentiated by the amount of weight loss during treatment ($t = 2.16$ to 3.19 , $p < .05$). Lastly, exploratory factor analysis revealed four underlying constructs for the two subscales measuring symptom severity. **Conclusions:** The MDASI-HN-C is a reliable and valid instrument to measure the symptom burden in Chinese NPC patients.

P-029 Status of Perceived Self-Efficacy and its Correlated Factors in Esophageal Cancer Patients during Radiotherapy

Pei Y, Meng AF, Xing GH *Nursing Department, Jiangsu Cancer Hospital, China*

Purpose: To investigate the status and correlated factors of perceived self-efficacy in esophageal cancer patients during their radiotherapy. **Methods:** 92 esophageal cancer patients during their radiotherapy were recruited by convenient sampling method. They were investigated with the Chinese version of SUPPHI (Strategies Used by People to Promote Health) (SUPPHI). Multiple linear regression analysis was used to identify the predictors of perceived self-efficacy. **Results:** The average score of perceived self-efficacy was 59.60 ± 11.67 (range=41-78). Multiple regression analysis showed that men was superior to women in coping strategies; married and divorced patients' self-efficacy was higher than unmarried and without a spouse; intermediate type and extroverted patients' self-management efficiency level was higher than patients with introverts; the higher education level the patients, the higher level of self-efficacy it was, high income and in-service patients' self-efficacy was higher than other patients. **Conclusions:** The study shows that esophageal cancer patients perceive medium-level self-efficacy during their radiotherapy. Clinical nurses should understand the factors of their self-efficacy and implement personalized care to improve their quality of life.

P-030 Psychological Impact of Breast-Conserving Surgery and Modified Radical Mastectomy in Breast Cancer Patients

Sun MQ, Meng AF *Department of General Surgery, Jiangsu Cancer Hospital, China*

Purpose: To investigate the impact of breast-conserving surgery (BCS) and modified radical mastectomy (MRM) on the psychological status of breast cancer patients. **Methods:** 70 patients received MRM and 50 patients with BCS were recruited in this study. They were investigated by self-reporting inventory (SCL-90) on their admission and 6 months after surgery and self-rating depression scale (SDS) when discharged from hospital and 6 months after surgery. **Results:** SCL-90: Compared with the national norm, patients in both groups suffered from somewhat psychological problems, such as somatization, anxiety, hostility and horror. Six months after surgery, patients in the MRM suffered from interpersonal sensitivity, depression, anxiety, horror and other psychological problems; patients in the BCS groups suffered from anxiety, hostility and horror. The factor scores of international sensitivity, anxiety and horror and the total score (1.63 ± 0.16) of patients with MRM were significantly higher than those (1.54 ± 0.22) of patients received BCS, $p < .05$. SDS: When discharged from hospital, the SDS score in the BCS group (62.78 ± 14.50) was significantly higher than that in MRM (56.57 ± 13.15), $p < .05$; however, the SDS score of patients with BCS (46.45 ± 14.82) was statistically lower than that of patients with MRM (61.07 ± 14.13) 6 months after surgery, $p < .01$. **Conclusions:** With respect to psychological impact, patients who received BCS felt less depressed at 6 months after surgery.

P-031 The Experience for the Practice of Training the Community Nurses with Relevant Knowledge about Laryngectomized Patients

Chunyi Gui *Nursing Department, Eye & ENT Hospital, Fudan University, China*

T. Purpose: To evaluate the effects of training the community nurses with relevant knowledge about post-laryngectomy patients, and understand the possibility of establish a training model in which the clinic nurse specialists (CNS) give the training. **Methods:** 16 community nurses were randomly divided into treatment group which was given relevant knowledge about post-laryngectomy patients training by CNS and control group with no training. All the community nurses were assessed both theory and skill. **Results:** Treatment group knew better of both theory and skill about post-laryngectomy patients than control group ($p < .05$). **Conclusions:** Training community nurses with relevant knowledge about post-laryngectomy patients by CNS can promote their mastery

of its relevant theory and skill, which can help them provide correct after-discharge nursing support to patients. It is feasible and necessary to carry out this training model in the long-term.

P-032 Changes in Clinical Judgment Capability of a Nursing Student during Adult Acute Phase Practice in Cancer Nursing: A Case Study

Megumi Nagoshi¹, Chihiro Fujita², Misae Shinomiya³ ¹Department of Nursing, Okayama Prefectural University, Japan; ²Kurashiki Daiichi Hospital, Japan; ³Department of Midwifery, Niimi College, Japan

Purpose: The study aimed at clarifying changes in clinical judgment capability of a nursing student during adult acute phase practice in adult health nursing. **Methods:** Data were collected before and after the adult acute phase practice. After all students were introduced to a case, a video-recording was made of the participant making observations and talking to the model, using a simulation model of nursing a stomach cancer patient, and reporting the results to the staff. After the practice another video-recording was made in the same setting. Analysis was performed as follows: (1) participant behaviors and remarks were extracted from the video-recording; (2) a time-series table was made of the behaviors and remarks; and (3) the behaviors, remarks and reports before and after the practice were compared. The study was approved by the research ethics committee of A University. **Results:** A twenty-one-year-old female student participated. She improved her power of observation from 18 items including temperature, pulse rate, respiratory sound, blood pressure, etc. to 19 items including drainage. Furthermore, the number of unnecessary items reduced; she became able to focus on necessary information. She reported the respiratory conditions, including respiratory rate, difficulty breathing/stiffness, SPO2 and differences in respiration between the right and left lungs. Her report about pain included levels of pain symptoms, counselling the patient about pain and pain while sleeping or turning over in bed. **Conclusions:** The findings suggest that the student improve observation skills and power of judgment in a limited period of time.

P-033 The Spiritual Need and Holistic Care in End of Life of-Patients with Advanced Cancer

Na Jin, Guixiu Dong, Ailing Han, Fang Pang, Yan Yang, Yongjia Li *Tumor VIP Ward of Department of Internal Medicine, Baotou Cancer Hospital, China*

Purpose: To explore the association between whole-person/holistic care and quality of life of patients with advanced cancer. **Methods:** Sixty patients with advanced cancer diagnosed between November 2013 and July 2014 were randomly divided into experimental group and control group. Opium analgesia medicines and some other medicines were used in both groups to control pain and other symptoms. In the experimental group, additional whole-person/holistic care including physical care, psychological supports, and spiritual care was used. Comparison between the two groups in terms of pain relief, movement function improvement, as well as quality of life improvement was done. **Results:** Statistical differences were detected between the experimental group and the control group in terms of pain relief, movement function improvement, and quality of life improvement ($p < .05$). **Conclusions:** Whole-person/holistic care can improve quality of life of patients with advanced cancer.

P-034 Consultation Experience of Women Diagnosed with Cervical Precancerous Lesion

Tomoko Otsuka¹, Toshiko Ohno², Tomoko Majima³ ¹Sapporo Medical University, Department of Nursing, School of Health Sciences, Hokkaido, Japan; ²Tokyo Kyosai Hospital, Tokyo, Japan; ³Chiba University Graduate School of Nursing, Chiba, Japan

Purpose: This study was undertaken to investigate follow-up consultation experience of women diagnosed with a cervical precancerous lesion. **Methods:** Semi-structured interviews were conducted with ten subjects (average age 36.6) who had completed treatment of high-grade cervical dysplasia or cervical cancer. Their narratives were qualitatively and inductively analyzed. The study was approved by the Ethical Committee of Chiba University Graduate School of Nursing. Consent was obtained from relevant parties and care was taken to ensure that no prejudice was caused to the subjects. **Results:** The time to final diagnosis ranged from three months to five years (average two years).

Consultation experience was classified into four categories: "Aversion to internal examinations", "Feeling assured of one's condition through consultation", "Anxiety caused by poor information about consultation/treatment" and "Seeing doctors for early detection and treatment of cervical cancer." **Conclusions:** Women felt embarrassed during internal examinations and their fear and anxiety were aggravated when they had little information about the details of examinations/treatment. They found it difficult to keep consultation appointments when their emotional pain grew strong. They faced uncertainties of the lead time to final diagnosis but their awareness of the possibility of a precancerous lesion developing into cancer persuaded them to attend follow-up consultations. Nurses are encouraged to provide care and support to these women to alleviate their emotional pain and ensure their attendance to consultations. Nurses should also liaise with doctors to ensure that the women have correct information about their condition and the importance of follow-up consultations.

P-035 The Practices and Attitudes of Certified Chemotherapy Nurses in Outpatient Departments

Megumi Nagoshi¹, Yuka Terashita², Rie Bunya³, Mami Shiota⁴ ¹Department of Nursing, Okayama Prefectural University, Japan; ²Kurashiki Central Hospital, Japan; ³Toranomon Hospital, Japan; ⁴Kawasaki Hospital, Japan

Purpose: This study attempts to clarify the practices and attitudes of certified chemotherapy nurses who help cancer patients and their family. **Methods:** The author conducted semi structured interviews on participants who have given their consent to the study in writing. The data were then coded, sub-categorized and categorized by upgrading the abstraction level. The study has been approved by the university's medical ethics board. **Results:** The study participants were nine certified chemotherapy nurses. Analyses on their interview results found the following eight categories, namely: "understanding the hopes of patients and their families going through emotional swing", "sense of limitation and resignation", "realizing the perception gaps and dilemmas", "supporting their willingness to fight the disease", "self-management of lifestyle and conditions", "information provision according to the patients' needs", "provision of supplementary explanations to assist treatment decision", and "coordination of relationships between people surrounding the patients". **Conclusions:** The study result suggested the necessity to build a relationship of confidence between the patients and medical staffs in order for the medical staffs to dispel the patients' anxiety, while realizing the limitation as professionals, and to receive and provide appropriate information reflecting the patients' needs.

P-036 Prostate Cancer Patients' Help-Seeking Details

Junko Kakeya¹, Chikako Kakehashi², Yoshimasa Jo³ ¹Department of Nursing, Niimi College, Japan; ²Department of Nursing, Kansai University of Social Welfare, Japan; ³Urology, Kawasaki Medical School Hospital, Japan

Purpose: The purpose of this study was to clarify the details of the prostate cancer patients' Help-Seeking. **Methods:** Subject of research: Eight prostate cancer patients. Research details: We inquired regarding basic attributes, current troubles, and what type of support was required. Analysis method: Analysis based on qualitative induction method. **Results:** 1. Background of subjects: Ages of subjects were: 60s-90s. All subjects were being treated via hormone therapy. 2. Current troubles: Structured of 66 codes, 9 subcategories, and 4 categories. [] indicates a category, <> indicates a subcategory. Prostate cancer patients' problems were as follows: The category [Physical Problems] is structured of <Problems related to urination> and <Physical changes caused by hot flashes>. The category [Resignation towards Physical Changes] is structured of <Resignation to sexuality> and <Resignation to physical changes due to aging>. The category [Troubles Unique to the Elderly] is structured of <Decline in cognitive function>, <Physical changes due to aging> and <Changes in spouses physical condition>. The category [Environment-related Troubles] is structured of <Problems traveling to the hospital> and <Life in a remote location>. What type of support is needed? Prostate cancer patients' Help-Seeking were as follows: Structured from 25 codes, 6 subcategories, and 3 categories. The category [Physical Support Needs] is structured of <Support when facing physical issues>, <Measure to address frequent urination>. The category [Social Support Needs] is structured of <Utilization of nursing insurance>, <Support structure for commuting for hospital visits>, The category [Emotional Support that Extends to Family Members] is structured of <Emotional support for spouse>, <Utilization

of help centers>. **Conclusions:** The majority of prostate cancer patients are elderly. Like the patients, their spouses supporting the patients are also elderly. Therefore, they face problems unique to senior citizens and require support for such issues. Furthermore, not only do they require nursing care services and other social support, but also does there seem to be an urgent need for better emotional support for spouses and consultation support for people living in remote areas.

P-037 The Use of Low Sugar Chewing Gum and Honey to Decrease Xerostomia in Head and Neck Cancer Patient with Radiation Programme at Dharmais Cancer Center Hospital, Jakarta, Indonesia

Sulanjani *Dharmais Cancer Center Hospital, Jakarta, Indonesia*

Purpose: One of side effect Radiation in head and neck area is xerostomia which is because of the change of gland saliva. The onset of xerostomia can be decrease with some intervention. In this research the intervention is by chewing low sugar bubble-gum and honey. **Methods:** This Research use clinical experiment with the pre and post test without control group. The number of Sampel 8 responden. All responden had all treatment. **Results:** Result of difference inexistence have a meaning the amount of saliva and grade xerostomia before and after intervention $p=.932$ and $p=.157$. Some of respondents felt their saliva become more liquid after intervention and easier to swallow the food. **Conclusions:** Result of this research a difference inexistence have a meaning, influenced by amount of less responden and adherence to intervention. Furthermore this research need to continued to have better result.

P-038 The Validity and Reliability of the Korean Version of Cancer-Chemotherapy Concerns Rating Scale

In Gak Kwon¹, Myung Sook Cho¹, Yunhee Ham², Heeyeon Shin², Keiko Fujimoto³, Saori Kikuchi³, Bumsuk Lee³, Kiyoko Kanda³ ¹Graduate School of Clinical Nursing Science, Sungkyunkwan University, South Korea; ²Department of Nursing, Samsung Medical Center, South Korea; ³Graduate School of Health Sciences, Gunma University, Japan

Purpose: The Cancer-chemotherapy Concerns Rating Scale (CCRS) was developed in Japan for outpatient undergoing chemotherapy, and its validity and reliability has been reported. The purpose of the study was to test the reliability and validity of the Korean version of the CCRS. **Methods:** The questionnaire including CCRS consisting of 15 Likert-type items, FACT-G, and Distress thermometer was filled by 199 cancer patients undergoing outpatient chemotherapy at a tertiary hospital in Korea. The data were analyzed using exploratory factor analysis with Promax Rotation to determine factor construct validity and Pearson correlation coefficient for criterion based validity. The reliability of CCRS was investigated by Cronbach alpha and Spearman Brown coefficient. **Results:** Four factors were obtained and overall structure was similar to those of the Japanese version; reorganization of daily life, self-existence, disease progress, and social and economic concerns. In the construct validity, moderate correlations were observed between FACT-G ($r=.64$, $p<.001$), and Distress ($r=.67$, $p<.001$). Cronbach's alpha for the total scale was 0.91 and that for subscales were 0.88-0.62. Spearman Brown coefficient was 0.85. **Conclusions:** We found that the Korean version of the CCRS could be clinically useful. It could provide health care providers with the information to know the psychological state of patients undergoing outpatient chemotherapy.

P-039 Chemotherapy in Breast Cancer Patients during the Qualitative Study of Real-Life Experience of Spouse

Yanfeng Wang *Interne Medicine Oncology Department, Inner Mongolia Medical University Affiliated First Hospital, China*

Purpose: Thorough understanding of spouse's real experience and needs during breast cancer patients are in the period of chemotherapy, to explore the related factors to promote their physical and mental health. To provide basis for clinical nursing staff to promote breast cancer patients' spouses physical and mental health, and to improve the quality of life of breast cancer patients and their spouses. **Methods:** A qualitative study using an existential-phenomenological approach. A total of 12 spouses of breast cancer patients were collected at Department of Oncology of Inner Mongolia Medical University Hospital. All spouses were participated in semistructured interviews. Themes were developed

relating to spouses' experiences with psychophysiological reactions, daily life and marital relations. **Results:** The real experience of respondents' spouse was summed up into four themes through in-depth interviews. Firstly, the complex psychological reactions in initial stage of diagnosis, main performances are shocked, doubt, fear and sadness. Secondly, daily life changes through chemotherapy process major performances are transformation of life keynote, change of family responsibility and life attitude. Thirdly, changes in mental state and relationship between couples during chemotherapy process; Fourth, fatalistic view of life. **Conclusions:** Through in-depth interviews of 12 cases of breast cancer patients' spouses, we felt the pain of their inward world, revealed their tremendous pressure in the economic and social aspects, explored their interpretation of fate. Their spouses also needed attention on their physical and mental health, providing medical, information, emotional supports so as to improve both patients and their family's the quality of life.

P-040 The Influence of Psychosocial Disorders in Patients of Leukemia Undergoing Chemotherapy for Leukemia Patient Survival Inpatient "Dharmais" Cancer Hospital

Retno Setiowati *Dharmais Cancer Hospital, Indonesia*

Purpose: To determine the effect of psychosocial disorders on patient survival is affected by leukemia with age, gender, relapse, remission status, type of leukemia, completeness medicine, and nursing care **Methods:** A method of the design of this research is using the cohort retrospective, data taken from a medical record and documentation of nursing in the installation of in-patient hospital cancer "dharmais" from January 2007 - December 2012 data collection started in March - May 2013. **Results:** Data obtained from Medical Record and Observation of patient assessment nursing care of Acute Leukemia in the hospital which was diagnosed in 2007 - 2012, is data since the first patients were diagnosed up to the observation expires May 2012. Of the 136 patients had a median survival time of patients of Leukemia Acute is 25 months with SD 22,11 months, 95%CI (27.05-34.55), psychosocial disorders 48 months 95%CI (37.57-56.43), age ≤ 40 years old 95%CI (37.47-68.5), no relaps 74 months 95%CI (67.36-80.64), Remission 47 months 95%CI (34.06-59.94), a type of leukemia AML 95%CI (35.87-58.13), completeness treatment 53 months 95%CI (36.07-69.93) dan nursing care less well 56 bulan 95%CI (39.59-72.41). On Multivariate analysis found is variables effect on survival gender, relaps, remission. **Conclusions:** Median survival time of patients with leukemia who have psychosocial disorders is 47 months. Median survival time of patients with leukemia who have a lifespan of less than or equal to 40 years was 53 months, and female gender is 47 months. Median survival time of patients with leukemia who did not relapse was 74 months, the status of remission was 47 months, is a type of leukemia AML is 47 months, the status of a complete treatment is 53 months and less good nursing care is 56 months. Variables that affect the survival of leukemia patients in the multivariate analysis were: gender, relapse, and remission status, this can happen because the measuring instruments used are not sensitive, how to do the nursing assessment although there has been a standard procedure but not evaluated.

P-041 Usefulness of a Journal Club for Sharing and Discussing New Evidence from the Perspective of Healthcare Providers in Japan

Jun Kako¹, Junya Ueno², Yusuke Kanno³, Masamitsu Kobayashi¹, Saori Katakura¹, Chiba Ikuko¹, Natsuki Kawashima⁴ ¹Division of Nursing, National Cancer Center Hospital East, Japan; ²Division of Muscular skeletal oncology and rehabilitation, National Cancer Center Hospital East, Japan; ³Division of Palliative Nursing, Health Sciences, Tohoku University Graduate School of Medicine, Japan; ⁴Previous Division of Nursing, National Cancer Center Hospital East, Japan

Purpose: In 2013, we set up a Journal Club (JC) to share information about palliative care with multi-disciplinary team members (nurses, pharmacists, physiotherapists, occupational therapists, speech-language-hearing therapists, and researchers) and to discuss applications to clinical practice, at the National Cancer Center Hospital East in Japan. We held JC every two months and the average number of participants was 10. The purpose of this study was to clarify the usefulness of this activity. **Methods:** A survey of 20 healthcare professionals who participated in JC was conducted using an anonymous, self-completed questionnaire between January and March 2014. This study was

approved by the immediate manager. **Results:** Data from 14 respondents (response rate, 77.8%) were analyzed. Acquisition of new knowledge and skills, maintenance or increase in motivation, and satisfaction with JC were high among all respondents. Usefulness of the JC was demonstrated in that participants took more of an interest in research than before (92.9%), achieved a greater understanding of the role multi-disciplinary team members (92.9%), developed the ability to easily share information with multi-disciplinary team members (85.7%), and achieved greater understanding of their role expectations (78.6%). In addition, some participants said that they would like to participate in the next JC. **Conclusions:** Journal Clubs may contribute to the practice of inter-professional collaboration and improvements in knowledge and skills regarding palliative care. Thus, we suggest that JC benefits patients and their families.

P-042 Japanese Translation of the Quality of Life Index Cancer Version

M. Mizuno, K. Sugimoto, T. Mayers *Faculty of Medicine, University of Tsukuba, Japan*

Purpose: The Ferrans and Powers Quality of Life Index cancer version III (QLI), an instrument to measure a patient's quality of life (QOL), is a good indicator to estimate the impact of cancer, its treatment, and the effect of nursing interventions from the patient's perspective. The purpose of this study was to create a Japanese translation of the QLI. **Methods:** To ensure the face validity of the QLI-J in terms of semantic equivalence and cultural adaptation, this study was conducted in two steps: the committee translation approach, followed by cognitive interviewing with Japanese cancer patients. **Results:** Using the committee approach and through discussion with the author of the QLI, our Japanese translation was made to reflect the original intention of the English. There were numerous points of discussion. For example the word "life" as used in QLI carries the dual meaning, of daily-life and also life from birth to death. Furthermore, there is no Japanese phrase that literally encapsulates "control over life," as it appears in the QLI. The cognitive interviewing process, which involved eight ambulatory cancer patients, confirmed the intelligibility, usability, and cultural appropriateness of the QLI-J for Japanese people. The translation of some items including: *chances of living as long as you would like, your faith in God, your education*, were discussed and revised based on the cognitive interviewing. **Conclusions:** By taking two careful steps for the Japanese translation, content validity of the QLI-J was enhanced. Reliability and validity of this measure should be verified before being utilized for patients.

P-043 Factors Influencing Chemotherapy-Related Cognitive Impairment in Patients with Cancer

Pok-Ja Oh¹, Jung Ran Lee² *¹Nursing Department, Sahmyook University, South Korea; ²Department of Nursing, Graduate School, Sahmyook University, South Korea*

Purpose: This study was done to investigate the relationship among fatigue, symptoms, anxiety, depression and cognitive impairment following chemotherapy in patients with cancer and to identify factors influencing their cognitive impairment. **Methods:** A purposive sample of 125 patients treated with chemotherapy were recruited in the cross-sectional survey design. Data were collected using self-report questionnaires. The instruments were Functional Assessment of Cancer Therapy-Fatigue (FACT-F), M. D. Anderson Symptom Inventory-Gastrointestinal Cancer Module (MDASI-GI), Hospital Anxiety Depression Scale (HADS), Everyday Cognition (ECog) and Mini-Mental State Examination (MMSE-K). **Results:** There were significant correlations among the five variables, fatigue, symptoms, anxiety, depression and cognitive impairment ($p < .000$). The results of multiple regression analysis revealed that fatigue, symptoms, gender and age were predictive of chemotherapy-related cognitive impairment and accounted for 45.2%. **Conclusions:** Based on the findings of this study, fatigue and symptoms should be integrated into the nursing interventions programs to improve cognitive function in cancer patients.

P-044 Attitudes toward Colorectal Cancer Screening among in Primary Care Population in Taiwan

Hui-Chuan Chiu¹, Shu-Ching Chen² *¹Department of Nursing, Linkou Chang Gung Memorial Hospital, Taiwan; ²Graduate Institute of Nursing, Chang Gung University of Science and Technology, Taiwan*

Purpose: To identify important factors influencing the attitudes toward colorectal cancer screening among Taiwanese people. **Methods:** A cross-sectional study was conducted in colorectal outpatient departments of a medical center in northern Taiwan. A set of questionnaires included State Anxiety Inventory (SAI), Colon Cancer Screening Attitudes Survey (CCSAS), and Functional Assessment of Cancer Therapy-Colorectal (FACT-C), and background information form. Multiple regression analysis was used to identify factors related to attitudes towards colorectal cancer screening. **Results:** A total of 102 people were recruited in this study. The most prominent attitude toward colorectal cancer screening was about the Worried Colonoscopy examination would be painful. People had high level of state anxiety, greater levels of colorectal symptom, and male gender were more likely to have negative attitude toward colorectal cancer screening. **Conclusions:** Future interventions could reduce barriers and overcome embarrassed for colorectal cancer screening.

P-045 Reduction Inpatient Chemotherapy Medication Abnormal Events: A Team Resource Management Model

Ching-Mei Chang *Department of Nursing, Tungs' Taichung Metro Harbor Hospital, Taiwan*

Purpose: To implement and evaluate the impact of a team resource management model on reducing medication errors in inpatient chemotherapy. **Methods:** A Retrospective and intervention study was adopted. This study was conducted in oncology in a certain regional teaching hospital, Taiwan. Collection dates from 2010 to 2012 years. Intervention methods and implement improvement strategies include: interdisciplinary team model, revision of port-A fixation, to build complete needle sizes, establish guidelines on cancer chemotherapy, chemotherapy orders with order scheduling in the computerized rendering, computer controlled drugs double check and other intervention strategies to improve the situation. **Results:** Abnormal rate of chemotherapy medication is 0.04%, 0.08%, 0.12% from 2010 to 2012 years. Analysis the cause include, port-A fixed method bad (4; 28.6%), angular needle size mismatch (3; 21.4%), do not follow double check procedure during medication implementation (3; 21.4%), cannot clearly understand the chemotherapy sequential administration in orders (2; 14.3%), chemotherapy infusion rate errors (2; 14.3%). Chemotherapy medication after intervention measures to improve, the incidence of abnormal events decreased from 0.12% reduction to 0.03%, progressive rate of 75%. **Conclusions:** Using the medical team resource management (TRM) help resolve system issues, correctness of information interventions contribute to prescription control and reduce miscalculation derived exception using medicine.

P-046 Curing the Patient, His Illness, while Healing the Mind Helping an Oral Cancer Patient Rebuild His Life

Mei-Hui Chen *Nr. tzuchi. Taipei, Taiwan*

Purpose: This case documents a final-stage oral cancer patient who delayed his treatment because of lack of medical fund. He had a open wound (15 x18 cm) on his right face. When he came to Tzu Chi hospital, his wound festered, stank, caused pain, and he could not eat. The hospital's interdisciplinary team helped he undergo a surgery. He faced much pressure because of financial burden, as well as his own living conditions. **Methods:** 1. Interdisciplinary team: ENT, plastic surgery, Radiation Oncology, Medical Imaging, Nursing, social workers, cancer and community volunteer teams. 2. Government and Nongovernmental organizations give financial support. 3. Tzu Chi foundation gives financial aid and its volunteers visit the families monthly, helping the patient socially, and encouraged him to become a recycling volunteer. **Results:** Tzu Chi volunteers accompanied the patient, so he is able to rebuild confidence. He became a recycling volunteer who puts in efforts to protect the environment. **Conclusions:** The patient finished his treatment for the time being, but his financial situation is a concern. Tzu Chi foundation combines charity with medical care, to provide him and others with complete care. Complete care includes care that helps the person, his family, and volunteers team up with the community to help him.

P-047 Life's Suffering Highlights Spirituality Grief and Joy at Heart Lotus Palliative Ward

Chin-Yi Kao, Jheng-fen Wang, Mei-hui Chen *Nr. tzuchi. Taipei, Taiwan*

Purpose: It is the number one killer of men between the ages of 25-44 in Taiwan. The case documents a oral cancer patient who feared and refused medical treatment. He endured pain until his wound festered. The medical staff, patients' families and volunteers have to work together to guard people's life and health with love. **Methods:** 1. And individual case and family members' talks, give body valuation, pen to talk. 2. Music therapy, Aromatherapy massage, the mahjong therapy, life review. 3. Volunteers accompany the patient everyday and simplify the treatment process. **Results:** Hospitalization period medical team discuss to help to visit to get close to die father-in-law (respiratory failure), satisfactory individual case and family members' wish in hospitalization together, give the individual case grief guidance process in, illustrate stand up to die of viewpoint with comfortable. **Conclusions:** Clinical nursing education in addition to professional technical ability, the grief for needing more to look after the self heart treats recovered, medical essence: Starting to take for the life is loving of arched bridge, expect to a caregiver to find back nursing essence and life value. Medical care with love focuses on patients. When we see others suffer, we identify and understand their feelings. Medical professionals must have great compassion, then they can care for patients and alleviate their pain with love.

P-048 Self-Assessment of Side Effects Associated with Hormonal Therapy for Breast Cancer

Sena Yamamoto¹, Keiko Tazumi², Harue Arai¹ ¹Division of Health Sciences, Osaka University Graduate School of Medicine, Japan; ²Osaka University Hospital, Japan

Purpose: It can be challenging for breast cancer patients to recognize side effects associated with hormonal therapy (HT) because they resemble those associated with menopause and with other breast cancer treatments. The aim of this study was to explore how patients assess the side effects associated with HT. **Methods:** We conducted semi-structured interviews based on an interview guide that covered the patients' experiences with side effects. The participants were 10 women who had received adjuvant HT for at least three months. A qualitative inductive approach was used to analyze data related to self-assessment of side effects. This study was approved by the institutional ethics committee. **Results:** Participants were between 32 and 65 years of age. Equal numbers of participants were taking tamoxifen and aromatase inhibitors. The duration of HT ranged from 3 to 19 months. Participants assessed their physical symptoms and described them in their own words to illuminate their personal explanations of the mechanisms underlying HT-induced symptoms and to allow them to mention other factors that they thought may be related. When assessing psychological aspects, they conservatively estimated the impact of HT. They thought that character flaws may be making them overestimate the side effects they were experiencing. These interviews allowed some participants to realize, for the first time, the emotional changes they had undergone in response to HT. **Conclusions:** To help patients assess their side effects associated with HT, nurses should provide education and pay close attention to how HT impacts patients' emotions.

P-049 Ostomy Life for Elderly Cancer Survivors Living with Colon Cancer

Kazue Yoshida¹, Rumi Takei², Atsuko Maekawa³, Michiko Ito⁴, Fumiko Watanabe⁵ ¹School of Nursing, Faculty of Medicine, Mie University, Japan; ²Sugiyama Jogakuen University, Japan; ³Nagoya University, Japan; ⁴Yamato Medical Center, Japan; ⁵Japan

Purpose: To clarify the emotional status for elderly cancer survivors living with colon stoma. **Methods:** Subjects were elderly cancer survivors who had undergone surgery to remove colon cancer at least 5 years prior and had been admitted to the ostomy association. We sent out an open-ended questionnaire examining the following 3 themes: "Things that have been lost", "Things that have been acquired", and "The importance of life". The resulting data was then analyzed qualitatively. **Results:** In total, 9 persons (4 male and 5 female) completed the questionnaire. The average age was 78 years (SD±1.56). The average time living with ostomy was 18.2 years (SD±16.98). The domestic situation was as follows: 3 living alone, 5 living together, 1 living with more than 3 persons. Respondents mostly felt they had lost: "freedom of movement", "life a couple", "enjoyment of adolescence", "power to live", and "friends". Things acquired were "mate/partner in ostomy association", "deeper family bonds", and "confidence in the ability to live by oneself". As for "the importance of life",

the following themes emerged: "importance of life", "desire to improve health", "importance of personal interchanges", "gratitude", and "graceful ageing" etc.

Conclusions: Descriptions had originality. It was clear that the ostomates had lost both physical and psychological function. However, we found that ostomates reached a turning point due to their participation in the ostomy association. Some were able to find love and/or gain self-confidence, all of which contribute to graceful aging.

P-050 An Individualized Home-Based Exercise Program on Quality Of Life in Women after Breast Cancer Surgery

Hsiao-Fang Hu¹, Li-Yuan Bai², Ya-Jung Wang³ ¹Department of Internal Medicine, China Medical University Hospital, Taichung, Taiwan; ²Division of Hematology and Oncology, Department of Internal Medicine, China Medical University Hospital, Taichung, Taiwan; ³School of Nursing, National Yang-Ming University, Taipei, Taiwan

Purpose: Women with breast cancer suffer from physical and psychosocial burden which negatively affect quality of life. This study aimed to investigate the impact of an individualized home-based exercise program on quality of life and exercise capacity after operation. **Methods:** Sixty-eight patients were randomized to either the exercise group (n=34) or the control group (n=34) within 24 h after operation for early breast cancer. The assessment tools were Functional Assessment for Cancer Treatment- Breast and a 6-minutes walking test. The outcome measurements were quality of life and exercise capacity, with each obtained 3 times in a 5 weeks interval. Chi-square, t-test, and generalized estimating equations were used in the statistical analyses. **Results:** The post-operation exercise program did not improve quality of life (p=.286) and exercise capacity (p=.532) for patients of breast cancer. The subgroup analyses of patients who did not receive chemotherapy suggested that women in the walking program (n=17) had better quality of life compared with whom (n=17) in the control group (p=.012). **Conclusions:** The individualized home-based exercise program improved quality of life for women who did not receive chemotherapy after breast cancer operation.

P-051 Evaluation of IV Nurses in the Chemotherapy

Chisato Ichikawa, Fumie Kitano, Kazue Hayasaka, Asuko Sekimoto, Chie Asanuma *Nursing Department, National Cancer Center Hospital, Japan*

Purpose: To evaluate the IV nurses by the head nurse of each section. **Methods:** Design, Settings and Participants: Single-center and prospective. This study was conducted in February at a cancer hospital in Chiba, Japan, with 7 head nurses who administer their chemotherapeutic IV nurses. Procedures: Anonymous questionnaires were used to collect the data, which include, the utilization, effectiveness, and future expectations of the IV nurses. The facility director approved this study. **Results:** The collection rate of the questionnaires was 71.4% (5/7). On the utilization of IV nurses, "The IV nurses are utilized enough" was 60% (3/5). "The IV nurses are utilized" was 40% (2/5). All head nurses answered that IV nurses were necessary. They expected certainty and safety to the practice of the intravenous injection and the increase of IV nurses. **Conclusions:** The head nurses suggested the effectiveness of IV nurses.

P-052 Pilot Study of Sleep Quality in Outpatients with Colorectal Cancer Undergoing Chemotherapy

Fusako Doi¹, Mika Nomura¹, Miki Utagawa², Miho Oba¹, Risa Yamada¹, Tamami Kobayasi¹ ¹School of Nursing, Kanagawa University of Human Services, Japan; ²Yokosuka Kyosai Hospital, Japan

Purpose: Patients with colorectal cancer who are treated with infused anticancer agents at home often develop sleep-wake disorders. Therefore, the present study aims to clarify the quality of sleep in patients with colorectal cancer undergoing outpatient chemotherapy. **Methods:** Three patients (mean age, 62.3 y) with colorectal cancer underwent at least six courses of chemotherapy at home with fluorouracil and leucovorin using a 48-h sustained portable pump. All patients wore a light-weight wrist accelerometer (Actiwatch®) for four consecutive days after chemotherapy. They also completed the self-administered OSA sleep inventory (MA version) questionnaire. The Ethics Committee at Kanagawa University of Human Services approved the present study. **Results:** The mean total duration of sleep was 333.8 min (SD, 32.9 min). All sleep-wake

cycles were monophasic (patients were asleep for 7 - 9 h/night per 24-h period). Mean sleep efficiency was 85.7% (SD=5.5%), which was equivalent to that of patients with chronic fatigue syndrome. The mean number of nightly awakenings was 3.5 (SD, 2.1), and the mean number of daytime naps was 3.2 (SD, 2.0). The mean activity level was 194.9 (SD, 33.4), which was about 80% of that of healthy adults. The mean of each factor in the subjective sleep questionnaire tended to be lower than that in healthy adults. **Conclusions:** Although the total duration of time that our patients slept was sufficient, the sleep was intermittent. A low quality of sleep might affect the daily activity of patients with colorectal cancer undergoing outpatient chemotherapy.

P-053 Telenursing for Patients with Pressure Ulcers Receiving Home Care
Natsuki Kumata¹, Yasumi Matsubara², Mitsuko Inayoshi³ ¹Kitasato University School of Nursing, Japan; ²Kitasato University Hospital, Japan; ³Kitasato University, Japan

Purpose: In order to provide visiting nurses with pressure ulcer care consultations from remote locations by wound care specialists (WOCN), we developed a telenursing system. We report one case in which this telenursing system was tested. **Methods:** In this study, we developed a telenursing protocol. The protocol consisted of using a tablet computer at the patient's home to connect with the WOCN consultation room via an online video call. Still images were also transmitted and received to obtain detailed information regarding the wound. The WOCN conducted medical interviews via video call, made assessments based on the still images, and then proposed methods of care. For ethical considerations, informed consent was obtained from the patients and families. **Results:** The patient was an 80-year-old woman in whom a pressure ulcer was observed in the sacral region. Telenursing was successfully performed for a patient with a pressure ulcer in accordance with the protocol. The patient and her family provided positive feedback, and the visiting nurse voiced expectations for the practical use of this telenursing system. **Conclusions:** The use of video calling in this case enabled face-to-face conversations and left good impressions on the patient, her family, and the visiting nurse. Considering the fact that telenursing may alleviate the burden placed on patients and reduce medical costs, research needs to be conducted with a view to its practical application.

P-054 Improving the Patient's Quality of Care during Lipodox Therapy: Using a Learning Checklist for Patients and Their Families
Ya-Ting Hu *Gynecology, National Cheng Kung University Hospital, Taiwan*

Purpose: This article aimed to investigate the efficacy of using a checklist for nurses to teach patients and their families about Lipodox side effects. **Methods:** An educational brochure containing Lipodox side effects was given to patients and their families at the initial treatment with Lipodox, and nurses provide health teaching about Lipodox for them. A learning checklist of Lipodox was designed to assess patients' comprehension about chemotherapy-related care. The 13-item checklist contains three parts: skin, circulation, and oral care, and each part scores 0-2 points indicating the level of understanding. The higher score they got, the better knowledge they had. We evaluated at two particular points: after first health education on admission and on discharge. **Results:** A total of 23 patients was the first time to receive Lipodox therapy from January to December in 2013. The average score of "level of understanding" on admission after first health education was 1.43 points; the average score on discharge was 2 points. Paired t test showed significant different between them ($p < .01$). **Conclusions:** A learning checklist assists nurses to educate patients and their families to improve the quality of care during chemotherapy therapy.

P-055 Improvement of Reducing Chemotherapy Extravasation Rate in a Medical Center Gynecological Ward
An-Lei Cheng *Nurse Practitioner, National Cheng-Kung University Hospital, Taiwan*

Purpose: The article aimed to develop and implement a quality of care project to early detect suspicious extravasation symptoms. **Methods:** To prevent the occurrence of the extravasation, we designed a project of chemotherapy-induced extravasation to improve the quality of care for patients receiving chemotherapy. The contents of projects included: (1) Revise and develop the nursing standards

of chemotherapy. (2) Promote the safety concept of chemotherapy. All health care providers (including doctors, nurses, workers) participated in advanced in-service education courses of chemotherapy. (3) Applying a self-learning CD device to assist new staffs to be familiar with the chemotherapy process and the adverse events of extravasation. (4) All health care providers needed to participate in a hospital-based test of chemotherapy ward certification. (5) Promote the notification of adverse events of chemotherapy; hold case reports in the Chemical Drug Safety Commission. **Results:** The rate of extravasation in 2013 was 0.26%, indicating a consistent trend of extravasation rate. We had reached the goal of <1% for 3 years. So we will change the goal to < 0.5% and keep monitoring and improving. **Conclusions:** We proposed a project to decline the occurrence of chemotherapy-induced extravasation and improve the quality of care.

P-056 Promoting the Satisfaction of Pain Management in Women with Gynecologic Cancer after Surgery
Fu-Han Yeh *National Cheng-Kung University Hospital, Taiwan*

Purpose: This paper aimed to analyze the adverse events of pain management and to enhance the satisfaction of pain management in women with gynecologic cancer after surgery. **Methods:** In a medical center of southern Taiwan, 124 women with gynecologic cancer undergo surgical treatment in 2013. The patients suffered from pain with pain score at 6-7 scores after 2-3 days surgery; patients experienced 4-5 pain scores after 3-4 days surgery. The Team of Quality Assurance proposed a project "Pain management in women with gynecologic cancer after surgery" to improve patients' satisfaction. A survey about nurses' knowledge and behaviors of pain management was conducted in a gynecologic ward at the medical center of southern Taiwan. An analysis of cause-and-effect diagram showed that the nurses could not identify patients' pain problem, nurses did not have efficacious pain management, and nurses' knowledge of pain management is deficient. Consequently, a pain management program was designed to nurses. The program emphasized self-learning material of pain management, advocating the assessment of pain score, providing pain relief based on patient's condition, and advocating the concept of quality of life in women with gynecologic cancer. **Results:** In addition, we also encouraged patients' family to be involved in assisting pain management. After implementation the program, patients' satisfaction regarding pain management of post-surgery was increased from 92.7% to 96.5%. **Conclusions:** Clinical health care provider can implement pain reliefs to improve the quality of life in women with gynecological cancer surgery.

P-057 Improving the Quality of Clinical Care in Lower Limb Lymphedema among Nurses
Shu-Ying Chuang *National Cheng Kung University Hospital, Taiwan*

Purpose: The purpose of the study was to evaluate the efficacy of an educational program of "Care for Lower Limb Lymphedema" in improving nurses' knowledge and skills regarding lymphedema care. The educational program was designed based on the "Clinical Guideline for Preventing Lower Limb Lymphedema in Women with Gynecological Cancer". **Methods:** This study was an intervention with pre-post design. Twenty-four nurses who worked at the OBS ward participated in the study. The contents of educational program consisted of lymphatic system anatomy, assessment, skin care, exercise, and massage technique of lower limb lymphedema. The educational program of lymphedema care was provided via lecture, DVD, skill evaluation, was provided to the nurses. The nurses had pre-post evaluation. **Results:** Seventy percent of nurses reported that they have to provide lymphedema care in clinical per week and 50% of the nurses reported no any formal education about lymphedema care. At pre-test, the nurses reported that they needed to reinforce professional knowledge in lymphatic system anatomy (27.1%), assessment of lower limb lymphedema (20.3%), skin care for lower limb lymphedema (15.3%), technique of lower limbs lymphatic massage (23.7%) and exercise to reduce lower limbs lymphedema (13.6%). After implementation the educational program, the nurses had significant improvement in knowledge, behavior, and confidence about lymphedema care to gynecological cancer patients. **Conclusions:** The results indicate that the educational program about lymphedema care offers as clinical care standard and is efficacious in improving nurses' quality of care.

P-058 The Nursing Experience of a Critical Patient about Accepting the

Hospice Care

Peiyu Lee *Department of Nursing, Chi Mei Medical Center, Liouying, Tainan, Taiwan*

Purpose: After practicing cardiopulmonary resuscitation (CPR) for terminal cancer patients, even if saving their life, it will make patients to feel more painful and their families to be regretful. The situation is possibly related to families do not understand the condition of the patient and they are not ready for the death and not to sign the DNR yet. We can not make the time to discuss setting up Advance Care Planning with patients and their families on clinical. When the patient is lost consciousness or on dying hour, it will be sorry can not understand the patient's willing in the end. Medical staff has to let families know the patient's condition, and discuss the right methods for care with them. It can avoid unnecessary suffering and be good dying. **Methods:** When the hospice shared-care nurse intervene in the condition of the patient, the process of caring will face ethical dilemma and will be taken into the consideration. By using the four boxes of clinical ethics to set up the construction, it can make a good consensus and the direction of care for the patient. **Results:** The patient had been cared well by the hospice shared-care nurse. The patient with physical disabilities couldn't express in language and hadn't families to make medical decision for him. We conformed the patient's willing and helped him to sign the consent form for DNR through the process of the individual communication. **Conclusions:** When families face to terminal disease of the patient, medical team and families joined to discuss the direction of care. The consent form was signed for DNR by the patient or his families and it could help the patient to avoid medical futility.

P-059 Effect of Nei- Guan Point Acupressure on Nausea and Vomiting in a Woman with Chemotherapy: A Case Report

Chia-Yu Ho *Department of Nursing, National Cheng Kung University Hospital, Taiwan*

Purpose: This paper is a case study which explores the effect of Nei-Guan point acupressure on chemotherapy-induced nausea and vomiting in a woman with ovarian cancer. **Methods:** A 36-year-old woman was diagnosed with ovarian cancer. She received Ectoposide+Cisplatin chemotherapy monthly for 6 cycles. The Nei-Guan point acupressure had been implemented to her since the forth cycles of chemotherapy. Primary nurses instructed the woman to perform the finger acupressure maneuver for 5 min on Nei-Guan point at least 3 times a day before chemotherapy, mealtimes or anytime based on her needs. **Results:** After implementing the finger acupressure, the frequency of vomiting was declined from 6 times/day to once a day. Although she had nausea twice to three times a day, she could oral intake about one bowl of rice or 2-3 slices of bread at a meal. **Conclusions:** Nei-Guan point acupressure is a useful non-pharmacological intervention to manage the chemotherapy-induced nausea and vomiting among women with gynecological cancer.

P-060 The Reduction of Incident for Chemotherapy Medication

Li-Ching Liu, Hsiu-Chen Lee, Chia-Jung Chen *Department of Nursing, National Cheng Kung University Hospital, Taiwan*

Purpose: Chemotherapy is one of the high-alert medications. There were two incidents reported regarding chemotherapy by IV injection in 2012, caused by incorrect infusion time and timing not in compliance with doctor's order. One confirmed incident was wrong infusion rate in 2013. Although the standard operation procedure has been well developed, the side effects resulting from chemotherapy shall endanger patient safety. Therefore, a safety SOP is essential for assuring patient to receive correct and effective treatment. **Methods:** (1) Periodically analyze the incidents and review the improvement progress by means of multidisciplinary communication and cooperation. (2) Modify the related standards base on the guidelines from Taiwan Oncology Nursing Society. (3) Hold the on-job training, including e-learning and practical course, in line with cancer center; such as CVC Bundle care, & Port-A-Cath. (4) Hold the advanced courses about cancer nursing. (5) Develop the programs of cancer nursing and skill surveillance. And annually perform the skill surveillance on "Chemotherapy medication by IV injection". **Results:** In addition to reviewing the standards of cancer nursing, nursing unit and cancer center at hospital jointly hold the on-job training and perform the skill test on nurses randomly at the unit. Cancer center also re-certifies the effectiveness of cancer nursing at the unit. **Conclusions:**

That chemotherapy medication should be checked by two nurses simultaneously is included in SOP. Though it can assure the safety of IV injection, it is still not enough for nurses who work under much stress and loading nowadays. The adoption of barcode and smart phones can assist nurses on nursing care practices to reduce the incident.

P-061 Development of an Educational Program that Strengthens the Cognition and Ability of Nurses to Detect and Prevent the Worsening of Delirium Severity in Terminal Cancer Patients

Miwa Aoki, Sawa Fujita *Faculty of Nursing, University of Kochi, Japan*

Purpose: To develop a Clinical Index to be used by nurses for an early detection of delirium, and elaborate an educational program that strengthens nurses' cognition and ability to detect and prevent the worsening of delirium in terminal cancer patients. **Methods:** In total, 6 nurses, with at least 5 years of experience in palliative care unit having either Clinical Nurse (CN), Clinical Nurse Specialist (CNS) licenses or both were interviewed using a semi-structured questionnaire. A qualitative analysis of the data was performed. This study was conducted after being approved by the ethics committee of University A and receiving the consent of all subjects. **Results:** From the analysis of participants narratives, main delirium-related symptoms were drawn, leading to the development of Terminal Delirium Clinical Index (TDCI). Thus, this algorithm can be considered as a tool for the assessment of delirium in terminal cancer patients. Based on this finding, we elaborated an educational program to strengthen nurses' ability to detect and prevent the worsening of delirium in terminal cancer patients. The contents of this program are comprised 3 parts that integrate the knowledge on clinical characteristics of terminal cancer and delirium. Since the program was constructed based on participating nurses' narratives, it may contribute to the improvement of nurses' practical ability. **Conclusions:** The present study provides a framework for development of an educational program that strengthens nurses' cognition and ability to detect the worsening of delirium severity from the narratives' perspective of observation and assessment in for terminal cancer patients.

P-062 A Study to Identify the Coping Strategies Adopted by Couples, Whose Wife is Diagnosed with Cervical Cancer in Relation to their Sexual Health

Rosaria Pinto, Meera S. Achrekar *Nursing, ACTREC, Tata Memorial Centre, India*

Purpose: (1) To assess the different aspects of sexual health i.e. physical, psychological, mental and social status; (2) To assess the sexual problems after diagnosis with Cancer Cervix; (3) To identify the coping strategies employed to overcome the sexual problems. **Methods:** A exploratory approach using a survey design was undertaken in a tertiary care cancer centre. A structured five point Likert scale questionnaire using face to face interview was initiated. Twenty women were selected by convenient sampling method. Only married couples aged between 30 yrs to 55 years and being treated in Tata Memorial Hospital and ACTREC for Ca Cervix was included. **Results:** With regard to communicating sexual feelings, 80% of couples were not comfortable, while 70% women experienced pain during sex and only 60 % were able to accept their appearance. The common presenting symptoms were foul smelling discharge (70%), Fatigue (70%), and lack of sexual desire (50%). 30% had sex once a week and only 10% had sex daily. With regard to coping strategies, 40% of men said crying enabled them to cope, while 100% of women stated that crying was the most commonly used strategy. 100% of couples believed that faith will give them strength to face illness. Men (100%) and women (10%) of women used masturbation as a coping strategy. Sexual expressions like foreplay (50%) were also used. **Conclusions:** Dryness of vagina, Foul smelling discharge, fatigue, and bleeding decreased their desire for sex. The coping strategy most commonly used by women was crying, while for men masturbation and Abstinence by mutual consent topped the list. Spirituality also played an important role for women. The knowledge deficit regarding other coping strategies needs to be addressed.

P-063 Effects of Intermittent Pneumatic Compression on Lower-Limb Edema during Chemotherapy of for Breast Cancer Patients with Lower-Limb Edema during Chemotherapy

Chie Furukawa¹, Kyoko Mori¹, Takashi Morimoto² ¹Yokkaichi Nursing and

Medical Care University, Mie Prefecture, Japan; ²Yao Municipal Hospital, Japan

Purpose: This study is to clarify the effect of on intermittent pneumatic compression (IPC) on the lower-limb edema during chemotherapy of for breast cancer patients. **Methods:** The participants were all people who had suffered the lower-limb edema during chemotherapy after breast cancer surgery and were prescribed the IPC to by the surgeon at a municipal hospital in Osaka, Japan, from June 2010 to September 2011. There were 32 patients and all obtained informed consent. The participants received the IPC for half an hour once a week. The calf circumference at 5 cm of below -knee joint, ankle circumference, and range of motion of the lower-limbs were measured at 4 measuring points; before the IPC, 1-week, 4-weeks, and 12-weeks after the IPC. Health Related Quality of life (HRQOL) was evaluated by the World Health Organization Quality of Life before the IPC and 12-weeks after the IPC. It contents of 26 questions items and its score range 1-5. Descriptive statistics were developed with proportions, mean, standard division (SD), Median, and quartile. **Results:** All of participants were women (100%) and their average age was 56.3 years. The median time since surgery was 1.7 years. The calf circumference and ankle circumference significantly decreased after the IPC. The degree of flexion of the lower-limbs significantly increased. The average and subscales of the HRQOL significantly increased after the IPC. **Conclusions:** The IPC therapy is beneficial for lower-limb edema during chemotherapy of breast cancer patients. Nurses need to pay attention to such factors before starting the IPC.

P-064 Online Information Gathering and Networking by Japanese Cancer Patients

K. Nishimura, N. Sakuraba, N. Hira *School of Nursing and Social Services, Health Sciences University of Hokkaido, Japan*

Purpose: Understanding online access by cancer patients to cancer-related information and to networking sites for cancer patients. **Methods:** Cancer patients and family members were surveyed by questionnaire on their attributes, and respondents were asked to rate their degree of online access using a four-point Likert scale. The respondents were asked to freely write down their specific experiences regarding the use of the Internet cancer resources. **Results:** A total of 124 questionnaire forms were collected from 98 patients (79.0%), 25 family members. Respondents in their 60's were the most numerous age group. In the questionnaire, 55 respondents (44.4%) answered that they had not searched the Internet for information on cancer, and the most common reason given by them for not searching was that they had depended on other information sources. This reason was given by 37 of the 55 respondents (67.3%), and the most common information source was doctors. Regarding the use of social networking sites for cancer patients, 97 respondents (92.4%) said they had used none. **Conclusions:** Many of the cancer patients and their family members who responded to the survey had never searched the Internet for information on cancer. It is likely that these patients and their family members put greater trust in doctors than in the Internet and depended on doctors for decision-making regarding cancer treatment and patient care.

P-065 Influence of Gum and Honey in Reducing Xerostomia in Head and Neck Cancer Patients Receiving Radiotherapy at Dharmais Cancer Center Hospital, Jakarta, Indonesia

Nani Sutarni, Sulanjani *"Dharmais" Cancer Hospital, IONA, Indonesia*

Purpose: One of side effect Radiation in head and neck area is xerostomia which is because of the change of gland saliva. The onset of xerostomia can be decrease with some intervention. In this research the intervention is by chewing low sugar bubble-gum and honey. **Methods:** This study is a clinical trial with pre and post test design without a control group. The number of samples obtained eight determined in accordance with the criteria of the sample. Data were analyzed using Chi Square test, whereas to assess the effect of interventions paired test was used for data analysis test saliva quantity and grade of xerostomia. **Results:** In this study results indicate the absence of a significant difference in the amount of saliva and xerostomia grade before and after intervention with $p=.932$ and $p=.157$. However, from the results of subjective evaluation on some respondents felt their saliva become more liquid after intervention and easier to swallow the food. **Conclusions:** Result of this research a difference inexistence have a meaning, influenced by amount of less

responden and adherence to intervention. Furthermore this research need to continued to have better result.

P-066 Structural Equation Model on Quality of Life in Patients with Gastrectomy

Young-Suk Kim, Young-Sook Tae *College of Nursing, Kosin University, South Korea*

Purpose: The primary object of this study was to validate and test a model to explain health-related quality of life in patients with gastrectomy. A second purpose was to identify pathways in order to provide basis for development of intervention that can increase health-related quality of life. For this purpose, an extensive literature review on quality of life of patients with gastrectomy was done and a hypothetical model was made based on the model for Health-related quality of life by Ferrans, Zervic, Wilbur, & Larson (2005) and Enhance-Behavior performance model by Sousa (2003). The research variables were exogenous variables (self efficacy and social support) and endogenous variables (depression, perceived health status, self care behavior and quality of life). **Methods:** A quantitative and cross-descriptive sectional study. All of 218 patients with gastrectomy cancer patients were recruited in departments of one medical center and two cancer specialist hospitals located in Busan. Datas were analyzed with descriptive stast **Results:** All indices of goodness-of-fit of the hypothetical model was $RMSEA=.07CFI=.95$, $TLI (NNFI)=.93$ $SRMR=.05$. Among the 14 pathways of the hypotheticalmodel, 9 pathways were statistically significant. Quality of Life was affectedby self-care behavior, perceived health status and depression. Self-carebehavior was biggest direct effect factor. Self-care behavior was affected by depression, self-efficacy. Perceived health status was affected by depressionand self efficacy. Depression was affected by Self efficacy and socialsupport. **Conclusions:** Quality of life of patients with gastrectomy was directly influenced by self-care behavior, depression and perceived health status. Findings of this study could underscore the need to consider nursing strategies of reducing depression and enhancing self-c

P-067 QOL Survey of Patients Undergoing Particle Therapy in Head and Neck Tumors

Asuka Ebisutani, Mio Fujimoto, Akemi Maeda *Nursing Section, Hyogo Ion Beam Medical Center, Japan*

Purpose: The aim of this study was to assess of Quality of life in patients with head and neck cancer, undergoing ion beam radiotherapy and post therapy. **Methods:** Patients answered a questionnaire on the Quality of Life-Radiation Therapy Instrument (QOL-RTI) for Japanese, pre-treatment, post treatment and 1 year after treatment. A performed investigation was mailed to 1 year later of treatment. Usual scales were 0 (not at all) to 11 (all the time). 199 patients who treated at ion beam medical center between April 2003 and April 2012. **Results:** 89 were males and 110 were females, with a median age at presentation of 67.2 years old. The most common cancer was paranasal spaces (34%), nasal cavity (23%), oral (18%). As a result, the QOL score was decreased significantly after treatment, pre RT was 304.1 and post RT was 288.2. And 1 year after, the score was slowly recovered (295.0, $p<.05$). In study of each question, the factors to affect the score are problems on the appearance or pains. **Conclusions:** The result of this study showed total QOL scores of head and neck cancer were related to acute symptoms. As there are long-term side effects even 1 year after treatment, we have to follow up the transition of the score.

P-068 Effects of Utilization of Telephone Counseling Support by Nurses on Distress, Anxiety and Depression of Cancer Patients Receiving Chemotherapy

Oh Nam OK¹, Seon Mi Cho¹, Min Sun Nam¹, Mi Sun Yi¹, Eun Ji Kim¹, In Gak Kwon², Yun Hee Ham³ ¹Advanced Practice Nurse, Department of Nursing, Cancer Center, Samsung Medical Center, South Korea; ²Graduate School of Clinical Nursing Science, Sungkyunkwan University School of Medicine, South Korea; ³Unit manager, Department of Nursing, Cancer Center, Samsung Medical Center, South Korea

Purpose: This study was conducted to evaluate the effects of phone counseling provided by nursing staff on patients outcomes such as distress, anxiety and depression. **Methods:** This is a randomized controlled trial (pretest-posttest

design). Total 70 patients who showed 4 or higher distress score were selected from screening process. Four patients were dropped earlier; therefore 66 patients participated in this research. 32 patients were randomized to experimental group and 34 patients were randomized to control group. After preliminary survey, telephone counseling support was given 3 days, 1 week, and 2 weeks after chemotherapy to experimental group, mainly discussing symptom management. Phone counseling lasted about 20 minutes per protocol. Post survey was done before 2nd cycle of chemotherapy. **Results:** Regarding distress, both groups showed a statistically significant decrease in the scores: 3.4 for the experimental group (from 6.3(±1.8) to 2.9(±1.8)) and 1.8 for the control group (from 6.1(±1.5) to 4.3(±2.2)). In comparison between the two groups, the experimental group demonstrated a statistically significant decrease relative to the control group. Regarding anxiety, both group showed a significantly significant decrease (3.5 and 3.2 for the experimental and control group, respectively), but there was no difference between the groups with statistical significance ($p=.055$). Depression was not affected by the intervention. **Conclusions:** Distress and anxiety both decreased with statistical significance in the pre- and post-treatment comparison. However, in the comparison between the two groups, the experimental group provided with support care using phone counselling demonstrated a significant.

P-069 Development of Clinical Practice Guideline of Assessing Chemotherapy-induced Peripheral Neuropathy for Gynecologic Cancer Patients

Ching-Lin Wu¹, Yu-Yun Hsu² ¹Department of Nursing, National Cheng Kung University Hospital, Taiwan; ²Department of Nursing, National Cheng Kung University, Taiwan

Purpose: The purpose of this study is to develop evidence-based clinical guideline to evaluate severity and changes in CIPN. **Methods:** The guideline was developed through following steps: (1) forming clinical questions with PICO; (2) conducting systematic literature reviews and appraisal of the evidence; (3) drafting CIPN assessment clinical guideline; (4) conducting the Delphi process for developing CIPN guideline; (5) evaluating clinical practice of the guideline; (6) external evaluation of clinical guideline of CIPN; (7) publicizing clinical guideline into execution. **Results:** A total of 12 studies met the inclusion criteria. Critical appraisal of studies and abstraction were conducted. A clinical guideline of CIPN was drafted based on the studies. After two-step Delphi process, a consensus of the clinical guideline was archived. The guideline of CIPN assessment included pain severity, motor symptoms, sensory symptoms, pin sensibility, vibration sensibility, tendon reflex, muscle strength, ADL and IADL. A clinical practice was conducted in 30 women with gynecological cancer receiving Paclitaxel or platinum-based drugs patients to evaluate feasibility, accessibility, and accuracy. **Conclusions:** Practical clinical guideline of CIPN assessment is efficient tool to assist oncology nurses to early detect signs and symptoms of CIPN. Consequently, appropriate management to CIPN can be provided.

P-070 Primary Nursing Care of a Male Adolescent with Pituitary Microadenoma and Pulmonary Nodules Causing Cushing's Disease: A Case Report

Dan Louie Renz P. Tating, Natasha Denise S. Montevirgen, Izra R. Mananguit, Loyda Amor N. Cajucom College of Nursing, University of the Philippines Manila, Philippines

Purpose: This case report aims to understand the pathophysiologic mechanisms, medical management and nursing management of an adolescent with a complex oncologic condition. A 14-year old male initially diagnosed with Cushing's Disease secondary to ACTH-secreting microadenoma. Eventually, pulmonary nodules were also found in an abdominal CT Scan. A dexamethasone suppression test ruled out pituitary microadenoma as the ectopic source of ACTH. **Methods:** Primary nursing was utilized as a model of delivering patient care, focusing on the following nursing problems: Impaired Gas Exchange, Ineffective Health Maintenance, RC: Metabolic Dysfunction, RC: Fluid and Electrolyte Imbalance, and Ineffective Protection. Psychosocial issues addressed were Risk for Caregiver Role Strain, Ineffective Coping and Powerlessness. **Results:** The oversecretion of ACTH was primarily due to the pulmonary nodules seen, more than the pituitary microadenoma, causing the symptoms of Cushing's Disease manifested by the patient. The patient remained metabolically

stable, showed improved fluid and electrolyte balance, and remained free from any form of injuries. The family's coping was also significantly enhanced. They had more knowledge about the patient's condition and became more skilled in addressing his nursing care needs. The patient's respiratory status, however, steadily declined necessitating intubation and mechanical ventilation. The patient expired one day after the termination of primary nursing care. **Conclusions:** Healthcare teams handling complex oncologic cases like this should know when to shift from a curative to a palliative care focus, to ensure patient's quality of life. Primary nursing was an effective for patients whose condition needs close collaboration and co-management.

P-071 Effectiveness of Stretching Exercise Training to Chronic Fatigue of Family Caregivers of Advance Lung Cancer Patient: A Random Control Trial

Wan-Ting Chiu^{1,2}, Kwo-Chen Lee² ¹Department of Nursing, Cheng-Ching Hospital, Taiwan; ²School of Nursing, China Medical University, Taiwan

Purpose: The purpose of this study was to evaluate effect of stretching exercises intervention on fatigue among FCs of advance lung cancer patient. **Methods:** This a randomized control trial and longitudinal study was conducted from October 2012 to 2013. Participants were randomly divided into an experimental group ($n=26$) and control group ($n=27$) from medical centers in the center of Taiwan. FCs had to meet the following criteria: (1) had a relative declared to have less than a 6-month life span by physician, (2) identified by the patient as the person mostly involved in his/her actual care, (3) 21 years or older at the time of recruitment, and (4) willing to participate and could communicate with the data collectors. Family caregivers were excluded if they reported being diagnosed with a major depressive disorder, insomnia, or heart disease. The experimental group used Stretching exercises, for 20minutes each day, five days per week for 8-weeks, control group as usually care. Data were collected using the Checklist Individual Strength (CIS) at roughly two-week intervals for 2 mouths. A Generalized Estimation Equations (GEE) model was used as the main statistical method to identify effect of fatigue among FCs. Statistical analyses were performed using the SPSS 15.0 Statistical Package, and a 2-tailed probability $p<.05$ was considered to be statistically significant. **Results:** Fatigue was common in FCs of advanced lung cancer patient. The both of group demonstrated reductions in CIS scores after intervention. However, the CIS scores of the two groups showed nonsignificant differences ($p=.249$). **Conclusions:** In this study, it was discovered that stretching exercises training may not had significant improve fatigue in caregivers of advance lung cancer patient. We suggested that future studies with larger sample sizes, more frequency, and longer following time, are warranted.

P-072 The Outcome Evaluation of Bone Marrow Examination Performed by Advanced Practice Nurse as Trained Medical Support Staff in a Tertiary Hospital

Miee Seo¹, Je Hyun Woo¹, Young Shin Lee¹, Young Ah Kang¹, Je Hwan Lee², Min Young Kim³ ¹Nursing Department, Asan Medical Center, South Korea; ²Division of Hematology, Asan Medical Center, South Korea; ³Department of Nursing, Jeju National University, South Korea

Purpose: The purpose of the study was to compare the patients' experience and satisfaction of bone marrow examination (BME) performed by Hematology APN with physician. **Methods:** The data were collected from 27 patients who had undergone the bone marrow examination. 13 patients had experienced BME from physician and 14 patients from APN. **Results:** The patients gave general satisfaction score 9.21 points out of 10 on average to APN, and 7.46 to physician ($p=.009$). The evaluation scores in operator's attitude ($p=.348$), procedure explanation ($p=.306$), symptom management ($p=.311$), self-care instruction ($p=.479$), and competence level ($p=.123$) were not statistically significant between APN and physician. **Conclusions:** In this pilot study, APN was a positive medical personnel compared with physician in performing BME. APN can perform almost same task as the physicians and bring about better outcome for patients. The extended research will be continued to identify quality of patient care and quality of specimen of BM biopsy by APN.

P-073 Review of Nursing Research Trend on Children with Malignancy in Korea

So-Eun Choi¹, Sang-Dol Kim², Sun-Hee Choi³ ¹Department of Nursing, Mokpo National University, South Korea; ²Department of Nursing, Kangwon National University, South Korea; ³Bone Marrow Transplantation & Chemotherapy Unit, BMT Center, Seoul. St. Mary's Hospital The Catholic University, South Korea

Purpose: The purpose of this study was to identify research trend on children with malignancy in Korea and make suggestions for future study. **Methods:** A review was carried out of all published papers in the Riss4u, Kiss DB, DBpia and domestic theses for a master's or doctoral degree between the years 1988 and 2014, using keywords 'children', 'childhood', 'adolescent', 'cancer', 'leukemia' and 'malignancy'. A total of 87 papers met inclusion criteria and were evaluated by 2 researchers. These were analyzed by research design, data collection method, research participants, nursing intervention in experimental research and main concept of the studies. **Results:** Regarding the source of study, 38 (43.7%) were both master's thesis and academic journal and 11 (12.6%) were doctoral dissertation. For the research design, quantitative study was 77 (88.5%) and qualitative study was 10 (11.5%). Studies published 1988-1999 were 18 (20.7%), those of 2000-2004 were 25 (28.7%), those of 2005-2009 were 26 (29.9%) and those of 2010-2014 were 18 (20.7%). Over the half the papers were used questionnaire (66.9%) to collect the data. The majority of study participants were patients and parents. **Conclusions:** Pediatric cancer nursing research still in a developmental stage, although it has made a considerable contribution to the evidence base of the discipline. The future research needs to utilize a variety of approaches including tool developmental study and well-designed intervention study.

P-074 Oncology Advanced Nurses' Professional Quality of Life and Job Satisfaction

Hyun Jin Cho, Kwang Sung Kim, Su Youn Lee, Se Na Jung *Comprehensive Cancer Institute, The Catholic University of Korea Seoul St. Mary's Hospital, South Korea*

Purpose: This study was to identify correlations between professional quality of life (ProQOL) and job satisfaction among oncology advanced nurses practitioners (APNs) and 80 oncology nurses. **Methods:** Data were collected from 26 oncology APNs and 80 oncology nurses. **Results:** Compassion satisfaction as a factor of ProQOL of the oncology APNs was 37.73, burnout 25.85 and secondary traumatic stress 29.42. Among oncology APNs, those with higher compassion satisfaction (more than 75% of standard) comprised 42.3%, while more than moderate burnout and secondary traumatic stress comprised 65.3% and 76.9% respectively. An oncology APN's compassion satisfaction was higher and burnout lower than the respective indices for an oncology nurse. Secondary traumatic stress was similar between oncology APNs and oncology nurses. The average index for job satisfaction was 3.01, with the highest scores for interaction, and the lowest for financial compensation. The oncology APNs' interaction and task scores were higher than those for the oncology nurse. Compassion satisfaction as a factor of ProQOL of the oncology APNs showed positive correlations with age, professional status, interaction, administration and total job satisfaction. Burnout showed negative correlations with interaction, autonomy, duty of administration, task, and total job satisfaction. Secondary traumatic stress showed negative correlations with interaction, autonomy, pay, task, and total job satisfaction. **Conclusions:** Oncology APNs' ProQOL was higher than that for oncology nurses. However, most APNs experienced moderate to high level of burnout and secondary traumatic stress. Interaction and task as factors of ProQOL were higher than indices for oncology nurse.

P-075 The Effect of Aromatherapy Massage in Chinese Cancer Patients: What Do the Findings Tell Us?

Alice N.L. Kwong, Karen W.S. Wan, Simone S.S. Ho, Rosita M.L. Ho, Ka Ming Chow *The Nethersole School of Nursing, The Chinese University of Hong Kong, Hong Kong, China*

Purpose: Aromatherapy massage (ATM), as one of the complementary therapies, has been shown to be increasingly used among cancer patients. Quantitative studies have demonstrated the effectiveness of ATM in cancer symptom management. However, few qualitative studies have investigated cancer patients' experience and perception of ATM. This study was to explore the experiences of female Chinese cancer patients in the use of ATM for

symptom management. **Methods:** This qualitative study used individual semi-structured interviews and the data was analysed using content analysis. **Results:** Preliminary findings suggest that ATM was appeared as helpful in patients living with cancer. Three themes were identified: (1) the participants perceived more benefits than adverse effects of ATM. (2) ATM addressed both physical and psychological symptoms (3) ATM provided a culturally-sensitive intervention for Chinese breast cancer women to understand and clarify their perceptions of the altered body image. **Conclusions:** The study contributes by broadening the knowledge in how patients experience and value ATM in the oncology context. It highlights the importance for healthcare providers in understanding cancer patients' needs for utilizing complementary health approaches in symptom management.

P-076 The Effects of Mindfulness Program on Anxiety, Depression, Distress, and Quality of Life in Cancer Patients

Hyae Gyeong Jeong¹, Yu Jin Lee¹, Si Won Park¹, Eun Sil Lee¹, Kyung Ae Bang¹, Yoen Hee Bae¹, Jae Hee Jeong¹, Hye Ryun Choi¹, Hyo Gyeong Park¹, Mi Ae Kim¹, Bong Mi Kim¹, Kyung Eun Lee², Jeong Sook Park³ ¹Cancer Center, Keimyung University Dongsan Hospital, South Korea; ²Department of Nursing, Yeungnam University College, South Korea; ³College of Nursing, Keimyung University, South Korea

Purpose: The aim of this study was to evaluate the effects of mindfulness program on anxiety, depression, distress, and quality of life (QoL) in cancer patients. **Methods:** The research was done from March to April, 2015 at Keimyung University Dongsan hospital in Daegu, Korea. Subjects were 40 cancer patients. They are divided to experimental group (n=19) and control group (n=21). The experimental group received mindfulness program for 1 hour per 1 week, 6 times and practiced by self at home. The mindfulness program included mindfulness meditation, mindfulness yoga, and body scan. Before and after experiment, both groups completed questionnaire. In order to evaluate the effect of mindfulness program, anxiety and depression measured with the hospital anxiety-depression scale (HADS), distress with distress thermometer (DT) and QoL with cancer specific quality of Life (C-QoL). Data were analyzed using a Chi-squared test, t-test, ANCOVA with the SPSS 18.0 program. **Results:** There was no difference between both groups except age (t=3.012, p=.005) in general characteristics and history of chemotherapy treatments (x²=6.423, p=.021) in disease-related characteristics. After controlling for age and history of chemotherapy treatments, there were significant differences in experimental group and control group on anxiety (F=4.171, p=.012), depression (F=4.437, p=.009). However, there were no differences on distress (F=.876, p=.463) and QoL (F=.495, p=.688). **Conclusions:** The findings indicate that the mindfulness program is an effective nursing intervention to control anxiety and depression in cancer patient. Therefore, we suggest that clinical nurses can help by applying mindfulness program for cancer patient.

P-077 The findings indicate that the mindfulness program is an effective nursing intervention to control anxiety and depression in cancer patient. Therefore, we suggest that clinical nurses can help by applying mindfulness program for cancer patient.

Ma. Encarnacion A. Dychangco *College of Nursing & Allied Health Sciences, St. Paul University Manila, Philippines*

Purpose: The purpose of this study was to determine the spiritual perspectives of Filipino oncology nurses quantitatively using the Spiritual Perspective Scale -SPS (1986) by Dr. Pamela Reed, and explore the understanding of oncology nurses as to the definition of spirituality through an open-ended question. **Methods:** Scores on the SPS were obtained by calculating the mean across all items as suggested by the SPS, but the researcher decided to initially analyze the data by looking at the frequency of scores in every item using percentage. The qualitative part of the study was done by looking at the individual definition and grouping them according to similar definitions. Themes were given once the definitions were grouped. **Results:** Only the answers of the 64 nurses who stated they were working in oncology units or cared for oncology patients were included in the results and analysis in the SPS. The mean score reflecting the frequency of spiritual activities is 4.56, with a verbal description of high spiritual perspective. As for the role of spirituality in the oncology nurse's life, majority of the nurses rated strongly agree in all the eight items, with a mean score of 3.61,

also reflecting a verbal description of high spiritual perspective. Four themes emerged from the various definitions shared by the nurses: Relationship with God or a higher being, Defines who we are and how we relate with others, Personal belief and faith in one's creator, and Serves as guide in my life decisions and gives me direction. **Conclusions:** The results of the study are encouraging as the findings reveal a regular practice of spiritual activities as well as a common agreement that spirituality plays an important role in their lives as nurses. Another inspiring revelation is the similarity of the Filipino oncology nurses' definition of spirituality to the definition of Reed and other authors like Seekers and Clark, that spirituality is a personal experience, which reflects a sense of relationship to something greater than the self and an awareness of the purpose and meaning of life.

P-078 The Effectiveness of Education Programs on Nurses' Knowledge, Attitudes and Assessment Practices for Cancer-Related Pain Management: An Integrative Literature Review

Carman YL Kwok^{1,2}, Winnie KW SO¹ ¹The Nethersole School of Nursing, The Chinese University of Hong Kong, China; ²Department of Medicine and Geriatrics, Caritas Medical Centre, China

Purpose: To examine types of nursing education program for cancer-related pain management and investigate the effectiveness of educational interventions on nurses' knowledge, attitudes and assessment practices. **Methods:** An integrative review was conducted using the databases CINAHL, EMBASE, MEDLINE, British Nursing Index, PubMed. The keywords used in the search: "breakthrough pain", "cancer pain" and "nursing education", "nurse knowledge", "nurse attitude", "nurse assessment". **Results:** Primary keyword driven search found 1790 articles, 13 articles related to nursing education program for cancer pain management published between 1986 and 2013 were identified for final analysis. Out of 13 experimental studies, 12 educational interventions showed improvement of nurse's knowledge, attitude and assessing practice behavior. **Conclusions:** This review found that there is no nursing education program which targets BTCP management. However, studies adopted a two-hour educational intervention using a combination of didactic lecture and interactive approach may improve nurses' knowledge, attitudes and assessment practices for cancer pain management. Future research on the development of nursing education program for BTCP management is urgently needed.

P-079 Implementation of Pain Assessment and Management of Nurses Based on Evidence-Based Guideline

Hyang Sook So¹, Heui Lyang Kim², Jieun Jeon², Eun Yee Kim³ ¹College of Nursing, Chonnam National University, South Korea; ²Nursing Department, Chonnam National University Hospital, South Korea; ³Nursing Department, Chonnam National University Hwasun Hospital, South Korea

Purpose: This study was aimed to investigate implementation of the pain assessment and management of nurses based on evidence-based guideline. **Methods:** Participants were 140 nurses at C University National Hospital. Data were collected from July 1st to 15th, 2014 using a structured questionnaire. Tools were the Registered Nurses Association of Ontario (RNAO, 2007) guideline. Data were analyzed using t-test, ANOVA via SPSS Win18. **Results:** Categories with high score at pain assessment were pain screening, parameter of pain assessment, pain reassessment, and documentation. Categories with high score at pain management were assessment of analgesics side-effects and records. Total score of guidelines according to general characteristics was significantly high in the higher age group, group with works more than 10 years, higher positions, and post-graduate group. Total score of guidelines according to pain education factors was significantly high in the group which received more pain educational sessions, group with had more than seven hours, and group which know more the pain management guideline. **Conclusions:** The score of pain assessment tends to be higher than the one of pain management. Due to the lack of communication with multidisciplinary teams concerning the result of pain assessment, the establishment of a plan for pain management didn't take place properly. Thus, it is necessary to develop a standardized format where multidisciplinary teams can generally apply pain assessment and management. In addition, an educational program should also be developed to allow nurses have better understanding on non-pharmacological management and play an

independent function in pain management.

P-080 Effects of a Navigation Program for Patients with Newly Diagnosed Gastric Cancer

Yeonsoo Hong, Jeongyun Park, Jeonghye Kim *Department of Clinical Nursing, Graduate School of Industry, University of Ulsan, South Korea*

Purpose: As the treatment and management of cancer have become departmentalized and specialized, patients with newly diagnosed cancer may experience uncertainty, low resilience, and anxiety over time from diagnosis to treatment. The purpose of this study was to develop a navigation program and evaluate its effects on patients' resilience, uncertainty, and anxiety levels. **Methods:** This was a prospective, randomized controlled trial in which the patients were recruited in a single top-tier general hospital. A navigation program that can comprehensively provide customized information and psychological support to meet individual needs is developed. The participants (n=103), who newly diagnosed gastric cancer, were randomly assigned into either the experimental (n=50) or the control group (n=53). The navigation program, which was given on the day before the treatment, consisted of information provision and psychological support. **Results:** Participants in the navigation program demonstrated significant (p=.017) reductions in anxiety as compared with the control group over time. However, participants in the navigation program demonstrated no significant improvements in the resilience (p=.305) and uncertainty (p=.370). **Conclusions:** In conclusion, the navigation program was an effective intervention for patients with newly diagnosed gastric cancer and deserves additional study in other populations of patients. We suggest that further studies be conducted to investigate other strategies for increasing the resilience and reducing the uncertainty of these patients.

P-081 Integrated Multidisciplinary Adjuvant Trastuzumab Clinic: A Prototype of the Evolving Role of Oncology Nurses in Systemic Cancer Therapies

Choy YP Maria, Yin PY Elaine, Lo YK Sara, Lo CK Joe *Department of Oncology, Princess Margaret Hospital, Hong Kong, China*

Purpose: The objectives of setting up an integrated multidisciplinary clinic for adjuvant trastuzumab therapy were: (1) To deliver holistic care by a multidisciplinary approach. Breast cancer patients can receive comprehensive reviews and advices through various team members within the Oncology team of healthcare professionals. (2) Facilitate cancer survivorship and rehabilitation processes by reducing disruptions to patients' daily lives resulted from the lengthy hospital visits. (3) To relieve the medical clinic workload, hence to allow oncologists to focus on other complex oncological cases requiring specialist attention. **Methods:** An integrated multidisciplinary clinic was set up since 2012 in an oncology department of a public hospital of Hong Kong. Protocol was compiled for non-medical disciplines to conduct patient assessments. Breast cancer patients receiving adjuvant trastuzumab therapy were seen by three healthcare disciplines within our team (oncologists, oncology nurses and oncology clinical pharmacists) in a pre-defined, alternating fashion among the 18 cycles. During oncology nursing assessment, patients' opinions and feedbacks concerning the oncology nursing services were collected by written survey at the end of therapy. **Results:** From December 2012 to December 2014, a total of 232 patient referrals were received, with a total of 1941 attendances taken up by the oncology nurses and oncology clinical pharmacists. Approximately 70% of the clinic consultations were conducted by non-medical disciplines, in which about half of them were conducted by oncology nurses. End-of-therapy satisfaction survey showed that over 95% of the patients were satisfied with the service provided by oncology nurses. Vast majority of the opinions agreed that this integrated multidisciplinary approach has not only shortened their waiting time of hospital visits, the professional inputs from oncology nurses can enhance their satisfaction on the overall cancer care processes. This is done by giving healthcare advices from a holistic approach, and by providing good psychosocial supports to them. Such as offering radiotherapy skin care to patients who were undergoing concurrent radiation treatment, lymphedema care for patients who developed lymphedema of upper arms; or empowerment of the patients by education of self-breast examination. **Conclusions:** Via integrated model of service, the role of oncology nurses could be further evolved and expanded in providing holistic care and professional inputs to the breast cancer patients

receiving adjuvant trastuzumab treatment. This form of service can serve as a future model of advance oncology nursing practices. At the same time oncologists' consultation time can be redirected to focus on other complex or complicated cancer cases.

P-082 Lived Experience of Registered Nurses in Taking Care of Terminally Ill Patient at the Makati Medical Center

Christine A. Donnelly, Margaret May A. Ga, Ma. Cecilia P. Paje, Joshua Jaime P. Nario *Nursing and Patient Care Service, Makati Medical Center, Philippines*

Purpose: The study aims to describe how Makati Med Nurses feel when they provide care, the phenomenon, and how they feel in taking care of terminally ill patients. There are 8 participants in the study who showcased the Filipino values, wholehearted compassionate care. Understanding this phenomenon provides a guide in Healing Transformation. **Methods:** This study aims to describe how Makati Medical Center Registered Nurses feel when they provide care to terminally ill patients. This study utilized the existential phenomenological method as espoused by Van Manen in analyzing the experiences of Nurses in taking care of terminally ill patients at the Makati Medical Center. **Results:** Participant 1 shares "I felt privileged to be part of patient's and family's experience. I get to know the patient, the family and myself better" the theme: symphony of care. Participant 2 shares: "...We should assist our patient towards a peaceful death" thus: oasis of peace and contentment as the theme. Participant 3 states "Sometimes you grieve alone, other times, you grieve you grieve with your colleagues or find support from your family. Thus, "solitude and bereavement" was identified. Participant 4, verbalized "I appreciate more the value of life, to treasure the moments with our loved ones." The theme is valuing moments beyond time. Participant 5 shares "Whenever I work, it doesn't seem like work at all." Thus the theme: Inspired by the patient. Participant 6 "it is very heartrending to assist the patient at the end-of-life" the theme sharing life, understanding death. Participant 7 narrates "I want to understand my patients' and families' fears and coping skills" thus the theme dealing with emotions. Participant 8 shares "I had the opportunity to share my time and building quality relationship just like being a member of the family". The theme identified was: embracing new family. The second reflection was shown in the second layer of the wheel describes the common themes as cognizant coping, total acceptance, bedazzling harmony and Inspiration beyond understanding. The third reflection (third layer) detailed to comforting steadfastness from the interlaced theme cognizant coping and total acceptance and optimized inner strength from bedazzling harmony and Inspiration beyond understanding. **Conclusions:** The core or the gist of the lived experience outlines the Healing transformation.

P-083 Risk Factors for Delirium in Patients with Thoracic Surgery

Jin-Hong Lee¹, Hyun-Kyung Kang¹, Eun-Jung Joo², Jong-In Chun², Min-Young Kim², Han-Jin Yoo² *¹Center for Lung Cancer; ²Department of Nursing, National Cancer Center, South Korea*

Purpose: To determine which risk factors associated with the development of delirium in patients after thoracic surgery, retrospectively collected data from electrical medical records. **Methods:** This study is based on lung cancer patients who underwent thoracic surgery, Korean National Cancer Center, from January 01 to December 31 in 2014. Three hundred one patients were analyzed for the study out of total 408 cases. We excluded patients who are metastasis from other malignant disease. The diagnosis of postoperative delirium was based on psychological doctor's consultation. Method and delirium onset risk factors were examined. Data were analyzed with descriptive statistics, t-test, χ^2 -test, Fisher's exact test and logistic regression analysis. **Results:** Postoperative delirium developed were 8 patients (2.6%) among all of subjects (301 patients). There were statistically significant differences between postoperative delirium and duration of operative ($p=.08$), diabetes mellitus ($p=.01$), and ASA score ($p=.05$) by unpaired t-test. In a multivariable logistic regression model, diabetes mellitus ($\beta=6.22$, $p=.02$), and brain diseases ($\beta=.01$, $p=.00$) remains the statistically significant risk factor for the development of postoperative delirium. **Conclusions:** Through understanding of these results, underlying disease of diabetes mellitus and history of cerebrovascular diseases or cognitive impairment were the most significant risk factors with regard to the development of delirium.

P-084 The Effect of Chemotherapy Infusion Nurse Certification in

Ambulatory Chemotherapy Center

Yoshiko Irie *Dept. of Nursing, University of Tsukuba Hospital, Japan*

Purpose: In Japan, it is very big problem that patient waiting time of outpatients. Many cancer patients have receiving chemotherapy in ambulatory chemotherapy center, and they rapidly increasing year by year. Also, it is very important issue for the patient that reducing the extravasation of chemotherapy for safety administration. In our hospital, we established a hospital original accreditation system of chemotherapy infusion nurse (CIN), because of improving patient service to outpatient received chemotherapy and expanding role of generalist nurses. Since July 2011, the CIN provide all of chemotherapy administration for outpatient. At the same time, we improved of observation and recording method for during chemotherapy. In this study, I want to clarify the effect of Chemotherapy Infusion Nurse system implementation. **Methods:** To analyze the effect of the CIN system acquire, collect the data of extravasation occur status and patient waiting time, and compare before and after. **Results:** The extravasation occur status was decreased, 0.123% (2010) → 0.075% (2012) → 0.071% (2014). And the patient waiting time until the start of administration from the patient arrived at ambulatory chemotherapy center reception, median was shortened, to 24 minutes (2012) from 30 minutes (2010). However, it was longer 42 minutes in 2014. In addition, the CIN was high score of general self-efficacy scale and job satisfaction scale than non-CIN. **Conclusions:** It was revealed the effect that the extravasation reduced and patient waiting time shortening by the generalist nurses master the expertise knowledge and skills. It was improved the patient services and safety administration for outpatient received chemotherapy by the implementation of CIN. In addition, it has been found that CIN system will lead to the improvement of the satisfaction and the expanding role of generalist nurse, therewith reduce the burden of doctor, and compensate of insufficiency the expert nurse and certified nurse specialist in the situation.

P-085 The Quality of Life of Pancreatic Cancer Patient Overcome the Force Applied Interdisciplinary Resilience Promotion Program

Jang Hyun Jin *Inpatient Nursing, Severance Hospital, South Korea*

Purpose: This study was designed to develop and examine the effects of the interdisciplinary Resilience Promotion Programs for pancreatic cancer patients. It was a nonequivalent control group pre-post test study. The Resilience Promotion Program was based on interdisciplinary and resilience of pancreatic cancer patients. Twenty-five patients of pancreatic cancer with chemotherapy participated in the experiment group, and there were twenty-three patients of pancreatic cancer with chemotherapy in the control group. **Methods:** The program was executed total four times for hospital period. Group Intervention was executed twice and individual intervention was executed the three of times. The pre-test was given before the interdisciplinary Resilience Promotion Program to measure resilience, symptom distress, psychosocial distress and QOL for both of the groups. The post-test was performed after total four times of Group intervention and individual intervention for hospital period. The data was analyzed by the SAS program using χ^2 -test, t-test, repeated measures ANOVA. **Results:** The results of this study are as follows: Hypothesis 1. "The level of Resilience of pancreatic cancer patient who participated in the resilience promotion program will be significantly higher than pancreatic cancer patient who did not participate in the resilience promotion program." was supported ($F=4.235$, $p=.015$). Hypothesis 2. "The level of Symptom distress of pancreatic cancer patient who participated in the resilience promotion program will be significantly lower than pancreatic cancer patient who did not participate in the resilience promotion program." was supported ($F=3.474$, $p=.005$). Hypothesis 3. "The level of Psychosocial distress of pancreatic cancer patient who participated in the resilience promotion program will be significantly lower than pancreatic cancer patient who did not participate in the resilience promotion program." was supported ($F=4.728$, $p=.036$). Hypothesis 4. "The level of QOL of pancreatic cancer patient who participated in the interdisciplinary Resilience Promotion Program will be significantly higher than pancreatic cancer patient who did not participate in the interdisciplinary Resilience Promotion Program was supported ($F=5.586$, $p=.022$). **Conclusions:** The interdisciplinary Resilience Promotion Program is an effective strategy for nursing intervention for pancreatic cancer patient to improve resilience.

P-086 Structural Equation Model on Health Promotion Behavior in Breast

Cancer Survivors

Kyeong Sook Jeong, Yong Sook Tae ¹*Nursing, Changshin University, South Korea*; ²*Nursing, Kosin University, South Korea*

Purpose: This study was designed to construct and test structural equation modeling on health promotion behavior in breast cancer survivors in order to identify variables affecting health promotion behavior. **Methods:** Data were collected from 201 patients who finished breast cancer treatment and were in follow-up care via outpatient department at the three cancer specialist hospitals located in B metropolitan city from July 23, 2014 to August 30, 2014. The study was conducted via face-to-face interviews and self-reporting questionnaires. A total of 201 questionnaires were used for analysis. The Data were analyzed with descriptive statistics, exploratory factor analysis using IBM SPSS Statistics 21.0 and the confirmatory factor analysis, fitness of model and hypothesis using Amos 21.0 program. **Results:** The goodness-of-fit of the hypothetical model was verified, as Normed $\chi^2=2.35$, RMSEA=.08, CFI=.92, TLI=.90, SRMR=.07, and seven out of the 9 hypotheses of the hypothetical model were supported. Health promotion behavior was affected by perceived social support, self-esteem, body image. Among these, perceived social support was biggest direct effect factor. On the other hands, uncertainty did not have statistically significant effects on health promotion behavior. Also Body image was affected indirectly by perceived social support and self-esteem. Self-esteem were affected by body image and perceived social support. Perceived social support was affected by body image and uncertainty. These variables accounted for 58.0% of the health promotion behavior in breast cancer survivor. **Conclusions:** Breast cancer survivors can proactively carry out the health promotion behavior to prevent the recurrence with improved perceived social support and self-esteem despite of their deteriorated body image. Most of all, developing nursing intervention is important so that breast cancer survivors can effectively promote their health by utilizing self-help groups as local communities' resources.

P-087 What Head and Neck Cancer Patients Thought about before Initiation of Treatment

Kazuyo Iwanaga¹, Kumiko Kotake², Yoko Ishibashi¹, Kaori Haba², Ikuko Miyabayashi¹ ¹*School of Nursing, Faculty of Medicine, Fukuoka University, Japan*; ²*Juntendo University, Faculty of Health care and Nursing, Japan*

Purpose: The purpose of this article is to clarify what patients who went into hospital for taking radiation therapy for head and neck cancer thought about before initiation of treatment. **Methods:** Subjects were six patients who were admitted to university hospitals in Japan and agreed to participate in the research. Their ages, sex, diagnosis, and disease stage were recorded by checking medical record. We also asked about their thoughts before initiation of treatment. This research was approved by Research Ethics Committee in an institution to which authors belong. **Results:** The average age of subjects was 68.7 years (range=62-83) and the diagnosis showed 2 larynx cancer, 1 hypopharynx cancer, 2 oropharyngeal cancer, and 1 oral cancer. Disease stages were 2 for stage II disease, 1 for stage III disease, and 3 for stage IV disease. All patients complained about hoarseness and the pain in the oral cavity and/or part of the pharynx. Three patients expressed difficulty in swallowing and 2 patients felt no appetite. After receiving informed consent on treatment all subjects thought positively by saying either "It is no use thinking far ahead," or "My treatment is left entirely to doctors." On the other hand, some patients told that "I am not sure that I can keep my physical strength," or "I am not sure whether I can get well." **Conclusions:** It has become clear that radiation therapy lowers the quality of life of patients, necessitating a provision of aid for reducing their pain.

P-088 Healthy-Related QOL and Influence Factors in Liver Cancer Survivors who Completed Treatment Discharge from Hospital

Yoko Ishibashi, Kazuyo Iwanaga, Ikuko Miyabayashi *Adult Nursing, Fukuoka University Faculty of Medicine, School of Nursing, Japan*

Purpose: The aim of the study was to investigate the quality of life (QOL) and influence factors after hospital discharge in liver cancer survivors who received treatment for recurrence. **Methods:** QOL, fatigue, and sleep patterns who underwent TACE or RFA for recurrent hepatocellular carcinoma were investigated at one week and one month after discharge. QOL was measured

with the SF-36v2. The PSQI-J and CFS were used for assessing sleep and fatigue. Statistical analysis for influence factors was performed by Spearman rank correlation ($p=.05$). This study was approved by the IRB of Fukuoka University Hospital. **Results:** A total of 18 survivors were enrolled in the study (mean age, 70.7±10.0). All the subscale scores at one week after discharge were lower than norm-based scoring. At one month after discharge, scores of RP (27.8 to 37.1), PF (35.8 to 40.0), and GH (36.7 to 40.6) were significantly increased. Number of survivors with severe fatigue (50% to 61.1%) and insomnia (61.1% to 55.5%) were not changed. Subscale scores at one month after discharge revealed negative correlation between insomnia and VT (-0.813, $p=0.00$), insomnia and MH (-0.788, $p=0.00$), physical fatigue and RP (-0.474, $p=0.47$), and general fatigue and SF (-0.531, $p=0.63$). **Conclusions:** Physical functioning, Role physical, and Social functioning were recovered in liver cancer survivors one month after discharge, but were less than healthy people. These findings suggest necessity of interventions for quality of sleep and physical fatigue.

P-089 Survey on Actual Supports Given by Physicians Involved in Cancer Treatment to Cancer Patient on Making Decision about Fertility Preservation in Japan: Differences between Breast and Hematology Specialists

Mieko Nozawa¹, Harue Arai² ¹*Department of Nursing, Tokyo University of Technology School of Health Sciences, Japan*; ²*Division of Health Sciences, Osaka University School of Medicine, Japan*

Purpose: This study aims to investigate differences between breast and hematology specialists in how they assist cancer patients decide about fertility preservation. **Methods:** An anonymous self-administered questionnaire survey was conducted via post on breast and hematology specialists working at Designated Cancer Care Hospitals. Approval by the ethics committee of our institute was obtained prior to the study. **Results:** Of 372 breast specialists and 551 hematology specialists, 206 (55.4%) and 219 (39.7%) responded. 1. Information provision: Significantly more hematology specialists informed patients about fertility preservation than breast specialists. Many breast specialists informed the patient and her spouse, while hematology specialists informed the patient and their parent(s). In both groups, at least 80% provided the information only orally. The top impeding factor of information provision was delay in treatment, followed by lack of information about fertility preservation, recurrence risk and lack of consultant. Many factors were significantly higher in hematology specialists than in breast specialists. 2. Consultation: Over 80% of the respondents have been consulted by patient on fertility preservation. Significantly more hematology specialists experienced difficulty responding patient than breast specialists. 3. Cooperation with oncology nurse specialist: Many breast specialists have cooperated with oncology nurse specialist, but 34.2% of the hematology specialists answered they have not cooperated. **Conclusions:** Hematology specialists were more actively provided information and consultation than breast specialists and have more experienced difficulty responding patients. Based on actual information provision and cooperation with nurse, mediums should be devised that helps patients review the information, and cooperation should be build with nurse who supplements information.

P-090 Development of Evidence-Based Nursing Intervention Protocols for the Prevention of Oral Mucositis in Cancer Patients

Jin-hong Lee¹, Jong-in Chun², min-young Kim², Seon-hwa Choi², Mi-sook Lee³, Beoung-yeo Lee⁴, Han-jin Yoo² ¹*Center for Lung Cancer*; ²*Department of Nursing*; ³*Department of Hematology Cancer*; ⁴*Intensive Care Unit, National Cancer Center, South Korea*

Purpose: The objectives of this study were to verify through a review of the literature whether the interventions for oral mucositis prevention used in hospitals are based on evidence and to develop nursing intervention protocols for oral mucositis prevention using an evidence-based guideline development process. **Methods:** The development process was based on the evidence-based guideline development process of the Scottish Intercollegiate Guidelines Network (SIGN), which was modified according to the objectives of this study and conducted in 6 stages. The recommendation contents were summarized and the strength of recommendation was determined following a review and qualitative evaluation of the literature. From December 2013 to March 2014, a draft of the

protocols was developed following an additional literature search and analysis; the intervention protocols were then confirmed and the algorithm finalized through a draft evaluation survey by a group of experts. **Results:** A total of 26 strength of recommendation grades for nursing interventions in the prevention of oral mucositis were derived from our literature review and were evaluated by an expert group. After evaluation by the expert group, 2 recommendation items, flossing and restricted chlorhexidine rinsing, were deleted because of inadequate evidence, low feasibility in practice, and low effectiveness. Accordingly, a total of 24 items in the categories were included in the final algorithm: patient and staff education (4), oral assessment (5), basic oral care (6), oral rinse (4), and cryotherapy (5). Among them, 10 recommendation items received A grades, 2 items received B grade, and 12 items received D grades. **Conclusions:** This study developed evidence-based protocols for the prevention of oral mucositis in cancer patients and thereby to enhance the quality and expertise of nursing practices for the prevention of oral mucositis. Although numerous studies have been conducted, it is not possible to suggest any clear guidelines and replication studies involving mouthwashes (e.g., chlorhexidine, benzydamine) widely used in practice are needed. Nursing intervention protocols should be developed for prophylactic interventions in patients receiving radiotherapy and chemotherapy and for therapeutic interventions at the onset of oral mucositis.

P-091 Support Needs of Telephone Helpline Service in Lymphoma Patients
Pei-Hua Wu *Cancer Center, Chi Mei Medical Center, Liouying, Taiwan*

Purpose: Telephone helpline services is an useful in gaining rapid access to oncology facilities. The objective of this study was to develop a telephone helpline called "Cancer Telephone Helpline Services " (CTHS) to provide lymphoma patients support needs in time, and evaluation the support needs of callers of CTHS. **Methods:** This was a retrospective study of telephone services during 2007~2011, to describe the support needs to a CTHS and caller characteristics, reason for call, and satisfaction of CTHS. **Results:** A total of 207 calls were made to the CTHS during 2007~2011, with the majority of callers being men (62.3%), general than the younger callers (58.9%). Callers included patients (64.7%), care giver (19.3%); 72.7% occurred at 8am-1pm; 69.9% of called to obtain information about cancer treatment problems and chemotherapy side effects how to management; 28.6% of calls transfer to emergency room for assessment. The overall satisfaction rate for CTHS was 96%. **Conclusions:** Through the CTHS, lymphoma patients and care givers could receive higher quality of care during the treatment and management their problems in time. We suggest such telephone helpline services can be used in other disease to help the patients in time. The finding may provide hospital additional information regarding to an optimal skills that will perform education strategies.

P-092 Implement Bundle Care as a Strategy to Enhance the Execution Rate of Oral Nursing Care in Oncology Ward

Yu-Kuei Chen, Tzu-Ting Hsu, Chiung-Yi Tu, Ming-Ying Hong *Department of Nursing, National Taiwan University Hospital, Taiwan*

Purpose: The purpose of this study was to use bundle care to enhance the execution rate of oral care in oncology ward. **Methods:** In clinical, we found nurses use different ways with nursing instructum for oral care and poor execution rate. Therefore, cancer patients don't understand how to do for oral care, their oral mucous membrane is going worse. Major problems of the problems included inadequate time and knowledge, poor compliance, incomplete instuctments. We implement bundle care as a strategy to enhance the execution rate of oral nursing care teaching: (1) Design evaluative card of oral mucous membrane (2) Establish the video and leaflet for the education of oral care (3) Performing education and training to the nurse staffs (4) Setting package of oral care. **Results:** Among multidisciplinary collaboration to improve execution rate of oral care of education. **Conclusions:** To enhance quality of nursing care through our intervention of oral care.

P-093 Application Medical Team Resource Management to Improve Chemotherapy Medication Safety

Yu-Kuei Chen, Meng-Yuan Liu, Hui-Chuan Chang, Ming-Ying Hong *Department of Nursing, National Taiwan University Hospital, Taiwan*

Purpose: The purpose of this study was to use team resource management

to improve chemotherapy medication safety. **Methods:** By the leadership, situation monitoring, mutual support and communication four aspects, conduct well communication and make effective teamwork. Use of information systems to electronic chemotherapy orders, bar code systems development, as well as physician, pharmacists, nursing knowledge and skills training, at the same time. **Results:** We establish good reporting system, increase organizational consensus, reduce clinical errors. **Conclusions:** To improve the quality of medical care and the employee satisfaction through the project.

P-094 Patient Participation and Information Sharing in Cancer Chemotherapy (I): Information Prescription for Outpatients

Yuko Kitamura¹, Hiroyuki Yamamoto¹, Ken Yamaguchi² *¹Nursing Care Research Division, Shizuoka Cancer Center Research Institute, Japan; ²Shizuoka Cancer Center, Japan*

Purpose: The number of patients receiving cancer chemotherapy on an outpatient basis is increasing. Such patients are required to perform self-monitoring for the adverse effects of anticancer drugs at home. We utilized the concept of information prescription in which patients are provided with essential information regarding self-care while undergoing medical treatment at the Shizuoka Cancer Center. Currently, about 300 chemotherapy regimens are followed in the hospital, among which, probably the top 50 frequently used regimens would have utilized such information sets according to the concept of information prescription. This study aimed to identify the versatility in these information sets and to create and manage a common information set. **Methods:** Relevant literature was reviewed and discussions were held with cancer-care professionals, after which the contents of the common information set were determined (e.g., treatment schedule, frequency of occurrence, duration, and coping strategies for adverse effects). **Results:** Each adverse effect was described along six dimensions: frequency, mechanism, grade for indication of severity, how to continue activities of daily living, prospective recovery, and when to contact the hospital. **Conclusions:** In order to provide appropriate information to the patient, it is necessary to update and manage this information. Under common contents, simplified information is provided. However, it was inconvenient to emphasize on regimen characteristics in the common contents. An evaluation system to analyze the utility of the information prescription and assess adverse effects would facilitate information sharing and collaboration in future.

P-095 Patient Participation and Information Sharing in Cancer Chemotherapy (II): The Development of Patient Self-Reporting Criteria for Adverse Events

Hiroyuki Yamamoto¹, Yuko Kitamura¹, Ken Yamaguchi² *¹Nursing Care Research Division, Shizuoka Cancer Center Research Institute, Japan; ²Shizuoka Cancer Center, Japan*

Purpose: The National Cancer Institute (NCI) Common Terminology Criteria for Adverse Events (CTCAE) is the widely recognized gold standard for description of adverse events among health professionals. However, patients have no such criteria. Of late, patient-reported outcomes (PRO) are also considered important while assessing adverse events. The purpose of this study was to develop patient self-reporting criteria for the adverse events of cancer chemotherapy based on NCI CTCAE ver.4.0. **Methods and Results:** First, we modified CTCAE ver.4.0 so that it was compatible with patients' language. The major adverse event items (fatigue, nausea, etc.) were replaced with words that a patient would find easy to understand. CTCAE ver.4.0 had items graded 1 to 5. However, the patient's language adaptation did not include grade 4 toxicity (life-threatening consequences) and grade 5 toxicity (death), as patients would be unable to make these the judgments by themselves. Second, we obtained the opinions of physicians, pharmacists, and nurses (multidisciplinary team) regarding the compiled criteria, following which, 34 items that were suggested by the multidisciplinary team were selected. **Conclusions:** This facilitates a common understanding regarding an adverse event during cancer chemotherapy between the patient and the multidisciplinary team. It enables the multi-disciplinary team to detect the adverse event earlier and thus help the patient in coping better. Currently, the duration and frequency of adverse events following anticancer drug regimens are not clearly known. This patient self-reporting criteria for adverse events of cancer chemotherapy would help us to build a database for

the elucidation of the same.

P-096 Project for Reducing Skin Damage to Oncology Patients Caused by Abdominal Drainage Tube

Yi-Ju Lin, Hsu-Han Wang, Ya-Ting Tseng *Department of Nursing, Chang Gung Memorial Hospital, Linkou, Taiwan*

Purpose: Because of biliary obstruction or ascites, various types of abdominal drainage tubes are often required for cancer patients. Currently, 84.6% of patients receiving abdominal drainage tubes suffer from skin damage. Current analysis indicates that reasons for such damage include (1) increased vulnerability to skin damage due to age, malnutrition, and chemotherapy, (2) repeated application and removal of tape required for long-term use of abdominal drainage tubes, (3) the rate of correct tape application and removal performed by nurses is 57.9%, and (4) that there is no consistent training for abdominal drainage tube care. Through project implementation, this study hopes to lower rates of skin injuries of oncology patients caused by abdominal catheter drainage insertions and to improve quality of cares. **Methods:** To mitigate the conditions above, the following improvement measures are proposed: (1) Provide fixation straps for abdominal drainage tubes; (2) Reduce the amount of tape applied; (3) Devise a tape application area rotation schedule; (4) Conduct abdominal drainage tube care training, and (5) Conduct monthly evaluation of abdominal drainage tube care performed by nurses. A "Skin Conditions with Abdominal Catheter Drainages Observation Chart" was designed based on referencing literatures. After reaching internal agreement and consistency among project members, practical observation methods were carried out in oncology patients with abdominal catheter drainages inserted for one day or more. Observation period started on March 1, 2012 and ended on March 31 of the same year, with a total of 13 patients being observed. Following improvements of project conceptions, 12 patients were evaluated using the same methods between August 1, 2012 and September 30 of the same year. **Results:** The result of the project showed that abdominal skin damage in patients receiving abdominal drainage tubes was reduced by 68.3% from 84.6% to 16.3%. **Conclusions:** Skin injuries caused by adhesive medical equipment have been common in hospitalized patients. However, patients' skin injuries caused by removing medical tapes are often treated passively with wound cares, and the causes of the problems are usually not investigated or resolved. Therefore, a project team was initiated to investigate caring conditions of abdominal catheter drainages and intactness of skins and to analyze high-risk populations of skin injuries due to usage of adhesive medical equipment based on factors such as age, nutrition insufficiency, chemotherapy, etc., as well as integrations of clinical experiences and evidence from references. In specific circumstances, insertions of catheter drainages are necessary, and each insertion period may last for a month or longer. Since the usage of medical tapes cannot be avoided, a stabilizing band for the drainage tube was designed to partially replace functions of the paper medical tapes and to ensure the safety of drainage tubes. In order to resolve problems of inappropriate medical tape use by staff members, re-education and regular reviews are carried out. The rate of abdominal skin injuries of patients was greatly lowered following the implementation of the project. There were no negative responses to the usage of the new safety-ensured bands, which only received positive feedbacks from patients and nursing staff.

P-097 Supportive Care for the Difficulties Faced by Japanese Premenopausal Breast Cancer Patients Receiving Adjuvant Hormone Therapy

Kazuho Azechi¹, Miwa Sakaguchi², Mayumi Tsujikawa² *¹Department of Nursing, Tokyo Metropolitan Medical Center, Japan; ²School of Nursing, Faculty of Medicine, Mie University, Japan*

Purpose: The object of this study was to clarify the difficulty issues faced by pre-menopausal breast cancer patients and to suggest resolving these difficulties. **Methods:** Four patients with pre-menopausal breast cancer receiving adjuvant hormone therapy were participated. The topics of the semi-structured interview were the emotions and experiences which the patients underwent during the course of their treatment. The KJ method was employed to analyze the data from them. **Results:** We found that the data obtained from the patients were organized into eight categories regarding the difficulties. (1) Suffering stemming specifically from hormone therapy, (2) Intermittent feelings of

anxiety, (3) Difficulty in obtaining appropriate information, (4) Proactive attitude to continuation of therapy, (5) Perception of not being understood by healthy individuals, (6) Feelings of distress related specifically to patient background, (7) Feelings of connectedness, and (8) Finding the meaning of their living. **Discussions:** This study identified and suggested the following factors which need to support the patients: (1) More assistance by nurse in the management of the side-effects of therapy; (2) A support group capable of individualizing patient care to meet specific patient needs; (3) Support from nurse who understood the patients' difficulties and provided appropriate support helped patients to make sense of their situation.

P-098 Analysis of Associated Factors of Continuing and Discontinuing Treatment in Patients with Breast Cancer

Shu-Hui Lee, Hsin-Yi Yang *Nursing Department, Chang Gung Medical Foundation, Linkou Branch, Taiwan*

Purpose: Cancer is the leading cause of death in Taiwan and comprised 28.1% of mortality cases in 2009. Breast cancer is the first leading cause of female cancer and the fourth mortality rate from cancer in among females. Treatment adherence may affect cure care outcomes and survival rate of cancer patients. Therefore, it is important to provide a more comprehensive understanding of factors associated with discontinuation and non-adherence to cancer treatment. The understanding will help to is important and may improve the healthcare quality of care of breast cancer patients. **Methods:** This study retrospective cohort study review analyzed data from a case management information system concerning breast cancer patients enrolled in case management information system of cancer patients from 2006 to 2010 in Chang Gung Memorial Hospital from 2006 to 2010. In addition to descriptive statistics and chi-square test, we used multiple logistical regression models to analyze factors associated with discontinuation and non-adherence of cancer therapy. **Results:** Total of 3,648 breast cancer patients were valid for analyses. In total among them, 397 patients (10.9%) discontinued the treatment. The study results revealed that factors such as traffic distance to the hospital, lack of family support, and advanced cancer stages were associated with earlier treatment discontinuation. Patients whose live residency in was distant more than 60 km had a higher risk of discontinuation than those nearby (OR: 2.11; 95% CI: 1.26 to 3.52, p=.004). Patients with those who have family support were tends to less likely of to discontinue treatment (OR: 0.12 ; 95% CI: 0.02 to 0.56, p=.004). Patients with diagnosed with more advanced cancer stages increased the likelihood to also associated with more discontinue treatment (OR: 3.34-6.64, p<.001). **Conclusions:** Traffic distance to hospital, family support, and cancer stage are factors significantly associated with discontinuation and non-adherence to breast cancer therapy in breast cancer patients. Suggestions for clinical interventions to improve adherence and continuation of cancer therapy are needed discussed to and may improve quality of care quality of breast cancer.

P-099 The Feeling about their Family of Young Women with Breast Cancer

Ayako Kishida, Yuka Tsukada, Former Student, Akane Tanaka *Tottori University, Japan*

Purpose: The purpose of this study was to examine the feeling about their family of young women with breast cancer. **Methods:** The semi-structured interviews were conducted in 10 young women with breast cancer under the age of 40 whose first episode of breast cancer was diagnosed in August and September, 2014. The transcripts were analyzed using the qualitative inductive method. **Results:** The findings covered seven main themes; Families support; Family had propriety over me; Don't want to put family under worry; Change of family planning; Feeling of economic burden; Attachment to family life and Effort to make a family. **Conclusions:** The results indicated that young women with breast cancer feel thank and apology for her family members. As the result indicated the young women with breast cancer and her family may benefit from tailored support from nurses.

P-100 Non-Cancer Palliative Care: A COPD Terminal Patient Case Report

Hung-Hui Hung *RCC, Chi Mei Medical Center, Liouying, Taiwan*

Purpose: This article describes the experience of applying hospice and palliative care principles incaring a 73- year-old male with chronic obstructive pulmonary disease (COPD). **Methods:** From September 17 to October 17 2014, the patient

also received a comprehensive assessment to identify his physical, spiritual and social status. By observations, communications and analysis, our hospice care team evaluated the impact of a dying patient to family and nurse. Through the interdisciplinary conference to jointly developed a line with the needs of patients and their family's hospice program. **Results:** During hospitalization, the patient and the families have repeatedly expressed clear and definite, they want to remove the respirator and withdrawal of life-sustaining treatments. Through intervention by the hospice and palliative care team to assist the families, after withdrawal of life-sustaining treatments, patient can serene reborn. After the farewell cases, nurses been found in grief reactions, such as crying or anger, they can not understanding the families decisions, and itself had been assist this withdrawal process. Then, through the interdisciplinary conference by the physician, psychologist and social worker assistance to the staff to share their feelings and help them understand the pressure cases and patients are whole decision-making process, finally, they can "face it" and "let it go". **Conclusions:** The sufficient preparation, efficient withdrawal of life sustaining treatment, and aftercare are very important, we can ease through the family palliative care consultation meetings was held to unite patients, families and medical staff consensus to achieve the peaceful death.

P-101 Explore the Relationship between Hope, Symptom Distress, and Quality of Life in Patients with Lymphoma

Ya-Zhu Kang, Ya-Jung Wang *Department of Nursing, School of Nursing, National Yang Ming University, Taiwan*

Purpose: To explore the relationship between hope, symptom distress, and quality of life in patients with lymphoma. **Methods:** A cross-sectional design was used to collect 85 patients' data from a medical center in northern Taiwan. The instruments included demographic questionnaire, the Chinese version of Herth Hope Index, the M.D. Anderson Symptom Inventory-Taiwan Form, and the Chinese version of Functional Assessment of Cancer Therapy-General Scale-Lym. **Results:** The majority of participants in this study were male, B cell lymphoma, and with an average age of 57.22 years. The level of hope was medium and three of the most common symptom distresses were sleep disturbances, fatigue, and dry mouth. The quality of life was above the middle level. Results indicated the higher the hope, the lower the symptom distress and the better the quality of life. Type of lymphoma, level of hope and level of symptom distress were the predictors of quality of life. All these variables explained 68% of the total variance of quality of life. **Conclusions:** Results of this study provided the clinical nursing staff information regarding level of hope, level of symptom distress and level of quality of life in patients with lymphoma. Nursing staff will be expected to provide cancer patients the positive energy with caring to keep going their hope, to reduce their symptom distresses through undergoing treatment, thereby to promote their quality of life.

P-102 Descriptions of Respiratory Physical Therapy for Terminally Ill Patients in Textbooks Used for Nursing Education in Japan

Harumi Ejiri, Naoko Horii *Nursing College of Life and Health Sciences Chubu University, Japan*

Purpose: To investigate how respiratory physical therapy for breathing difficulty in terminally ill patients with cancer as well as non-cancer diseases is described in major textbooks used in basic nursing education and considered how students should be taught about respiratory assistance. **Methods:** We selected 6 companies that publish the major textbooks used in basic nursing education in Japan. We further selected 11 textbooks mainly on "cancer care," "palliative care" and "nursing in the chronic phase" that were published most recently. **Results:** Descriptions about breathing difficulty and respiratory physical therapy for terminally ill patients with cancer and non-cancer diseases were included in all the 11 textbooks. The descriptions in most of the textbooks pertained to pursed-lip breathing and abdominal breathing (7 of the 11 textbooks). The methods for performing such techniques were described in 5 of the 11 textbooks; while in some textbooks, explanations for the technical terms were given, in others, the terms were only introduced. Respiratory assistance was not explained in any of the textbooks. **Conclusions:** Respiratory assistance was not explained in any of the textbooks used for nursing education in Japan that we investigated. As terminally ill patients often have trouble breathing, it is necessary for nurses to efficiently alleviate breathing difficulty in patients. Thus, it is beneficial to provide

respiratory assistance to patients safely by acquiring right knowledge and skills. Therefore, it is necessary to find opportunities to impart knowledge and skills of respiratory assistance in basic nursing education.

P-103 Life Adjustment in Adult Lung Cancer Patients in Japan

Naoko Horii¹, Harumi Ejiri¹, Toyoko Sugita², Atsuko Maekawa² ¹*Department of Nursing, College of Life and Health Sciences, Chubu University, Japan,* ²*Department of Nursing, Nagoya University Graduate School of Medicine, Japan*

Purpose: To clarify the structural features of life adjustment of adult lung cancer patients. **Methods:** A text analysis was conducted with interview data from adult lung cancer patients admitted to two hospitals. The study was conducted from April to October 2012. Ethical considerations: The study was approved by the ethics committees of the authors' university and the university hospital where the data were collected. **Results:** The subjects were 16 people with a mean age of 59.3 years. The text data consisted of 1,976 records. Frequent keywords were "now" (164), "doctor" (96), and "surgery" (86), in that order. Positive types (167), such as "young" and "develop oneself," and negative types, such as "die" and "pain" were identified from a sensitivity analysis. Lung cancer patients' life adjustment could be divided into 21 categories with linguistic methods, including "treatment," "modifications," "family," "compare," "relations with others," "daily living activities," "symptoms," "job," "mental preparation," "physical strength," "survival," "acceptance," "normal," "anxiety," and "relationship of trust." A network diagram was drawn with "modification" as the central word to confirm the co-occurrence. Words with strong co-occurrence included "job," "treatment," "compare," "family" and others. **Conclusions:** The life adjustment of adult lung cancer patients were closely related to treatment, and tended to have a negative image. It may also be conjectured from the findings that life adjustment are important to fulfill adult roles, such as in work and family.

P-104 Impact of Fatigue on Quality of Life in Patients with Thyroid Cancer after Total Thyroidectomy: The Effectiveness of Physical Activity

Jungeun Kim¹, Hyangkyu Lee², Sue Kim², Woongyoun, Chung³ ¹*Yonsei University College of Nursing, Korea,* ²*Department of Clinical Nursing, College of Nursing, Yonsei University,* ³*Department of Surgery, College of Medicine, Yonsei University, Korea*

Purpose: To analyze the effect of physical activity, in the relationship between fatigue and quality of life in patients with thyroid cancer after receiving total thyroidectomy. **Methods:** Data collection was conducted from patients with thyroid cancer after total thyroidectomy recruited from thyroid cancer center of S hospital in Seoul from May 9 to September 16, 2014. G Power program version 3.1.8 was used to calculate the sample size. Significant level ($\alpha=0.05$), statistical power ($b=0.95$) and the moderate effect size ($f=0.3$) were set as initial values. Considering a dropout rate of 10%, a planned sample size was set to 135 participants, and data from 130 participants were finally used in the analysis. **Results:** The main results of this study as following: (1) The levels of physical activity differed by experience of habitual exercise ($t=-3.729, p<.001$) and intensity of exercise ($F=6.955, p<.01$). Patients who do participate (exercisers) in habitual exercise with higher intensity had high scores on physical activity when compared to patients who do not participate (non-exercisers). Non-exercisers had high scores on scales of fatigue ($t=4.395, p<.001$). Exercisers had higher scores on scales of quality of life, and the levels of quality of life differed by habitual exercise ($t=-4.090, p<.001$) and intensity of exercise ($F=13.482, p<.001$). These results suggested that physical activity is an important factor in correlation with fatigue and quality of life of patients with thyroid cancer. (2) No significant correlation in the levels of physical activity and fatigue according to the clinical characteristics of patients, however, the scores of quality of life differed by the operation period ($F=4.280, p<.05$). In addition, the more physical activity decreased the scores of fatigue, and increased the scores of quality of life. These results are similar to the results presented in the previous studies. (3) Quality of life had highly significant correlation with physical activity. The habitual exercise had a favorable influence on the quality of life. **Conclusions:** The results of this study indicate that further research investigating personalized exercise intervention according to the individual characteristics of patients is required. Like other cancer patients, patients with thyroid cancer also need careful follow-up and personalized nursing interventions.

P-105 What Should we Cooperate with Visiting Nursing? Giving Information from Palliative Care Unit to Visiting Nursing

Masamitsu Kobayashi¹, Natsuki Kawashima², Tomono Sugiyama¹, Jun Kako¹, Chiemi Saito¹, Yasufumi Osono³ ¹Department of Nursing, National Cancer Center Hospital East, Japan, ²Previous Department of Nursing, National Cancer Center Hospital East, Japan, ³Juntendo University Faculty of Health Care and Nursing, Japan

Purpose: Cancer patients who have taken visiting nursing at home sometimes die at a hospital. However, because of insufficient communication between the hospital and visiting nurses after admission, there remain to be some problem that visiting nurses do not have an opportunity of the feedback to know how was the end of the patient, how did their family feel, or whether the timing of admission was appropriate or not, may resulting in decreased worthwhileness or sense of discontinuation of their efforts. We aimed to improve the communication between the palliative care unit (PCU) at a hospital and visiting nurses for better cooperation. **Methods:** During May 2013 through December 2014, a brief report of the patient who died after admission to the PCU was sent to visiting nurses who had cared him/her before admission, including the clinical courses and situation of the end of the patient. **Results:** 104 reports were sent to 46 home nursing agencies (1-7 reports for each agencies), and the average time of duration from the death of patient was 13.25 (range, 0-45) days. Four visiting nurses responded to the letters describing how the family was doing or how was the grief care with expressing appreciation to the ward nurses at the PCU. **Conclusions:** Although the actual influence of this approach is difficult to be evaluated, improved communication would contribute to establish a good relationship between visiting nurses and PCU in the management of end-stage patients.

P-106 Are We Ready for Personalized Cancer Risk Management? The View from Breast-Care Providers

Hiroko Komatsu, Kaori Yagasaki Faculty of Nursing and Medical Care, Keio University, Japan

Purpose: Personalized medicine, the tailoring of prevention and treatment, is the future of routine clinical practice. This approach has started to appear in genetic testing for predisposition to hereditary breast and ovarian cancer (HBOC). **Methods:** We explored how breast-care providers perceived HBOC risk management, using grounded theory. **Results:** This study found that the frontline healthcare providers perceived HBOC risk management as still being neglected in breast cancer care. Emerging challenges included treatment priority, hesitancy to deal with sensitive issues, easily missed risks, genetic data not being shared among multidisciplinary professionals, and patients being lost to follow-up. Oncology nurses are ideally placed to facilitate communication and utilization of genetic information among multidisciplinary professionals. **Conclusions:** Specialized outpatient clinics need to be established to follow up individuals at high risk. There is a need to create a system to meet the future demands of personalized medicine in nursing practice.

P-107 Development of First Year Practice Tool for Head and Neck Cancer Surgical Oncology RNs

Ji Eyun Park, Moon Young Jang, MiHee Park, Yun Hee Moon, Hyun Park, Min Kyung Kim Head and Neck Cancer Unit, Severance Hospital, Yonsei University Health System, South Korea

Purpose: The objective of this study was to develop a tool to measure and assess the training and practice demands of head and neck cancer surgical oncology registered nurses (RN) with 12-18 months' experience in one university hospital in a metropolitan area of Korea. This tool is expected to enhance the expertise of head and neck cancer oncology RNs, to promote their transition to the proficiency stage after one year of training as novices, to improve nursing practices, and to augment the quality of head and neck cancer surgical patient care. **Methods:** A: We investigated the training demands and practice skills check list of RNs with 12-18 months of 10 RNs clinical experience in nursing head and neck cancer surgical patients for 30 days from September 1, 2014 to September 30, 2014. B: Upon identifying the training demands, we produced a list of clinical nursing practices that should be strengthened after one year of clinical experience in nursing head and neck cancer surgical patients, and examined the validity and reliability of this list. **Results:** By examining 10 RNs who were initially hired as new nurses and were stationed in head and neck cancer surgical oncology care for 12-18 months, we found that there were high training demands in the several following fields: Made of 12 categories and 77 detailed educational practice topics. Education needs more than 30% from the 11 categories, and 27 details and retraining is needed in this practice area. We

generated a detailed tool list based on these categories. **Conclusions:** In order to enhance the assessment and procedure skills of RNs specialized in the care of high-risk head and neck cancer surgical patients, the head and neck cancer care tool should be used to evaluate the RN's first-year performance and to identify any areas requiring improvement. This tool can be especially useful in boosting the RNs' clinical adaptation in caring for the "difficult" head and neck cancer surgical patients. Moreover, by reducing the gap between the training and actual practice, the quality of head and neck cancer surgical patient care can be remarkably heightened.

P-108 Improvement of Cancer Care by the Case Data Management System

Wen-Hsuan Wang Cancer Center, Kaohsiung Medical University Hospital, Taiwan

Purpose: Cancer been the major cause of death is more than 20yrs in Taiwan. Providing good quality of cancer treatment and care is a major issue in the clinic practice. Cancer care needs longitudinal and continuous care throughout the whole treatment period. **Methods:** Cancer Case Managers (CCM) were recruited to improve the effectiveness of cancer care services and supported immediate, safety, continuous, comprehensive care for every oncology patients. The system was set up to search case more comprehensively via cancer type code (ICD code), cancer histology type (M-code), and critical illness insurance identification. **Results:** 488 patients were enrolled in 2009 (recruit rate: 34.53%) and cases increased to 1797 in the following year (73.27%). In 2013, 3112 patients were enrolled (100%) First diagnosed patients' education rate was 34.84% (2010), 94.52% (2012), and 98% (2014) Patients followed rate was 79.04% (2011) and increased to 95.4% (2013). **Conclusions:** CCM provided more effective, high-quality patient-centered treatment and care.

P-109 Current Trends in Studies on Telephone Consultation Services for Cancer Patients in Japan

Chihiro Fujita¹, Megumi Nagoshi², Misae Shinomiya³ ¹Kurashiki Daiichi Hospital, Japan, ²Department of Nursing, Okayama Prefectural University, Japan, ³Graduate Program of Midwifery, Niimi College, Japan

Purpose: To explore trends, contents and issues for future research in studies on the telephone consultation services for cancer patients in Japan. **Methods:** Iqaku Chuo Zasshi was searched using the keywords: telephone consultation service, cancer care and nursing for original articles which were published between 1981 and 2014, and 16 articles which focused on cancer patients were selected. To see how studies changed, years of publication, study designs, types of diagnosed cancer were classified and analyzed. **Results:** The first study a nurse made on telephone consultation services for cancer patients was published in 2000, and such studies have been increasing in number. However, 12 reviews, 32 proceedings, and 16 original articles were found. Twelve out of 16 articles used a descriptive statistical design, one a qualitative study, another a case study and 2 others. Nine of them analyzed consultation records, 5 used patients and 2 used nurses as subjects. The studies focused on the contents of consultations, and analysis revealed "diagnosis and treatment," "medical examination," "symptom" and "anxiety." Although investigations were found into actual conditions regarding the authors own institutions and consultations with visitors, no evaluations by visitors of consultations were found. **Conclusions:** The findings suggest that it is necessary to evaluate how much telephone consultations meet patient needs.

P-110 A Nursing Experience of Implementing Inter-Professional Collaborative Practice Model on a Young Female Patient with Facial Skin Cancer for Body Image Disturbance

Miao-Ching Wang Hematology & Oncology, Chi Mei Medical Center, Liouying, Taiwan

Purpose: Cancer has been the first place in the top ten leading causes of death since 1982 in Taiwan. The patient was 25 years old, suffering from facial skin cancer, and had negative emotion and little self-confidence since her facial skin got inflamed and ulcerated due to reception of radiotherapy. Patients with facial skin cancers care about their self-images and self-dignities much more than the others. We hope that patients will receive the best care through implementing inter-professional collaborative practice model. **Methods:** Doctors, nurses, pharmacists, dietitians, medical technologists, medical radiation technologists, physical therapists, occupational therapists, social workers and other medical professionals were formed the inter-professional collaborative team to set the goal based on patient's needs, and to take care/solve the patient's physical/

psychological/spiritual/social issues by making good use of the professions from team members. And we achieved the assignments efficiently through communications, mutual assistance, integrations. **Results:** The team improved her body image disturbance and discomfort caused by radiotherapy for the facial skin cancer, and relieved her worries about disease and life through giving active cares and empathy to lead her expressions inside of her heart. We had the great relationship with patient and made her face the disease positively, and finished the therapy thoroughly. **Conclusions:** Therefore, it is proven that the inter-professional collaborative teams improve medical cares and facilitate the medical resources, decrease false cure/complications/medical expenses, shorten the length of stays and upgrade the quality of healthcare.

P-111 A Nursing Experience on a Patient with Lung Cancer at First Visit Receiving Chemotherapy

Chia-Hsuan Wang *Hematology & Oncology, Chi Mei Medical Center, Liouying, Taiwan*

Purpose: Cancer has been the first place in the top 10 leading causes of death for more than 30 years. Lung cancer was the first place in the top 10 leading cancers in 2012. The patient was 37 year-old, who found she got lung cancer at first visit and received chemotherapy. She was anxious about her cancer and had psychological disturbances for no perception of disease other than being uncomfortable with chemotherapy. **Methods:** We collected patient's health information by observation, conversation, physical assessment based on Gordon 11 Function Health Patterns and found that she had ineffective breathing pattern, potential risk for deficient fluid volume and anxiety. **Results:** Patient's anxiety was eased thru the care from other patients and nursing staff. Furthermore, our team helped her to face her disease and overcome the physical/psychological disturbances thru her family. **Conclusions:** Most patients who are diagnosed to have cancer at first visit suffer from psychological anxiety and physical disturbances. Establishing reliable relationship between patients and nursing staff would help us to offer better medical care.

P-112 A Study on the Relation between Gender and Quality of Life for Lung Cancer Patients

Yi-Lin Wu¹, Nai-Ying Ko², Jung-Der Wang³, Wu-Wei Lai⁴, Wu-Chou Su⁵
¹Department of Nursing, National Cheng Kung University Hospital, Taiwan, ²Department of Nursing, National Cheng Kung University, Taiwan, ³Department of Public Health, National Cheng Kung University, Taiwan, ⁴Department of Surgery, National Cheng Kung University Hospital, Taiwan, ⁵Cancer Center, National Cheng Kung University Hospital, Taiwan

Purpose: The purpose of this study was to understand the demographic status and characteristic of QOL in different genders. **Methods:** The study design was to analyze secondary databases. The study samples were lung cancer (primary diagnosis ICD-9 = 162.0-162.9) patients who were diagnosed at National Cheng Kung University Hospital and joined WHOQOL interview in DOH100-TD-C-111-003 study. Those diagnosed without tissue proof were excluded. The databases included the cancer registration database, the diagnosis and treatment database for lung cancer, and the NCKUH quality of life database. Using SPSS and SAS 9.3 software, regression model and mixed-models were constructed to explore the difference and related factors of quality of life between genders. **Results:** The demographic status showed different ($p < .05$) characteristics from male and female patients. Female patients were younger, more unemployed, and more single, less comorbidities, more adenocarcinoma and smaller tumor size. More male patients received chemotherapy (41.5%, $p = .003$) than female patients. More female patients received target therapy (27%, $p < .001$). Female patients had better physical mean of QOL at 9th month post diagnosis ($p = .037$), but poorly psychological mean of QOL at 6th month post diagnosis ($p = .006$). Patients were male had more improve in pain ($p = 0.0001$), energy ($p = .049$), active ability ($p = .018$), sleep ($p = .0003$) and daily activity ($p = .021$) in the physical domain of QOL. Male patients also had more improve in thinking ($p = .039$), bodily image ($p < .0001$), Self-esteem ($p = .0036$) and negative feelings ($p < .0001$) in the psychological domain of QOL. **Conclusions:** There were different demographic status, treatment type, psychological QOL at 6th month, physical QOL at 9th month and QOL improve status between the genders of lung cancer patients. Different care plans should to be explored for different genders of patients to prevention QOL decrease.

P-113 Understanding Surgeons' Ability to Continue Pancreatic Cancer Treatment Working at the University Hospital

Anri Inumaru *Mie University, Japan*

Purpose: Pancreatic cancer is hard to diagnose and treat. Surgery is the only radical treatment option available. The current study aims at understanding the reason why surgeons working at a University hospital in Japan are able to continue pancreatic cancer treatment. **Methods:** A qualitative approach was undertaken, whereby 6 pancreatic surgeons (with experience ranging from 8-19 years) working at a University hospital were interviewed after obtaining signed consents, 3 of which were analyzed using Modified Grounded Theory Approach, described by Kinoshita in 2003. **Results:** 6 aspects about the surgeons' thoughts were found. (1) The presence of long-term survivors: The surgeons were glad that some patients live long though there was few. (2) Trust and gratitude: The surgeons felt happy that the patients felt free to be direct with their expressions of gratitude. (3) Difficult surgery preference: The surgeons appreciated the challenge of their work, precisely because of the difficulty of the surgery. (4) Good at switching off feelings: The surgeons were well-adapted to overcoming depressive feelings, and could switch between expressions of bad and normal feelings well. (5) Feelings of reward: The surgeons found it rewarding that they could increase The Quality of Life and extend the life expectancy of patients without any other treatment. (6) Knowledge and skills earned by experience: The surgeons found pancreatic surgery to be a good way to accumulate experience and acquire skilled technique. **Conclusions:** The surgeons were proud of their jobs, and had some coping styles.

P-114 Difficulties Experienced by Nurses in Japan when Supporting Decision-Making for Patients with Advanced or Recurrent Cancer

Miki Hosoya¹, Yasutaka Kimura¹, Kyoko Toju¹, Chikako Shimizu² ¹Nursing Department, National Cancer Center, Japan, ²Department of Breast and Medical Oncology, National Cancer Center, Japan

Purpose: The purpose of this study was to clarify the difficulties perceived by nurses when they support the decision-making process of patients with advanced or recurrent cancer in Japan. **Methods:** We conducted three focus-group interviews at a cancer hospital in Tokyo, one each with two oncologists, two nurses, and two medical social workers. The interviews were analyzed by qualitative and inductive methods. **Results:** The nurses' interviews revealed patient factors, institutional factors, and nursing care as three critical domains. Patient factors included the following: those with rapid cancer progression, those who could not accept that their cancer had reached an advanced stage, those who could not understand their condition and chemotherapy, those who did not have their cancer diagnosis disclosed to them, those who were reluctant to talk with their oncologist regarding their hope, and those who wished to be treated until death in the hospital. Institutional factors were the lack of nursing staff, private interview rooms in ambulatory settings, and specialized palliative care units in the area. Nursing care factors included communicating with patients dying, supporting the hopes of patients dying, and coordinating between patients and their families for their preferred place of death. **Conclusions:** Nurses perceived many difficulties when supporting the decision-making of patients with advanced or recurrent cancer. An educational program is required to support nurses in this process.

P-115 Difficulties in Supporting Decision-Making in Patients with Advanced or Recurrent Cancer for Medical Social Workers in Japan

Kyoko Toju, Miki Hosoya, Yasutaka Kimura, Nursing Department, National Cancer Center, Japan Chikako Shimizu, Department of Breast and Medical Oncology, National Cancer Center, Japan

Purpose: The purpose of this study was to clarify difficulties perceived by medical social workers (MSW) when supporting decision-making in patients with advanced or recurrent cancer. In a clinical setting, nurses have reported the experience of cooperation with MSW not going well. We need to understand the difficulties with MSW supporting decision-making, these can become clues for fostering cooperation between nurses and MSW. **Methods:** We conducted focus group interviews three separate times. Participants included doctors, nurses, and MSW employed by a cancer hospital in Japan. The data were analyzed using qualitative and inductive methods. **Results:** MSW are frequently involved in deciding the preferred place of care and death. The difficulties perceived by MSW were "overwhelming time shortage" and "cannot evaluate MSW's interventions". If a patient was mentally unsettled, MSW had difficulties with "the patient and family taking a long time to make decisions" and "Patient and family hesitate to discuss the end of life". And MSW perceived "difficulty clarifying a patient's hope when their condition quickly declines" and "having few options

for meeting the patient's hopes when a prognosis is poor". **Conclusions:** The results suggest that nurses need to coordinate the intervention by MSW earlier. Decision-making of the preferred place of care and death influences the quality of life of a patient and their family, and a patient's condition may decline quickly. We need to develop a decision-making support program so that these difficulties are settled.

P-116 Application of Watson's Caring Theory to Assist Patients with Terminal Oral Cancer in Overcoming Death Anxiety

Tzu-Chiu Wang *Nursing Department, Chi-Mei Medical Center, Liouying, Tainan City, Taiwan*

Purpose: The case was a man aged 45 years with buccal mucosa cancer. Patients with terminal oral cancer often experience haemorrhages because of rapidly deteriorated tumor wounds and experience uncertainty and death anxiety. Watson's caring theory was used to help the case patient face issues related to death and reduce fear resulting from death and to accompany the patient in finishing the last journey of life. **Methods:** Provide basic humanistic and altruistic system of values in patient care. Improve and accept the patient's expressions of positive and negative perceptions. Use scientific problem-solving methods for systematic decision making. Affirm the power of the existential-phenomenological forces. **Results:** He also wrote cards to his wife, saying "I will leave sooner or later. I am really sorry for being unable to take care of you longer. Thank you for the care you have given me all these years. I feel secure and comfortable with you being by my side." **Conclusions:** The patient reported that the haemorrhaging wound was increasingly severe and was aware that the situation was an inevitable process. He tried to recite Buddhist mantras and adjust his respiration. With many companions beside him, the patient did not feel lonely.

P-117 Result Analysis of the Chemotherapy Care Consultation Services in a Hospital in Southern Taiwan: A Retrospective Study

Yi-Hsiu Kuo, Chun-Mi Pan *Nursing Department, Chi Mei Medical Center, Liouying, Taiwan*

Purpose: Chemotherapy is a common treatment for cancer patients. The cancer patients in this case hospital are admitted to the wards in the Internal Medicine and Surgical Departments. By means of the consultation of the chemo care team, better care guidance and education can be provided to help improve the patients' quality of life and further enhance the skills of the clinical nursing staff. **Methods:** Retrospective study was conducted on the subjects the dedicated chemotherapy nurses consulted during January 2012 and November 2013 in a hospital in Southern Taiwan. The research instrument, "Cancer Patient Consultation Sheet", included the consultation units, problems consulted and the results. **Results:** The number of patients serviced was 14378, and the unit consulted most often was the non hematoma ward, with 8059 patients in total (56.05%). The consulted problems included care guidance, with 7890 people (54.88%), drug delivery technology, 4201 people (29.22%), and tubing assessment, 2287 people (15.90%). The top five items in the care guidance category were further analyzed and divided into Gastrointestinal Care, with 2432 people (30.82%), dietary intake, 1482 people (18.78%), piping care, 1044 people (13.23%), pancytopenia care, 1040 people (13.18%), and the urinary tract care, 565 people (7.16%). IV Port-A, with as many as 1327 people (58%) accounted for the most in piping assessment, followed by the 960 people (42%) of IA Port-A. The number of patients who could receive the instant assistance and care after consultation was 13323 (92.66%) while 1055 people (7.34%) needed the referral to the medical team. **Conclusions:** Related health education materials can be made based on the questions and results obtained in the consultation services. Furthermore, professional knowledge and technique training programs can be held to educate the ward nurses so as to provide more professional care quality.

P-118 Fall Prevention Improvement Projects for Cancer Patients in a Regional Teaching Hospital in Taiwan

Chun-Mi Pan *Nursing Department, Chi Mei Medical Center, Liouying, Taiwan*

Purpose: Due to the disease progression and side effects of the therapy, the physical activities and functions are reduced. In addition, the patients also lack crisis consciousness, overestimate their physical capabilities and worry that they may cause the caregiver's trouble. So they insist on off-bed activities, resulting in recurrence of falls. Thus reducing the cancer ward fall, maintaining patient safety is important. **Methods:** This health education project emphasized on the

danger of falling and the importance of fall preventions through posters and health education videos. The medical team performed health education of fall prevention together so that the risk awareness of the patients and the family and their levels of cooperation were strengthened. In addition, training of the patients' lower limb muscles and the policy to keep the bed against the wall and the accompanying chair against the bed were implemented to reduce the degree of fall injuries and to enhance the caregiver's role and functions. **Results:** The number of falls reduced from nine to three half a year after the implementation. With the project implementation, the health promotion among the patients and the caregivers was made, enabling the nurses to implement fall prevention care measures and contributing to the development of a culture and atmosphere of fall prevention. **Conclusions:** Falls are common abnormal events in medical institutions. We expect this improvement plan, as homogeneity of the wards fall prevention reference.

P-119 Nursing Counseling Results of Chemotherapy Infusion System of a Hospital in Southern Taiwan

Chun-Mi Pan *Nursing Department, Chi Mei Medical Center, Liouying, Taiwan*

Purpose: Chemotherapy is a common treatment for cancer. With the consultation of chemo care team, we can know chemotherapy patients category of infusion pathway, consulting reasons, and the processing results. Professional knowledge and technique training programs can be held to educate the ward nurses so as to improve health care quality. **Methods:** This is a retrospective study for the cases receipt consults of professional nurse of chemical treatment of a hospital in southern Taiwan from July 2012 to June 2013. We collected 1074 cases. "Record of tubing care for chemotherapy patients" was the tool for this research, including units, category of infusion pathway, consulting reasons, and the processing results. **Results:** All cases were divided into two groups, 494 cases (45.99%) were consulted in July to December 2012, the others 580 cases (54.01%) in January to June 2013. The 818 cases (76.16%) consulted form non-hematoma specialist wards is majority. The main infusion pathway is IV Port-A which were accounted for 534 cases (49.72%), IA Port-A which were accounted for 397 cases (36.96%), the main reason which were accounted for 550 cases (51.21%) is to help curved needle placed, 381 cases (35.47%) is to help assess Port-A function. The reason which were accounted for 202 cases (53.02%) is blood block up the path or blood reflux is not smooth, 111 cases (29.13%) is abnormal rate of infusion, 68 cases (17.85%) is abnormal site of injection. 955 cases (88.91%) could be proceeded after Nursing counseling. It is accounted for 96 cases (80.67%) who need to notify the original physician for further processing, and 23 cases (19.33%) had to consult surgeons to assist in handling. In the chi-square test results, the rate of referral and assistance to the IV-Port needles placed were significantly reduced of the hematoma Section in 2012. That they need to help setting the needle and that the pipeline can be continuing used after treatment are in direct proportion. **Conclusions:** In addition to strengthen the technique of standards pipeline caring, promoting the basic obstacles excluded, such as blood block up the path, abnormal rate of infusion or site of injection is still worth in staffs education. Besides, consulting the professing nurses could be contributed to exclude the transfusing problems of patients.

P-120 Prevention of Advancing Severity of Mucositis in Head and Neck Cancer Patients Undergoing Chemoradiation Therapy: A Case Study Examining Nursing Support to Promote Patient Self-Care

Harue Arai¹, Mariko Koike¹, Satomi Miki², Keiko Tazumi², Ryoko Kado², Atsumi Nishio², Ryoko Yamashita² ¹Osaka University Graduate School of Medicine, Osaka, Japan, ²Osaka University Hospital, Osaka, Japan

Purpose: To analyze a case in order to gain useful findings regarding nursing support to promote self-care to prevent advancing severity of mucositis in head and neck cancer patients undergoing chemoradiation therapy. **Methods:** We conducted two semi-structured interviews after application of 30Gy and after completion of treatment regarding oral care and self-care for pain alleviation. Data was then qualitatively and inductively analyzed. This study was approved by the institutional ethics committee. **Results:** Case A was a 75-year-old man with stage II hypopharyngeal cancer. His treatment regimen was RT (66 Gy)+DOC10 mg/m² dl+CDDP20 mg/m² dl. Mucositis progressed from grade 0 to 3 according to the common terminology criteria for adverse events, after which treatment was completed. When starting treatment, He was resistant to using opioids and expressed a desire to rather try to endure pain by himself. However, he said that he had been given an explanation on the necessity of opioid use from a nurse. In the second interview, He said that he was proactively making adjustments he had discovered himself to make oral care more effective and

feeling the effects of these adjustments had led to him continuing with self-care of his own accord. However, he had worked out these methods himself, he couldn't determine their validity and had to use a process of trial and error. **Conclusions:** Nurses can provide patients with motivation to continue with self-care by offering specific feedback to evaluate the methods and effects of self-care skills acquired by patients.

P-121 Difficulties in Supporting Decision-Making in Patients with Advanced/Recurrent Cancer for Oncologists in Japan

Yasutaka Kimura¹, Miki Hosoya¹, Kyoko Toju¹, Chikako Shimizu² ¹Nursing Department, National Cancer Center, Japan, ²Department of Breast and Medical Oncology, National Cancer Center, Japan

Purpose: The purpose of this study was to clarify difficulties perceived by oncologists when supporting decision-making in patients with advanced/recurrent cancer. It becomes the clue knowing the way of the cooperation with doctors for nurses to know the difficulty of the doctor in the supporting decision-making. **Methods:** Focus group interviews were carried out a total of three times with two oncologists, two nurses, and two medical social workers (MSW) employed at a cancer hospital in Japan. The dates were analyzed by qualitative and inductive methods. **Results:** In terms of difficulties perceived by doctors when supporting decision-making in patients with advanced/recurrent cancer, doctors felt that they carried a heavy responsibility for supporting such decision-making, and they didn't have sufficient time to do so. In addition, with respect to condition of the disease, prognosis, and ideals for future, they experienced difficulty with some awareness gaps arising between patients and their families on one hand, and doctors on the other. Further difficulties included the challenge of discussing prognoses with patients and their families, as well as the difficulty of listening to patient's hopes for the future. **Conclusions:** Oncologists often serve in roles that involve the provision of decision-making support, and it was thought to be necessary to share roles and responsibilities with nurse, MSW, and so on. In addition, oncologists felt hesitation and difficulties in connection with prognoses and ideals for the future, suggesting the need for decision-making support programs in patients with advanced/recurrent cancer patients.

P-122 Reducing the Incidence Rate of Pressure Sore in Oncology Ward

Ching-Yen Wu, Ya-Yin Tseng, Yi-Hsiu Lin *Nursing Department, Chi Mei Medical Center, Liouying, Tainan*

Purpose: Taiwan Joint Commission on Hospital Accreditation(TJCHA) put the pressure sores in one of the quality indicators at TCPI in 2003. The incidence of pressure-sores is positive correlation with the quality of care(TJCHA, 2013). To decrease the incidence of pressure-sores, reduce the medical costs and decrease the caring hours, then upgrade the quality of care. Following the TJCHA, the threshold of the incidence of pressure-sores is 0.09%. We set the goal that the incidence of pressure-sores in Hematology & Oncology should decrease from 0.17% to 0.09%. Second pressure-sores decrease from 50% to 35%. **Methods:** Establish education Courses. Implementation Monitoring, decrease the incidence of pressure-sores. **Results:** Statistics from 2014/1/1 to 2014/10/31, the incidence of pressure-sores is 0.09%, Second pressure-sores is 30.7%. Estimate the correct rate of position and turning is 94.7% and impaired skin integrity is 89.5%. The correct acknowledge to the incidence of pressure-sores is 96.3%. **Conclusions:** We found that there are more malignant patients in Oncology, so the incidence of pressure-sores is higher. It should be examined more carefully and prevented early. The pressure sores is one of the quality indicators. Although we reach the goal, we will analysis and improve continuously to upgrade our quality of care.

P-123 The Practice of Nursing on Fertility for the Cancer Patient Undergoing Chemotherapy by a Certified Nurse in Breast Cancer Nursing: A Case Report

Junko Kitajima¹, Mariko Koike², Eiko Masutani², Harue Arai³ ¹Division of Health Sciences, Osaka University Graduate School of Medicine, Japan; ²Cancer Education and Research Center, Osaka University Graduate School of Medicine, Japan; ³Division of Health Sciences, Osaka University Graduate School of Medicine, Japan

Purpose: In Japan, breast cancer morbidity rates have increased. The practice of nursing on fertility before chemotherapy is important for patients with breast cancer because chemotherapy may impair fertility. This study aimed to clarify the impact nursing practices followed by a certified nurse in breast cancer nursing may have on the fertility of patients of a reproductive age undergoing

chemotherapy. **Methods:** We conducted a semi-structured interview using an interview guide. The subject was a female nurse certified in breast cancer nursing. We descriptively and qualitatively analyzed the data. This study was approved by the institutional ethical review board, and we received informed consent from the subject. **Results:** The subject had 10 years of experience of providing care for patients undergoing chemotherapy, and 9 clinical years of experience after obtaining certification. In practice, the nurse obtained confirmation of intention of pregnancy and childbirth from patients and partners, provided information about fertility preservation, and prompted interviews with partners. While providing information about fertility preservation to patients, she ascertained the age, condition, stage of convalescence, and matrimonial circumstances of the patients. Moreover, she controlled the amount and content of the provided information and assessed the patients' background which complicated nursing practice on fertility. **Conclusions:** The nurse ensured that patients could consider pregnancy and childbearing before treatment and decide whether fertility preservation was chosen. She had performed discrete nursing for fertility based on the knowledge and experience gained while ascertaining patients' background. She was also compassionate toward patients.

P-124 Understanding of Survivorship Care of Long-term Cancer Survivor Patients by Japanese Nurses Involved in Cancer Patient Care: Two Case Studies of Patients with Possibility of Long-Term Survival after Completion of Treatment

Kazuko Onishi¹, Kanae Tkase², Yoshimi Matsuda³, Ikue Ogawa⁴, Yukie Hosoda⁵, Kumiko Tanaka⁶ ¹Faculty of Nursing, Suzuka University of Medical Science, Japan, ²School of Nursing, Fukushima Medical University, Japan, ³Yamagata Saisei Hospital, Japan, ⁴Former School of Nursing, Kansai University of Social Welfare, Japan, ⁵St.Luke's International University, Japan, ⁶Kanagawa Cancer Center, Japan

Purpose: To study the acknowledgement level of long-term survivorship care following cancer treatment by Japanese nurses. **Methods:** In order to obtain understanding of requirement for long-term survival care, two sample cases with long-term survival possibilities were created. The nurses were asked to list three issues which strongly influence long-term survival and care important for long-term survival. **Results:** Responses received: 351 (rate 28%). Average age: 39.6 (SD7.2), experience in cancer patient care: 11.3 years (SD5.8). Case 1: The patient was a 24 year-old female with Hodgkin's disease, married but no children. Strongly influence: progress and recurrence of disease (62%), suffer related to decision making (47%), influence to fertility (43%). Care important: consultation related to sexuality (59%), mental care (58%), and symptom management (29%). Case 2: The patient was a 60 year-old male lung cancer, who suffered depression but completely recovered. Strongly influence: risks of recurrence and progression (54%), uncertainty regarding prognosis (45%), depression (43%). Care important: mental support (55%), symptom management (40%), support in accepting the reality of own sickness (38%). **Conclusions:** Nurses in Japan tend to consider symptom management and mental care as most important and to treat the aspects of patients' lives with less priority. It is considered that this is because majority of nurses practicing cancer care are only involved with the patients during the stages of diagnosis, treatment, or terminal stage care. The opportunity of the nurses being involved in extending survivorship care to long-term cancer survivors are rare.

P-125 Nursing Care for Psychological Distress at the End of Life for Patients with Cancer in a Palliative Care Ward: A Qualitative Study (Second Report)

Jisho Takashi¹, Miwa Aoki², Satomi Kitagawa³, Harue Arai¹ ¹Division of Health Sciences, Osaka University Graduate School of Medicine, Japan, ²Faculty of Nursing, University of Kochi, Japan, ³Osaka University Hospital, Japan

Purpose: The purpose of the current study was to elucidate how nurses in palliative care units (PCUs) address psychological pain after they understand it, and we analyzed the same data of our earlier qualitative study again. **Methods:** Qualitative study. Using the definition of palliative care provided by the World Health Organization, we first modified the definition of "psychological pain" to mean "clinically normal psychological responses such as anxiety and fear." We conducted semi-structured interviews with four nurses about how they care for patients who have psychological pain, and then we performed a qualitative inductive analysis. Each participant provided written informed consent. **Results:** Each participant had worked for between 5 and 14 years as a nurse and for between 3 and 5 years in PCUs. Five categories were observed for analysis. With regard to "caring through conversation" and "fulfilling patients'

wishes by available means," nurses cared for psychological pain directly, and they contributed to "team cooperation among various professionals." Nurses also "relieved physical pain" based on their understanding that physical pain generates anxiety and fear, an awareness that is among the nurses' "fundamental understandings." Nurses used their occupational skills to communicate with patients and in so doing cared for their psychological pain. **Conclusions:** Nurses in PCUs communicated with patients and cared for patients' psychological pain via communication and/or fulfilling patients' wishes. They cooperated with other professionals, and they also relieved psychological pain by reducing physical pain. Their communication with patients effectively relieved psychological pain.

P-126 The Effects of Online Education for Risk Control of Cervical Cancer Natsuki Kumata¹, Naoko Hayashi², Etsuko Sindo³, Mika Chaen³, Mitsuko Inayoshi¹, Naoko Nakayama² ¹Kitasato University School of Nursing, Japan, ²St. Luke's International University, Japan, ³International University of Health and Welfare, Japan

Purpose: To evaluate the effects of online education for risk control of cervical cancer. **Methods:** This study was designed as a single intervention group. Online education was provided on the basis of stages of change using transtheoretical model (TTM). Participants were nursing students who took an online survey before and 6 months after intervention. During the education, students used the learning platform Moodle to view videos, exchange opinions in a forum, and receive messages from the researchers. The educational effect was measured using a questionnaire. The survey was approved by the ethics committee. **Results:** Of the 87 study participants, 37 (42.5%) answered the post-intervention survey. In terms of stages of change for cervical cancer vaccination, before intervention, eight (21.6%) participants were in the precontemplation stage, 20 (54.1%) were in the contemplation stage, two (5.4%) were in the preparation stage, and seven (18.9%) were in the action stage. After intervention, 13 (35.1%) participants were in the precontemplation stage, 17 (45.9%) were in the contemplation stage, none (0%) were in the preparation stage, and seven (18.9%) were in the action stage. A large number of participants had valid knowledge of cervical cancer after intervention, and a significant difference was observed ($t=3.83, p=.00$). The burden of preventive vaccination in balanced decision-making increased after intervention, and a significant difference was seen ($t=-3.125, p=.004$). **Conclusions:** Participants acquired accurate knowledge regarding cervical cancer through this online education, but the burden of balanced decision-making regarding preventive vaccination increased.

P-127 Life Control in Patients Receiving Outpatient Care for Hematopoietic Stem Cell Transplantation-Life Control Looking at the Present Day Tsuneko Nagai¹, Sawa Fujita² ¹Department of Nursing, Faculty of Health and Welfare, Prefectural University of Hiroshima, Japan, ²Graduate School of Nursing, University of Kochi, Japan

Purpose: It is known from previous research that after hematopoietic stem cell transplant (HSCT) a client's life control is difficult. However, we could not find any report of certain phenomena from the client's subjectivity. The aim of this research was to describe after HSCT clients who receive outpatient care, how they are considering their life control looking at the present day. **Methods:** We requested the clients to participate in research, after about one year had passed receiving outpatient care after an HSCT. Data collection was conducted through semi-structured interviews. Giorgi's phenomenological method was used for data analysis. The research had been approved by the Research Ethics Committee of the research facility. **Results:** The data gained from the 18 subjects revealed 4 main themes. In this study we report about three of the main themes. "Living with distance from others" is when patients cope and live among others while enduring the gaps created in the patients' lives. "Maintaining emotional balance in order to live" is for the patients to live a happy life by not holding on to anxieties about the future, even if they are given a poor prognosis. "Trying to be one's self from before becoming sick" means trying to be one's usual self by avoiding being seen by others as a sick person. **Conclusions:** Clients found a value in their present life and reconstructed themselves through life control looking at the present day. It suggested that nurses should support life control continuously.

P-128 The Effect of a Nursing Intervention Program Designed to Maintain the Physical and Emotional Stability of the Patients who are Informed of the Recurrence of Breast Cancer

Naomi Ota *Department of Nursing, Kawasaki University of Medical Welfare, Japan*

Purpose: The patient who received the recurrence notice of a breast cancer has a great psychological impact. Therefore, they fall into a critical situation easily. This study was conducted to verify the efficacy of a nursing intervention program for giving mental and physical stability to patients with breast cancer who were recently notified of recurrence and are receiving treatment. **Methods:** The program provided information about treatment and side effects, teach relaxation techniques, give emotional support, and support for awareness. The program began two weeks after patients received notification of recurrence, was conducted in 4 sessions over a 2-month period. We verified the program by comparing patients with recurrent breast cancer who underwent the program (program group) against a control group (non-program group). The two program groups was assessed using the physical symptom subscales of the EORTC-QLQ30, the Japanese version of POMS, the Japanese version of MAC scale. We assessed effect of the program using two-way repeated measures analysis of variance (ANOVA). The study was reviewed and approved in advance by the ethical committees of University A and the study site. **Results:** A total of 22 subjects were included in the analysis; 9 were included in the program group and 13 in the non-program group. We observed interactions in the program group for loss of appetite ($p=.038$) and constipation ($p=.048$), vigor ($p=.006$). **Conclusions:** This program was effective as a nursing intervention program for improving the physical and mental stability of patients with breast cancer notified of recurrence and receiving treatment.

P-129 The Trajectory of Quality of Life for Esophageal Cancer Patients at a Medical Center in Taiwan

Hui-Chuan Chou, Yi-Lin Wu, Ya-Ci Siao *Nursing Department, National Cheng Kung University Hospital, Taiwan*

Purpose: National Cheng Kung University Hospital funded a five-year research program from May 2011 to survey quality of life among cancer patients. This research extensively and repeatedly collected the EQD5 Taiwan version questionnaires from cancer patients at each time clinic visits. The purpose of this study was to describe the long-term trend on the quality of life of patients with esophageal cancer. **Methods:** The study design was to analyze secondary databases. The study samples were esophageal cancer patients who were diagnosed from 2004 to 2014 at NCKUH and joined EQD5 interview. Those diagnosed without tissue proof were excluded. The databases included the cancer registration database, the diagnosis and treatment database for esophageal cancer, and the NCKUH quality of life database. We described the trend of QOL by calculating the mean of QOL at each time point and linking them to become curve. Using Excel software, explore the time trend of QOL by function calculations. **Results:** 141 patients participated in this study, including 129 (91.5%) males and 12 (8.5%) females. The average age is 55.7 years old. Only 31 (22.0%) patients were single. 71 (50.35%) patients whose economic status were under 10 thousand per month. 102 (72.3%) patients filled questionnaires more than twice at different times during the diseased period. So, total 411 questionnaires were to analyze. The timing of the questionnaires filling was during post diagnosed 1-10 years. The two year trend of global QOL showed decreasing change at the 3rd, 7th and 9th month after diagnosis. After 16th month, the trend of global QOL began to increase and kept scores between 70-80 point. There was increasing significant in the long term QOL of health status. **Conclusions:** This research showed the trajectory of QOL for esophageal cancer patients at NCKUH. For esophageal cancer patients, the QOL improved gradually as time went by. Hoping this analysis can help clinicians increase QOL attention on patient care, especially the timing QOL maybe to change.

P-130 Experiences and Perception of the Patient who Had Undergone the Low Anterior Resection Operation to Accept the Defecation Function Troubles

Asami Tsujii¹, Yukiko Suzuki², Ikuharu Morioka¹ ¹Wakayama Medical University, School of Health and Nursing Science, Japan, ²Shijonawate Gakuen University, Nursing, Japan

Purpose: Patients who have undergone the low anterior resection (LAR) operation for the rectum cancer often have the defecation function troubles. The aims of this study were to clarify experiences and perception of such a patient to accept the defecation function troubles, and to obtain clues for supporting patient's survivorship. **Methods:** The participant, male in seventies, took part in face-to-face, semi-structured interviews. He had undergone the LAR operation three years ago, and had accepted defecation function troubles on the interview day. A qualitative descriptive research design was used to explore the patient's

experiences and perception during he had defecation function troubles. **Results:** The experiences and perception were summarized into following seven items: 1) Practicing concrete self-care behaviors, 2) Keeping the mind to overcome the disease by himself, 3) Dispelling the anticipatory anxiety, 4) Being optimistic about his prospects, 5) Having confidence in his doctor, 6) Gaining support from his family and 7) Being advised by the medical care staff before the operation. **Conclusions:** In order for the patients who had undergone the LAR operation to accept the defecation function troubles, thinking and dealing positively the cancer and troubles are important as well as to practicing the concrete self-cares.

P-131 Are Support Services Responsive to the Psycho-Social Needs of Adolescents with Malignancies? An Explorative Study of Children's Hospital Care in Singapore

Xiuhua Lee, Rafikah B Sawal, Huiluan Tan, Yinghong Li, A.P. KK Maria Paediatric Oncology Department, Women's and Children's Hospital, Singapore

Purpose: Adolescents with malignancies are at a greater risk for physical, psychological and social adjustment especially during the diagnosis and treatment phases. This qualitative study examined the gaps in the psycho-social support services rendered to adolescents with malignancies in a children's hospital in Singapore. **Methods:** A purposeful sampling was done to include oncology patients within 10 to 19 years of age. Three developmental theories by Erikson, Freud and Piaget were used as the conceptual framework underpinning the development of the research themes discussed during interviews with 5 adolescents with malignancies. Data were collected from interviews with key participants (n=5) recruited from one center in Singapore. Qualitative data was analyzed using the software, Nvivo. **Results:** The importance of psycho-social support was highlighted, so was the availability for fertility information and the involvement in family conferences. The 5 adolescents were satisfied with the level of psycho-social support received from their nurses and social workers. However, due to visitor restrictions, many of their social support (friends) were not allowed to come. The adolescents did show a high amount of appreciation to their mothers, who were often their main caregiver and source of comfort during the multiple hospitalisations. Cancer treatments caused physical changes (alopecia, weight changes and skin changes) and that affected their self-esteem. Food was seen as a form of enjoyment and the quality, taste and variety was important to them. **Conclusions:** Two key areas emerged from this research—the first relating to the personal cancer experiences and the impact on the adolescents' lives and the second, relating to their contact with support services in the hospital. Insufficient information resulted in distress in adolescents; hence this is an area to improve upon. More awareness on the adolescents' feelings towards physical changes, social support and need for knowledge will aid in the healthcare workers' communication approach and delivery.

P-132 Knowledge Based Oncology Nursing Practice: Lymphedema Management Based on the Theory of Unpleasant Symptom for Patients with Breast Cancer

Bo-Seop Lee, Sanghee Kim Graduate School of Nursing, Yonsei University, South Korea

Purpose: Knowledge based practice presents a challenge to advanced practicing nurses to integrate nursing theory, research, and practice in oncology nursing. For patients with breast cancer, lymphedema is a well-known major complication after surgery. The purpose of this paper was to describe linkage of management of lymphedema and Theory of Unpleasant Symptom (TUS) in terms of knowledge based practice. **Methods:** As a method, an integrative review was applied and critical analysis was done for data analysis. With understanding of TUS and reviewing of literatures, existing knowledge regarding lymphedema related factors were matched to each concept in a designed matrix. **Results:** In a TUS, lymphedema could be influenced by a series of physiological, psychological and situational factors. The physiologic aspects include edema, sensory disturbance, and inflammation. The psychological aspects are depression, anger, and negative body image. Situational factors can be described as the lack of exercise and guided instruction. Unpleasant symptoms can be summarized as objective and subjective experiences such as decreased joint flexibility, pain, and fatigue. Finally, the above symptoms could result in resignation job, lower quality of life and disturbance of sexual interaction. **Conclusions:** TUS, as a middle-range theory can be described as lymphedema which is a major symptom for patients with breast cancer. Knowledge based oncology nursing practice which uses TUS provides nurses' with their own perspective as well as professional guidance on management of lymphedema.

In order to provide appropriate care for patients with lymphedema after breast cancer, nurses could apply TUS.

P-133 The Application of Comfort Theory in the Nursing Care of Terminal Cancer Patients

Wen-Yi Tu Chi Mei Medical Center, Liouying and Fooyin University, Taiwan

Purpose: Cancer has been a leading cause of death in Taiwan. In 2011, 92,682 new cancer cases occurred in Taiwan, meaning 399 cancers diagnosed per 100 thousands cases pre 251 Taiwanese. On average, one new cancer occurred in every 5 minutes and 40 seconds in 2011 (Ministry of Health and Welfare, 2014). It has great impact on life quality of patients and their families. Comfort is a state of ease and peaceful contentment, meaning the satisfaction of body, heart, and soul. It would be changed by many intrinsic and extrinsic factors. Especially for hospitalized patients, direct physiological reaction related to the body suffering could decrease their comfort and healthy behavior. **Methods:** 4 concepts of comfort theory, containing physical comfort, psychospiritual comfort, sociocultural comfort, and environmental comfort were applied to the nursing care of terminal cancer patients in September 2013. Physical comfort concerns the physiological and autologous balance. Psychospiritual comfort is the intrinsic self-realization, containing self-respect, meaning of life, and the self-existence. Sociocultural comfort is the relationship between the individual, the family, and the society, containing economy, family tradition, custom, faith and etc. Environmental comfort is the individual experience toward extrinsic environment, containing temperature, light, voice, odor, color and etc. **Results:** After providing the comfort care via the medical team, including standard comfort, counseling, and solace, patients feel much concerned. And enhanced sense of presence by connecting and strengthening their past life, patients feel much comfortable and have higher quality of home life. **Conclusions:** Terminal cancer cause considerable psychological and physiological impact on patients and their families. Clinical staff must reliance, to be more cautious when estimating the psychological turning of patients and their families. Providing timely nursing care individually and verifying these results, not only upgrade the individualism of nursing care, but also provide patients medical service with higher quality.

P-134 Medication Administration in a Tertiary Care Cancer Centre: An Audit

K.R. Lakshmanan, Meera S. Achrekar, Amuthalakshmi, Dipti Ghonge, Malini Mohite Nursing Department, Tata Memorial Centre, India

Purpose: Therefore the audit was undertaken to identify compliance to drug administration protocol and assess nurse's knowledge regarding drugs being administered. **Methods:** Thirty nurses were selected by convenient sampling. Content validity of audit check list was done by giving it to experts. Data was collected from 24th March 2015 to 27th April 2015 by observation and interview technique. Data was collected. Audit check list and inpatient file (medication chart and nurses record) were used as tool. Valid percentage was calculated. **Results:** There was mix of male (17%) and female (83 %) nurses. Only 20 % of nurse used three identifier for identifying the patient. 50% of nurses knew side effects of the drugs and 77% of nurses were aware of indications of the drugs. 97 % of nurses used hand rub before administration. 60% of nurses confirmed if patient had any history of allergy before administering drug. Drug expiry date was checked by only 60% of nurses and 97% of nurses calculated drug correctly. 42 % of nurses explained the procedure. 33% explained drug timings and 21% explained side effects of the drugs to the patient. All the chemotherapy drugs (n=5), high risk medicine (n=3) and narcotic drugs (n=3) were counter checked by senior nurses. 84% of nurses checked the patency of intravenous line. Non touch technique was used for oral medication, while measuring device was used for liquid medication by all nurses (n=5). 100% of nurses documented drug administration in medicine sheet with time and sign but only 91 % of nurses documented drug along with diluents used. **Conclusions:** There was an acceptable compliance to protocol during drug administration by most of the nurses. There is a need for nurses to be knowledgeable about medication being administered, side effects and timings so that they involve and explain to patients. Checking wrist band for patient identification and expiry date of medicine, needs enforcement.

P-135 Understanding of Patients' Experience for Eating-Related Issues and Trials of Complementary and Alternative Medicine during Chemotherapy

Hye Kyung Song^{1,2}, Sun Jung Kim¹, Song Mi Lee¹, Kang Young Lee¹, Hei-Cheul Jeung¹, Sanghee Kim² ¹Gangnam Severance Colorectal Cancer Clinic, ²Yonsei University, Graduate School of Nursing, South Korea

Purpose: Eating-related issue is common for colorectal cancer patients. Patients usually experience dietary struggles caused by the disease itself and cancer treatment as well. It may affect patients' quality of life and also compliance with treatment and it is crucial for oncology nurses to understand these struggles and to support patients. The aim of this study is to investigate perceived changes of ingestion-related symptoms and prevalence of CAM (Complementary and Alternative Medicines) usage in the colorectal cancer patients who receive chemotherapy. **Methods:** A descriptive survey design was used with 51 patients who were diagnosed with colon cancer and received chemotherapy. A structured questionnaire was used and descriptive statistics were used for analysis. **Results:** Patients reported perceived changes of ingestion-related symptoms such as anorexia (29%), fatigue (21.6%), stomatitis (21.6%), taste change (19.6%), nausea (19.6%), and dry mouth (17.6%). Among the participants, 54.9% reported they were taking one or more CAM, and commonly used CAM is over-the-counter medications such as Korean red ginseng, Vitamin, and Omega 3. Vegetable supplements such as Burdock, Artemisia, Bellflower, and Pumpkin juice, and mushrooms like Phellinus, Ganoderma lucidum, and Maitake were also widely taken. **Conclusions:** To understand the dietary problems in the colorectal cancer patients plays a key role in providing proper nursing care and supportive measure. Thus, oncology nurses should proactively assess and discuss nutrition or diet-related issues including CAM usage at the initial phase of patient care.

P-136 QOL of Cancer Patients who Choose Vaccine Therapy and Influence Factor

Mayumi Tamura¹, Norie Suetsugu², Shigeru Yutani³ ¹Faculty of Nursing, St. Mary's College, Japan; ²Institute of Nursing, Faculty of Medicine, Saga University, Japan; ³Kurume University Cancer Vaccine Center, Japan

Purpose: To clarify the QOL of cancer patients who choose a cancer peptide vaccine. **Methods:** Twenty-four cancer patients who visited A university Cancer Vaccine Center for the first time to receive a cancer vaccine participated in this study. Data were collected from questionnaires based on the immunity power QOL investigation (FACT - BRM) and Yamasaki's Japanese edition of the 13-item SOC, and semi-structured interviews. The Ethical Committee approved the investigation. **Results:** The average of the QOL scores was 113.5 (range of 0-160). A significant correlation was seen between QOL and recurrence/metastasis and SOC. The group of high QOL scores had a good physical condition and felt much support ($p < .01$). The low QOL-scoring group of patients had a smaller number of patients who had a job and lived with their families than the high QOL-scoring group. Patients said, "When I die, I may become confused. But I don't worry now," "I'll try any treatment whatever that might lead to a prolonged life," "This treatment costs a lot of money, but there is no substitute for life." **Conclusions:** Cancer patients who want get this treatment have to go to the outpatient department. Factors influencing the QOL of cancer patients who choose vaccine therapy were determined to be physical condition and feeling of support from their families. Patients from distant areas may especially feel so. There was a correlation between QOL and SOC. It was found that SOC had "comprehensibility", "manageability" and "meaningfulness" in high QOL-scoring patients.

P-137 The Influence of Adjuvant Chemotherapy on the Role of a Mother in Breast Cancer Patient

Kayo Inoue¹, Harue Arai² ¹Suzuka University of Medical Science, Japan, ²Osaka University Graduate School of Medicine, Japan

Purpose: To explore the components of the mother's role during chemotherapy for breast cancer and the factors that inhibit their role because the incidence of breast cancer has been increasing among women with young children. **Methods:** Semi-structured interviews were conducted with 5 mothers with young children; they were receiving outpatient treatment with adjuvant chemotherapy in breast cancer. This study was approved by the institutional ethical committee. **Results:** The mean age of the women was 44.4 years, and they each had two children (mean age 12.5 years, range, 4-17). Nine major themes were identified (six maternal roles and three inhibiting factors). Components of the mother's role while receiving outpatient chemotherapy included "understanding the pattern of side effects and preparing for the next chemotherapy", "performing their role while dealing with their physical condition", "helping their children transition to the new role", and "reaffirming their role and considering the potentially changed role". Negative aspects included "feeling sorry about not being able to be a good mother"; however, "the presence of their children during chemotherapy provided them mental resilience". The factors inhibiting the mother's role were "lower

activity affected by general fatigue", "affect to prepare meals because of nausea" and "hesitation to attend school events because of hair loss". **Conclusions:** Oncology nurses must be aware of the mother's needs and assist them in reducing the side effects of chemotherapy.

P-138 Educational Need on Radioactive Iodine Ablation among Primary Caregivers

Su Min Ahn *Thyroid Cancer Clinic, Yonsei University College of Medicine, South Korea*

Purpose: Detecting thyroid cancer in the early stages is needed in order to better treat the patient. Primary caregivers also need an educational plan to better help and support the patients in dealing with cancer. The overall purpose is to formulate a plan and materials for the caregivers in order to care for the cancer patient. **Methods:** Thyroid cancer patients at a Yonsei University Hospital had thyroid cancer surgery, and afterwards were prescribed radioactive iodine ablation. Caregivers were family members who were twenty years and older and literate. From October 20th, 2014–December 3rd, 2014, 140 surveys were given to the caregivers. **Results:** Some important results are noted as follows. (1) Caregivers were mostly spouses with 65 (46.4%) and 18 (12.9%) were relatives. Average period of time in taking care of patients was 3.54±6.30 months. 109 (77.9%) did not accompany the patient for radioactive iodine ablation. 32 (22.9%) replied yes for the family history of thyroid cancer. (2) All patients had surgery (100%), radiation therapy, hormone therapy, and chemical substances (in this order). Treatment capacity was 100-150mCi for 86(61.4%), which was the most. Thyrogen was not used by 81 (57.9%). (3) Highest requested education was on side effects with 4.36±0.52. Other information such as hormone therapy, diet, preparation, etc. was also asked about. Overall purpose and action was the highest with 4.74 points. Information about family groups who were in similar conditions was the lowest with 3.64. (4) Caregivers who were more interested in their own health matters had higher educational needs for the patients ($t = -2.104$, $p = .037$), and often got information from health care personnel and become more interested ($t = 2.609$, $p = .010$) in patient care. **Conclusions:** In this research, by using a very basic tool, we can see that caregivers are a most important support system. Educational programs for patients and their caregivers should be available in a clinical setting.

P-139 Care of Patient with Graft versus Host Disease: Case Study

Radhika Padawe, Meera S. Achrekar *Nursing Department, Tata Memorial Centre, India*

Purpose: To assess the impact of GVHD on patients and plan for appropriate nursing intervention. **Methods:** Five patients who had undergone peripheral blood stem cell transplant and admitted with GVHD complication post transplant were selected by convenient sample method. Care analysis was carried from admission to discharge. **Results:** Among the five patients, three patients were diagnosed with ALL, one with CML, and one with AML. They were in age group of 10 yrs to 50 yrs. All had received allogeneic stem cell transplant. All five patients were admitted presented with greenish loose stool and diagnosed as Gut GVHD. Volume of stool varied from 600 ml to 4500 ml/day. Two patients had also presented with skin rash and diagnosed as skin GVHD. One of them had discoloration of mucus membrane, low SpO2 saturation and diagnosed as liver and lung GVHD. Patient with gut GVHD received Cap- Budez-CR and parenteral administration of Cyclosporine, Prednisolone, Etanercept, total parenteral nutrition and blood product transfusion. Local application of Betnovate, hydrocortisone, petroleum jelly /body lotion for skin GVHD, budesonide and seroflo inhalation for lung GVHD. Pain was managed by administration of INJ Tramadol and paracetamol. **Conclusions:** All post BMT patient need to be monitored for Acute or Chronic GVHD. Nursing management along with medical management will provide the way for patient's recovery and their Quality of Life.

P-140 Oncology Ward Implement Central Venous Catheters Bundle Care Experience Sharing

Ching-Er Lee *Nursing Department, Chi Mei Hospital, Liouying, Taiwan*

Purpose: Central venous catheters (CVC) Bundle care implemented include: Hand hygiene, maximum sterile surface protection, use appropriate and effective skin disinfectant, select the appropriate site, the daily assessment of whether. **Methods:** Develop implementation plans: (1) Care measures to strengthen the combined cognitive health care personnel. (2) Implementation of health care staff caring for the combined measures compliance. (3) Regular monitoring of the performance of the central conduit quality of care. (4) Reduce central

catheter-related bloodstream infections. (5) Enhance patient safety and health care. **Results:** Statistics 2013 January-June bloodstream infections density 1.36 0/00. After the planned implementation of 2014 January-June bloodstream infections density 0.96 0/00. **Conclusions:** Propelled modular proven to reduce bloodstream infections of care in clinical care, successfully reduce bloodstream infections, and show the effectiveness of this combined care. Therefore the Court continues to promote this care plan, and incorporate it into the hospital norms and promote in all units.

P-141 Disturbance of ADL of Chemotherapy-Induced Peripheral Neuropathy and Quality of Life in Cancer Patients-Mediating Effect of Psychosocial Distress

Kyung Yeon Kim¹, Seung Hee Lee¹, Jeong Hye Kim², Oh Pok-Ja³ ¹Nursing Department, Korea Cancer Center Hospital, Seoul, Korea, ²Department of Clinical Nursing, University of Ulsan, Seoul, Korea, ³Nursing Department, Sahmyook University, Seoul, Korea

Purpose: The purpose of this study was to examine the mediation of psychosocial distress in the relationship between disturbance of ADL of chemotherapy induced peripheral neuropathy and quality of life in order to provide a basis for planning nursing interventions to improve the quality of life in cancer patients. **Methods:** A purposive sample of 130 patients treated with chemotherapy were recruited in the cross-sectional survey design. Data were collected using self-report questionnaires. The instruments were Chemotherapy Induced Peripheral Neuropathy Assessment Tool (CIPNAT), Hospital Anxiety Depression Scale (HADS), and Functional Assessment of Cancer Therapy-General (FACT-G). **Results:** The mean score for disturbance of ADL of chemotherapy induced peripheral neuropathy was 3.30. Overall quality of life was 2.48. The mean score was 0.99 for anxiety and 1.07 for depression. The prevalence was 35.4% for anxiety and 47.7% for depression. There were significant correlations among the three variables, disturbance of ADL of chemotherapy induced peripheral neuropathy, psychosocial distress, and quality of life. Psychosocial distress had a complete mediating effect ($\beta = -.74$, $p < .001$) in the relationship between disturbance of ADL of chemotherapy induced peripheral neuropathy and quality of life (Sobel test: $Z = -6.11$, $p < .001$). **Conclusions:** Based on the findings of this study, nursing interventions programs focusing on disturbance of ADL management, and psychosocial distress decrease are highly recommended to improve quality of life in cancer patients.

P-142 Drug Adherence and Quality of Life in Breast Cancer Patients Receiving Adjuvant Endocrine Therapy - Based on Theory of Inner Strength in Women

Sujin Ha¹, Eunjung Ryu² ¹National Cancer Center, South Korea, ²College of Nursing, Chung-Ang University, South Korea

Purpose: The purpose of this study was to describe associations among symptom experience, inner strength, quality of life and drug adherence and to predict quality of life in breast cancer patients receiving adjuvant endocrine therapy. **Methods:** A sample of 118 participants with breast cancer receiving adjuvant hormonal therapy were recruited from a breast cancer unit at National Cancer Center in Korea, designed comprehensive cancer center since 2000. Patients were eligible for participant if they were aged 18 years or older, had a diagnosis of breast cancer with adjuvant endocrine therapy. Patients were ineligible for participant if they had begun taking antidepressants within the past 30 days. Patients completed a demographic questionnaire, the M. D. Anderson symptom Inventory (MDASI) for symptom experience, the Connor-Davidson Resilience scale 2 (CD-RISC2) for inner strength, the Medication adherence scale (MMAS-8) for drug adherence, and the Functional Assessment of Cancer Therapy-General (FACT-G) for quality of life. **Results:** The mean age of the sample was 50.52 years (± 10.5). Most women (71.2%) were married and the majority (83.9%) of all patients had been diagnosed with stage I or II breast cancer. The mean score of MDASI-K (symptom experience) was 2.50 (± 2.17); the symptom severity was 2.59 (± 2.24) and the symptom interference was 2.31 (± 2.35). The mean scores of CD-RISC2 and FACT-G were 5.51 (± 2.17) and 74.38 (± 15.33), respectively. Adherence rate by pill counts was 91.25% (± 12.48) and drug adherence score by MMAS-8, a self-reported method, was 5.89 (± 1.34). The results showed that there was a positive correlation between inner strength and quality of life ($r = .48$) and a negative correlation among symptoms severity, interference, pill counts and quality of life ($r = -.41$, $-.57$, $-.48$, and $-.23$, respectively). The stepwise multiple regression analysis indicated that the symptom interference, inner strength, new normal and drug adherence were identified as significant predictors of quality of life in breast cancer patients

receiving adjuvant endocrine therapy. The model accounted for 51.8% of the variance in quality of life. **Conclusions:** In conclusion, it is necessary to establish nursing interventions to reduce symptom experience and to reinforce inner strength and adaptation to new normal in order to improve quality of life in breast cancer patients receiving adjuvant endocrine therapy. In addition, adverse effects of endocrine therapy and reduced quality of life should be considered in the development of nursing interventions.

P-143 Current Status of Cancer Centers in Korea

Su Youn Hong¹, Kwang Sung Kim², Young Sook Tae³ ¹Nursing Department, Seoul St. Mary's Hospital, Korea, ²Oncology Center, BMT Center, Seoul St. Mary's Hospital, Korea, ³College of Nursing Kosin University, Korea

Purpose: To survey the current status of cancer centers in Korea. **Methods:** 21 cancer centers, from regional cancer centers to the largest hospitals, were surveyed from October to November 2014. The questionnaire was developed by the board members of the oncology nursing society. **Results:** A center specializing in cancer treatment was either a cancer hospital or a center affiliated with a larger hospital. 81% operated wards solely for cancer patients. The average number of beds was 339.1, and each center had independent laboratory, chemotherapy infusion rooms and pharmacy. Degree of nursing staff varied from grades 1 to 3. As an education program for new nurses, the nursing department and ward jointly educated the principles and basic practice. In cancer nursing, the policy of reverse isolation for patients with leukopenia varied according to institution. Assessment, intervention and evaluation of cancer pain were carried out effectively, although committees that decided on cancer pain management policy were few. In the education for a patient, the oncology APN mainly educated on the adverse effects of chemotherapy and central line care. 95.2% appointed oncology APNs, who were variously designated as nurse, coordinator or physician assistant in 50%. 14.3% of APNs held concurrent positions as head nurse or research nurse. **Conclusions:** As cancer increased medical professional organizations have shown a variety of forms of organization and human resources management. It seems to require a political approach of the institutions for pain control, chemotherapy, central venous catheter management, patient education, the role and qualifications of APN.

P-144 Effectivity of Mentoring Program by Head Nurse Can Increase the Behavior of Nurses in Maintaining the Safety Away from Hazards Chemotherapy

Ade Suryani *Dharmais Cancer Hospital, Indonesia*

Purpose: Mentoring program by head nurse can increase the behavior of nurses in maintaining the safety away from hazards chemotherapy. The phenomenon was found in the headspace Dharmais cancer hospital mentoring, behavior and safety nursed themselves from the hazards of chemotherapy has not been optimal. This study aims to get a picture of the effectiveness of mentoring programs to increase head nurses conduct themselves in maintaining the safety of the hazards of chemotherapy in inpatient room RSKD. **Methods:** This study used the method of quasi experiment with pretest-posttest control group design. The sample used in 66 nurses (33 intervention group, 33 control group). Intervention mentoring program conducted in the intervention group after training mentoring program head nurse. **Results:** The results showed the behavior of nurses in maintaining personal safety from hazards chemotherapy was significant difference before and after the mentoring program head nurse in the intervention group ($p < .05$). **Conclusions:** Mentoring programs can improve the behavior of head nurse in keeping away from the hazards of chemotherapy safety. Mentoring program head nurse by way of coaching, monitoring, and evaluation needs to be conducted on the behaviour of personal safety from hazards chemotherapy nurse at the hospital.

P-145 Impact of Supportive Care Needs and Family Support on Quality of Life of Advanced Cancer Patients in Chemotherapy

Jee-Hye Bae, Myungsun Yi *Nursing Department, Seoul National University, Korea*

Purpose: To identify relationships among supportive care needs, family support, and quality of life of advanced cancer patients in Korea, and to identify factors influencing quality of life. **Methods:** The data were collected from 120 adult cancer patients receiving palliative chemotherapy after being diagnosed with stage IV of solid tumor at a university hospital located in Korea. The Supportive Care Needs Survey-short form 34, Family Support questionnaire, and Functional Assessment Cancer Therapy version 4 were used to measure the variables.

Results: The mean age of the participants was 56.54 (± 11.61) years and 52.5% were male. The most frequent type of cancer was colon and rectal cancer (35.8%). Period since diagnosis was 23.78 (± 27.43) months and 53 (44.2%) of the participants had experience of recurrence of cancer. Quality of life of the participants was positively correlated with family support ($r=.473$) and negatively correlated with supportive care needs ($r=-.487$). Stepwise regression analysis revealed that the quality of life of the participants was explained by age, family support, psychological needs, and physical/daily living needs, accounting for 53.5% of the variance. The most influencing factor was physical/daily living needs. **Conclusions:** The results of this study indicate that oncology professionals must meet physical/daily living needs as well as psychological ones to promote quality of life of advanced cancer patients receiving palliative chemotherapy. Oncology professionals must also provide family-oriented interventions to reinforce family support, because family members play an important role in promoting quality of life for advanced cancer patients.

P-146 The Application of Neuman System Model to Nursing Caring of a Patient with Newly Diagnosed Thymic Carcinoma-Experience Sharing

Yen-Ling Tsai *Chi Mei Medical Center, Liouying, South Korea*

Purpose: Thymic carcinomas originate from anterior mediastinum and account for approximately 0.2%-1.5% of the incidence of all human cancers worldwide. In Taiwan, the annual incidence of thymic carcinoma, 6.3 cases for every million people, is higher than that in Western countries, 1.5 cases for every million people. This works out to about 150 new cases of thymic carcinoma per year in Taiwan (Ministry of Health and Welfare, 2014). In one case with newly diagnosed thymic carcinoma, the Neuman system model was applied to the nursing care of this patient, for the physical and psychological distress related to the fear of cancer. So the intervention by the health care team, with "family" as the fundamental unit of care Case given professional care. And assist caregivers in the face of change and adaptation role care skills training related to the case and family get the quality of life in all aspects. **Methods:** Newman system model to "holistic" view investigate cases of physical, psychological, social and cultural development, spiritual five variables. Were applied to the nursing care of thymic carcinoma patients in November, 2013, around the case are facing "pressure source", included intrapersonal factor, interpersonal factor, extrapersonal factor, and use three lines of self-defense protection status, has reached a balance of body and soul. **Results:** In order to give the psychological support, the innermost feeling of this patient and his caregiver were encouraged to be expressed; some supporting groups for cancer patients in our hospital also offer this patient mental support through the sharing of each patient's experience. In addition, by means of musical and exercise therapy, the patient's anxiety was relieved. **Conclusions:** The mental accommodation and nursing technique of the caregiver were also provided. The three defense lines and the self-care ability of this patient could be enhanced and stabilized by utilizing these nursing interventions. Therefore, the care of this patient could be maintained by himself and his families at home, and the life quality of this family, after leaving hospital, would also be improved.

P-147 The Nursing Experience of a Lymphoma Patient with the Application of Watson's Caring Theory

Shion-Ying Fong *Chi Mei Medical Center, Liouying, South Korea*

Purpose: Chemotherapy is one of the commonly treatment for cancer. But patient discomforted with the drug side effects, worry about disease prognosis, treatment effect uncertainty and inner distress. These often make patients feel frustrated, and give up the treatment. Although medical advances can improve cancer cure rate, but the side effect of chemotherapy made patient exhausted, mouth gum changing, hair loss, loss of appetite, nausea and vomiting. These remain a major challenge of health care. Therefore nursing care should have detailed assessment, psychological reactions and the side effects of the chemotherapy. Using nursing interventions and integrity of the individual to help patients continue to complete the entire treatment process. These care methods are very important issue. **Methods:** According to nursing care of Watson's theory, it used ten care factors as nursing care guidelines. Every time contacted with patients providing good timing for nursing care. Humanity care is human nature. It is also represent humanity nursing. These care methods had applied since March 2013 at Lymphoma patient. Nurses use these effective professional role and skills to reduce the psychological hopelessness of patients, and provide timely appease. **Results:** It established a good and intensive care relationship with patient by listening with conviction, persistent and initiative care and open-ended questions to encourage the patient expressed the inner-feelings. It also

provided physical care, decrease chemotherapy discomfort with substantial support. It relevant new information or treatment, by using activity, diet or drugs health education to increase self-care capacity and other related information. It gave patients timely feedback, enhanced self-affirmation to produce a sense of accomplish, and to proceed participate in self-care activities. **Conclusions:** Emphasizing the "care feeling" to patient via persistent and initiative care, timely appease. And encourage the patient to face the disease, to improve self-care capacity, to maintain the best quality of life, to participating social contact and activities, and share their experiences at association of disease. Moreover, it enhanced self-affirmation and rebuild living values to face the future with optimistic attitude.

P-148 The Status for Radiation Treatment of Cancer Patients and Ambulatory Nursing Activity in Radiotherapy Unit

Jeong Eun Mo¹, Jeong Yun Park² ¹*Department of Radiotherapy Unit of Kyung Hee University at Gang Dong, South Korea, 2*Department of Clinical Nursing, University of Ulsan, South Korea

Purpose: The purpose of this study is to review on characteristics of patients who receive radiotherapy in a radiotherapy unit and to analyze ambulatory nursing activity of radiotherapy unit. **Methods:** This was a retrospective study. The data were collected from radiotherapy unit of a hospital located in Seoul. Ambulatory nursing activity was collected by the self-reporting method. **Methods:** There was total of 5804 radiation therapy from March 2013 to February 2014 in a hospital. The most common type of radiotherapy was a 3 dimensional conformal radiotherapy (3DCRT) due to insurance coverage. The most common area of radiotherapy was pelvic area, which is related to high proportion of rectal cancer and cervical cancer. Ambulatory nurse in radiotherapy unit spent counseling, patient education in newly visited patient, and coordination with other department. **Results:** Results show ambulatory radiotherapy nurse plays a role in managing radiotherapy unit as a direct care provider, an educator, a counselor, and administrator. **Conclusions:** For the improvement of ambulatory care, it is needed to develop the patient education program for radiation therapy and standardize the ambulatory nursing services.

P-149 Factors Influencing on Change of Quality of Life in Patients Undergoing Hematopoietic Stem Cell Transplantation: A Longitudinal and Multilevel Analysis

Hyang Sook So¹, Chi Eun Song², Jieun Jeon³, Hye Jung Jung³, Yoonjeong Cha³ ¹*Nursing Science, Chonnam National University, Korea, 2*Hematology Department, Chonnam National University Hwasun Hospital, Korea, ³*Nursing Department, Chonnam National University Hospital, Korea*

Purpose: This study was the prospective longitudinal study based on Roy's adaptation model to identify changes of the quality of life in patients undergoing allogeneic hematopoietic stem cell transplantation. **Methods:** The questionnaires were administered before HSCT, 30 and 100 days after HSCT. Of the 48 potentially eligible patients, forty four (91.7%) participated in this study and forty (93.2%) completed the questionnaires at 100 days after HSCT. Multilevel analysis was applied to analyze changes of quality of life. **Results:** Overall, quality of life showed a decreasing tendency from pre-HSCT to 100 days after HSCT. The adaptation level of participants was compensatory. Type of conditioning was the most significant factor influencing on the quality of life before HSCT ($\beta 00=79.92$, $p<.001$; $\beta 01=-12.64$, $p<.001$) and the change rate of quality of life ($\beta 10=-1.66$, $p=.020$; $\beta 11=2.88$, $p=.014$). Symptom severity ($\beta 20=-1.81$, $p=.004$), depression ($\beta 30=-0.58$, $p=.001$), social dependency ($\beta 40=-0.35$, $p=.165$), and loneliness ($\beta 50=-0.23$, $p=.065$) had a negative effect on the change of quality of life. Symptom severity and depression were the statistically significant influencing factors on the change of quality of life. **Conclusions:** According to the result of this study, the development of nursing intervention is needed to improve quality of life in patients undergoing allogeneic hematopoietic stem cell transplantation in the early immune reconstruction period. The interventions should include the program for enhancing to coping capacity and the program for helping to control of symptom severity and depression. Also these interventions need to be applied at the beginning of HSCT and multidisciplinary approach is helpful.

P-150 The Risks and Related Factors of Cancer among Allogeneic Hematopoietic Stem Cell Donors in Taiwan

Yun Jung Tsao^{1,2}, Pei-Tsung Kung³, Yung Hua Lai¹, Shih-Peng Yeh^{2,4}, Wen-Chen Tsai¹ ¹*Department of Health Services Administration, China Medical University,*

Taiwan, ²China Medical University Hospital, Hematology, Taiwan, ³Department of Healthcare Administration, Asia University, Taiwan, ⁴Department of Medicine, China Medical University, Taiwan

Purpose: In recent years, the use of allogeneic hematopoietic stem cell (HSC) transplantation is increased. The past literature revealed that granulocyte colony-stimulating factor (G-CSF) increased the risk of cancer. However, peripheral blood stem cell donor needed to receive the G-CSF during donation. By now, in Taiwan, no study confirmed that peripheral blood stem cell collection increased the risk of cancer after G-CSF mobilization was used in healthy allogeneic donors. The aim of this study was to evaluate allogeneic hematopoietic stem cell donors in risk of cancer and examined the relevant factors of cancer in Taiwan. **Methods:** This study was a retrospective cohort study. The National Health Insurance Research Database of Taiwan between 1999 and 2010 was used. The study subjects included 451 bone marrow stem cell donors (BMSCs) and 756 peripheral blood stem cell donors (PBSCs). After a ratio of 1:10 propensity score matching, a total of 13277 subjects were included in the study. We conducted the Cox proportional hazards model to examine the incidence risk of cancer on hematopoietic stem cell donors and relevant factors. **Results:** Incidence risk of cancer in bone marrow stem cell donors (0.56 per 1000 person-years) was significantly lower ($p < .05$) than that of the public (1.27 per 1000 person-years); incidence risk of cancer in peripheral blood stem cell donors (0.75 per 1000 person-years) was significantly lower ($p < .05$) than that of the public (2.15 per 1000 person-years). The cancer risk was lower in bone marrow stem cell donors than that of general population, but there was no significant difference (HR=0.49; 95% CI :0.12-2.01, $p > .05$); peripheral blood stem cell donors also had lower risk of cancer compared with the general population, and it also had no significant difference (HR = 0.33; 95% CI: 0.08-1.365, $p > .05$). There was insignificant difference of the cancer risk in bone marrow and peripheral blood stem cell donors groups (HR=1.91, 95% CI :0.14-26.41). Age, gender, environmental condition and income were not relevant factors with incidence of cancer ($p > .05$). **Conclusions:** This study showed that incidences of cancer among allogeneic HSC donors were lower than that of general population. The risk of cancer in peripheral blood stem cell donors was not higher than that of bone marrow stem cell donors.

P-151 Nursing Experience of Hopelessness for a Patient with Terminal Cancer

Yi Hsiu Lin *Department of Nursing, Chi Mei Medical Center, Liouying, Tainan Taiwan*

Purpose: This article to describe a clinical experience in hopelessness and uncomfortable, side effect after treatment in a case study of terminal with renal cancer. Provides specific, individual and supportive of professional nursing care plan, to enhance the patient's quality of life. **Methods:** Author provided active caring, listening and accompanying to establish a good nurse-patient relationship. During the nursing period the authors used the Gordon 11 Functional Healthy Assessment Model, and data was collected through interviews, observations, and physical assessment, care plans showed that the patient suffered from a Hopelessness and Imbalance nutrition: less than body requirement. **Results:** According to case in the hopelessness of disease, guide the patient tell the inner thoughts and feelings, enhance interaction with the outside world and reestablish confidence, find self-worth and affirmation, so he would like to join course of treatment. In nutrition less than body requirement, reducing discomforts from treatment side effects resulting, after discussion we designed a simple list of calorie replacement, he can choose what food he want and increase nutritional intake by himself. **Conclusions:** In the patient is terminal cancer, provides supportive of professional nursing care, establish a trust relationship in the hopelessness, and continues to provide nutritional care, maintaining the patient's quality of life. Want to share nursing experience, provide more information and references to patient care of nursing staff.

P-152 Comparison of the Stool Form and Frequency between Lower Anterior Resection and Ultra-low Anterior Resection in Rectal Cancer

HyangRan Lee¹, Jeong Yun Park², Jin Sook Song¹, Jung Rang Kim¹
¹Department of Colorectal Clinic, Asan Medical Center, Korea, ²Department of Clinical Nursing, University of Ulsan, Korea

Purpose: To compare patient outcome of lower anterior resection (LAR) and ultra-low anterior resection (uLAR) for rectal cancer. **Methods:** The participants of this study were 110 rectal cancer patients with Lower Anterior Resection (LAR)

who regularly scheduled follow up at Asan Medical Center in Seoul, Korea, from March 2015 to May 2015. Data were collected using self-reported questionnaires and clinical records. **Results:** The mean age of patients was 58.8 yr in the LAR (n=58) and 59.8 yr in the uLAR (n=52). No significant differences were found between the two groups regarding gender, age, and operation method. There was significant difference between the two groups in terms of stool form and frequency. Normal shape (Like a sausage or snake) was 72.4% (n=42) in the LAR and 48.1% (n=25) and in the uLAR. Soft blobs was 15.5% (n=9) in the LAR and 44.2% (n=23) in the uLAR, respectively ($p = .015$). The mean minimum stool frequency was 3.74(±3.08) in the LAR and 6.60(±6.56) in the uLAR, respectively ($p = .004$). The mean maximum stool frequency was 4.83(±3.04) in the LAR and 7.85(±7.40) in the uLAR, respectively ($p = .005$). **Conclusions:** This study showed there was the abnormal stool form and increased defecation in the uLAR comparing LAR. Therefore, it is necessary to provide patients with bowel management and operation information through evidence-based nursing intervention. A future study with a larger number of cases and long-term follow up will be necessary to confirm the recovery in bowel habit following surgical resection for rectal cancer.

P-153 Development and Effects of Self-Efficacy Promoting Program in Breast Cancer Patients Receiving Chemotherapy

Park Kyung Hee *Department of Nursing Science Kosin University Graduate School, Korea*

Purpose: This research was to develop of self-efficacy promoting program for self-management of chemotherapy in breast cancer patients receiving and identify the effects of this program on patient's self-efficacy, self-care behavior and quality of life. **Methods:** A non-equal, comparative pre and post experimental design with convenient sampling method was utilized. 45 chemotherapy in breast cancer patients receiving agree to participate in this study and were divided into two group, experimental (22) and control (23). Self-efficacy promotion program was consisted of provision of booklets, movies, self-care guidelines for infection prevention, SMS, self-care checklist, counseling, telephone counseling. The intervention was provided to 1-2 person each time for 30minutes, total 220minutes. **Results:** (1) The development of self-efficacy promoting programs for breast cancer patients receiving chemotherapy. Education by using videos, booklets, infection prevention guidance, individual interviews, self-care checklists, telephone counseling. This three-week program covered a total of eight sessions and each session average 30 minutes. (2) Hypothesis 1 "After the intervention, the increase in the level of self-efficacy in the experimental group will be greater than the one in the control group." This hypothesis was tested by ANCOVA and was supported after the intervention was administered, the increase in the level of self-efficacy was significantly greater in the experimental group than the control group. Thus the hypothesis 1 was supported ($F = 5.30, p = .009$). (3) Hypothesis 2 "After the intervention, the increase in the level of self-care behavior in the experimental group will be greater than the one in the control group." This hypothesis was tested by ANCOVA and was supported after the intervention was administered, the increase in the level of self-care behavior was significantly greater in the experimental group than the control group. Thus the hypothesis 2 was supported ($F = 3.96, p = .027$). (4) Hypothesis 3 "After the intervention, the increase in the level of quality of life in overall health in the experimental group will be greater than the one in the control group." This hypothesis was tested by ANCOVA and was supported after the intervention was administered, the increase in the level of quality of life in overall health was significantly greater in the experimental group than the control group. Thus the hypothesis 3 was supported ($F = 4.94, p = .012$). (5) Hypothesis 4 "After the intervention, the increase in the level of quality of life in functional in the experimental group will be greater than the one in the control group." This hypothesis was tested by ANCOVA and was rejected since there was no significant difference in the increase in the level of quality of life in functional between the experimental group and the control group. Thus the hypothesis 4 was rejected ($F = 0.21, p = .809$). (6) Hypothesis 5 "After the intervention, the increase in the level of quality of life in symptoms in the experimental group will be greater than the one in the control group." This hypothesis was tested by ANCOVA and was rejected since there was no significant difference in the increase in the level of quality of life in symptoms between the experimental group and the control group. Thus the hypothesis 5 was rejected ($F = 0.03, p = .966$). **Conclusions:** The results of this study suggest that development and the effects of chemotherapy in breast cancer patients receiving self-efficacy promoting program as proposed in this research for self-management of chemotherapy in breast cancer patients receiving would be effective in increasing patient's degree of self-efficacy, self-care behavior and quality of life

in overall health. Therefore, self-efficacy promoting program can be utilized as an effective nursing intervention for self-management of chemotherapy in breast cancer patients receiving. This experimental study validates the effectiveness of the theory Bandura, this program can also be found useful for any other cancer patients, for clinical practice and for home care.

P-154 Uncertainty, Anxiety and Social Support in Cancer Patients Undergoing Surgery

Yu Jin Park¹, Myungsun Yi², ¹Seoul National University Hospital, South Korea, ²College of Nursing Seoul National University, South Korea

Purpose: The purpose of this study was to examine the relationships among uncertainty, anxiety and social support for cancer patients waiting for operation.

Methods: The study used a descriptive correlational design with a convenience sample of 120 cancer patients undergoing surgery in Korea in 2014. Uncertainty, anxiety, and social support were measured with self-report questionnaires using the State-Trait Anxiety Inventory, Mishel's Uncertainty in Illness Scale, and the Social Support developed by Tai. Data were analyzed by SPSS 20.0 Win program using frequency, percentage, Cronbach's alpha, t-test, ANOVA, Pearson's correlation coefficient, Chi-square test, hierarchical multiple regression.

Results: Mean age of the participants was 52 years, and most of them were female (72.5%). Type of cancer includes breast cancer (37.5%), thyroid cancer (32.5%), and bladder cancer (30.0%). The mean score of uncertainty was 81.43 in a range of 46-111, that of social support was 60.86 in a range of 16-80. And the mean score of anxiety was 47.13 in a range of 25-76. Uncertainty was positively correlated with anxiety and negatively with social support. No correlation was found between anxiety and social support. Hierarchical multiple regression analysis showed that social support was found to be a moderator between uncertainty and anxiety. **Conclusions:** Oncology professionals should consider uncertainty when providing psychosocial care for cancer patients waiting for the operation to relieve anxiety. In addition, social support, especially, family support needs to be reinforced to relieve anxiety by providing family-oriented nursing interventions.

P-155 Symptom Distress and Coping Style in Patients Undergoing Allogeneic Hematopoietic Stem Cell Transplantation

Hyang Sook So¹, Chi Eun Song², Kim Eun Yee³, So Young Bae³ ¹College of Nursing, Chonnam National University, South Korea; ²Hematology Department, Chonnam National University Hwasun Hospital, South Korea; ³Nursing Department, Chonnam National University Hwasun Hospital, South Korea

Purpose: This study was secondary analysis to find the relationship between symptom distress and coping style among patients undergoing hematopoietic stem cell transplantation in the period of early immune reconstruction. **Methods:** The participants recruited in the university hospital located in J province. Data collection period was from November 2012 to March 2014. The questionnaires including in symptom severity, depression, loneliness, social dependency, coping style, quality of life were administered before HSCT, day 30 and day 100 after HSCT in the original study. Symptom distress and coping style were reanalyzed in this study. Symptom distress was measured by M.D. Anderson Symptom Inventory and data collected in day 30 after HSCT was used for analysis. Coping style was explored by Way of Coping Questionnaire and data collected before HSCT was used for this study. Window SPSS program was used for the analysis. **Results:** Symptom severity of fatigue, disturbed sleep, and lack of appetite was mild to moderate. Symptom severity was positively associated with symptom interference. Patients significantly used emotion-focused coping rather than problem-focused coping in the stressful situation. Specially, self-controlling and positive reappraisal were used for solving the problem. But there was no relationship between symptom distress and coping styles. **Conclusions:** Symptoms such as fatigue, disturbed sleep, and lack of appetite need to be assessed by symptom cluster. Even though this study could not prove the relationship between symptom distress and coping styles, further study is required to develop the program for improving coping strategies against symptom distress.

P-156 Psycho-Social Nursing Intervention for Cancer Patients in Korea: Literature Review

Eun Young Park *College of Nursing, Gachon University, Korea*

Purpose: To search the status of psycho-social nursing intervention for cancer patients in Korea, such as effective results of study and practice in our cultural condition. **Methods:** Review the literature for psycho-social nursing intervention

from 2005 to 2014. Analysis the type and effectiveness of intervention. **Results:** 30 studies are reported during 10 years recently. Types of intervention are; stress management, forgiveness intervention, music therapy, hope and spiritual intervention, guided imagery, laughter therapy, logotherapy, cognitive behavioral intervention, expressive writing, mindfulness meditation, forest experience intervention and etc. In clinical setting, patient's education and counseling by the ONS's is increased successfully. **Conclusions:** More effort to set up the role of Oncology Nurse Practitioner in clinical setting and to study of nursing sensitive outcome in oncology nursing. Apply the effective intervention which was verified by various studies to cancer patients with suitable culture condition.

P-157 Oncology Nurses' Resilience, Professional Quality of Life and Caring

Misun Jeon¹, Sang Hee Kim², Ilson Ko², Sue Kim², Seung Hee Sun³ ¹Oncology Nursing, Graduate School of Nursing, Yonsei University, Korea, ²College of Nursing, Yonsei University, Korea, ³Hepatooncology, Korea University Guro Hospital, Korea

Purpose: To investigate oncology nurses' resilience, professional quality of life and caring. **Methods:** A cross-sectional descriptive correlational study was applied with 107 oncology nurses in general medicine-surgical ward, outpatient clinic and hematopoietic stem cell transplantation unit using self-report questionnaires. Data analysis included descriptive statistics, Pearson's correlation, and stepwise multiple regression, to examine factors affecting oncology nurses' caring with SPSS/WIN 20.0 program (IBM). **Results:** Oncology nurses indicated lower resilience, higher compassion satisfaction, higher levels of burnout, secondary trauma and lower caring. There was statistically significant relationship among caring, resilience, compassion satisfaction and burnout. There was statistically significant relationship between secondary trauma and burnout. Factors affecting oncology nurses' caring was compassion satisfaction and education with higher than graduate school. These factors explain 32.5% of explanatory power. **Conclusions:** This study demonstrated that oncology nurses' caring relates to resilience, professional quality of life and education. This association between them suggests several implications for nursing practice to encourage holistic nursing and management to promote resilience, compassion satisfaction and reduce burnout and secondary trauma. Additionally, further study to understanding oncology nurses' caring is recommended.

P-158 The Evaluation of Activities of a Palliative Care Ward in an Acute Care Setting

Miwako Eto¹, Kazuki Ohba², Keiichi Yamasaki³, ¹Nursing Department, Bell-land General Hospital, Japan, ²Palliative Care Department, Bell-land General Hospital, Japan, ³Palliative Care Department, Bell-land General Hospital, Japan

Purpose: To examine to what extent the palliative care ward achieved its roles based on the relevant data. **Methods:** The data such as average number of hospitalization day and the occupancy rate for the palliative care ward were reviewed. **Results:** The rate of discharge to their home was increased from 18% to 27 % over the past six months, although the rate of leave hospital mortality was over 80% at the establishment of the ward. It was presumed that the role functions and performance of the palliative care ward were getting disseminated to inside and outside of the hospital. However, palliative care is still generally imagined to be provided for dying patients, and it is difficult to get an earlier referral from medical practitioners. The knowledge of palliative care should be more disseminated, and an efficient palliative care screening system for cancer patients should be performed so that specialized palliative care was provided timely to all patients with complicated and severe pain. **Conclusions:** Palliative care screening system for cancer patients and education for health care providers should be implemented to develop the efficient palliative care system.

P-159 Impact of Fatigue on the Quality of Life of Thyroid Cancer Patients after Total Thyroidectomy

Jung-Eun Kim¹, Hyangkyu Lee², Sue Kim², Woong-Yoon Chung³ ¹Graduate School of Nursing, Yonsei University, South Korea, ²College of Nursing, Yonsei University, South Korea, ³Department of Surgery, College of Medicine, Yonsei University, South Korea

Purpose: To examine the effect of physical activity on fatigue and quality of life among thyroid cancer survivors after total thyroidectomy. **Methods:** Patients who had a total thyroidectomy were recruited from the thyroid clinic of cancer center in Seoul between May and September of 2014. Data were collected from 130 eligible participants using self-report questionnaires, consisting of the Revised Piper Fatigue Scale (RPFS) and the International Physical Activity

Questionnaire (IPAQ). Quality of life was measured by the Korean version of the Quality of Life-Thyroid scale (QOL-thyroid scale). SPSS was used to analyze the data through statistical methods, including ANOVA, t-test, Pearson correlation coefficient. **Results:** Non-exercisers reported higher scores of fatigue compared to exercisers. As the intensity of exercise increased, fatigue level decreased and the quality of life increased. A significant correlation was found between the quality of life and operative periods. **Conclusions:** The physical activity exhibited a positive effect on the quality of life as decreasing fatigue level and increasing quality of life. Nursing intervention for customized exercise for individual characteristics of thyroid cancer patients is needed.

P-160 Effects of Telephone Counseling on Cancer Screening: A Systemic Review

Li-Yun Lee *Department of Nursing, National Taipei University of Nursing and Health Science, China Medical University Beigang Hospital, Taiwan*

Purpose: The authors systemically reviewed published research on telephone counseling on cancer screening. To explore the design, interventions, results, and quality of these articles for application in clinical care. **Methods:** The keyword "cancer screening" and "telephone counseling" were used to search in the database including Cochrane Library, Pub Med, Science Direct-Health science collection, CEPS, and Guide to periodicals published in Taiwan. The search focused only on articles published between 2002 and 2011. An initial 569 articles were initially identified. After filtering based on inclusion criteria and excluding duplicates, we selected 6 remaining articles that contained randomized control trial for further analysis, synthesis, and evaluation quality based on the Modified Jadad Scale. **Results:** All 6 studies were used to randomized control trial design, most eligible subjects were female, the most common cancer screening was screening mammography, and these studies showed that telephone counseling can promote the rates of cancer screening, the behavior, knowledge, and satisfied for cancer screening in experimental group. **Conclusions:** The study provided nursing staffs for applying telephone counseling to shift individual intention for cancer screening and can build up counseling procedure and management model.

P-161 Knowledge Based Oncology Nursing Research and Practice: How Do We Get There?

Hye Jeong Jung, Go Eun Lee, Yeong Kyung Jeon, Eun Jin Jo, Ju Young Choi, Sang Hee Kim *Nursing College, Yonsei University, South Korea*

Purpose: The aim of this study was to analysis the current trends of study in the Asian Oncology Nursing, and to provide the explicit direction to improve the quality of published cancer nursing papers. **Methods:** A total of 167 articles published between 2010 and 2014 was reviewed using the criteria of analysis with the categories of research design, keyword, body of knowledge and using a conceptual framework or theory. **Results:** The results showed that patient-centered studies were the most common (70.9%). Also, much of the published research was conducted in hospital settings (75.5%) and used breast cancer patients (22.2%). Researchers undertook mostly quantitative studies (90.4%). The most popular topics were health in the nursing meta-paradigm (59.7%). Whereas there was only 2.4% in environmental topics. Almost half the papers derived explanatory knowledge from a body of knowledge. It was noted that a conceptual framework or a theory were rarely presented in the studies (7.8%). **Conclusions:** The findings of this review suggest that cancer nursing research is still in the developmental stage as seen in the past five years. A number of issues need to be tackled before improving output, such as using conceptual or theoretical frameworks and methodological challenges.

P-162 The Development of Salivary Stimulation Exercise on Post-Operative Mouth Dryness for Cancer Patients

Jeong Sook Park¹, Anna Kim² ¹Keimyung University, Korea, ²Kyungpook National University Hospital, South Korea

Purpose: This study was aimed at developing The Salivary Stimulation Exercise to reduce post-operative mouth dryness for cancer patients. **Methods:** The Salivary Stimulation Exercise was developed in consideration of locations of major salivary glands-the parotid gland & the submandibular gland-, minor salivary glands, and the salivary gland stimulation method with consultation of otolaryngologists and related study. The Salivary Stimulation Exercise is easy to learn for patients and induces saliva secretion by patients' tongues and hands. **Results:** Content Validity Index (CVI) was calculated based on CVI of the items judged by specialists consisting of three otolaryngologists, three dentists, and

two oncology nurses. The questionnaire was comprised of six items - one item of [rinsing mouth with cold water], four items of [methods of Salivary Stimulation Exercise], and one item of [four times a day]; CVI of all the six items scored more than 0.8 points, and the average CVI was 0.84 points. Therefore, all the items were included in the Salivary Stimulation Exercise. **Conclusions:** Salivary Stimulation Exercise needs to be verified about education and effect.

P-163 Trismus and Related Factors in Head and Neck Cancer Patients: A Systemic Review

Chiung Hui Fu *Department of Nursing, China Medical University Beigang Hospital, Yulin, Taiwan*

Purpose: This paper reviewed published researches on trismus for measurement, definition, and related factors in patients with head and neck cancer. **Methods:** A Systemic review trismus in Head and Neck Cancer Patients Received Treatment, Information search use MedLine, PubMed, EBSCO (CINAHL), CEPS, Taiwan Theses. Search 2001to 2011documents to key word trismus or mouth opening mouth open limited) and head and neck cancer, or head and neck cancer oncology or exercise. **Results:** We selected 12 remaining articles. Results showed: (1) The mean age was 57.6 years; (2) The most cancer sub-site was tongue and mouth floor; (3) The gauge was used in objective measurement; (4) The definition had been described as mouth opening of more than 35mm; (5) Surgery and radiation dose were the most significant factors predicting trismus; (6) Trismus could lead to oral dysfunction, lower social function, and poor quality of life; and (7) mouth opening exercise was recommend. **Conclusions:** Study results should help nursing staff learn the measurement methods, definition, influence factors, and intervention for trismus in clinical care.

P-164 Influence of Neoadjuvant Chemoradiation Therapy on Anorectal Function in Rectal Cancer Patients Based on Manometric Finding

Jin Sook Song¹, In Ja Park², Jeong Hye Kim³, Hyang Ran Lee¹, Jeong Rang Kim¹ ¹Department of Colorectal Clinic, Asan Medical Center, Seoul, Korea, ²Department of Colon and Rectal Surgery, University of Ulsan College of Medicine and Asan Medical Center, Seoul, Korea, ³Department of Clinical Nursing, University of Ulsan, Seoul, Korea

Purpose: To evaluate anorectal function based on manometric data after neoadjuvant chemoradiation therapy (nCRT) in rectal cancer patients.

Methods: We analyzed 312 patients with mid and low rectal cancer on whom anorectal manometry data were available for both before and after long-course nCRT from January 2012 to May 2015. Manometric parameters were compared between before and after nCRT and association with clinical characteristics was analyzed. **Results:** Of 312 patients, low rectal cancer patients were predominant (n=228, 73.1%). There were significant differences in the sphincter length (4.01±0.48 vs 4.09±0.43 cm, p=.001) and the maximal resting pressure (47.12±17.09 vs 50.84±16.31 mmHg, p<.001) between before and after nCRT, regardless of the location of the tumor. The maximal squeezing pressure, the maximal tolerable volume and rectal compliance slightly decreased without statistical significance. Changes in manometric data between before and after nCRT were not associated with changes of tumor location and clinical T/N category after nCRT. **Conclusions:** The long-course nCRT did not impair overall short-term anorectal function based on manometric data. A further study with clinical correlation and long-term functional results was required to evaluate clinical effect of nCRT on long-term anorectal function.

P-165 Experience of Changed Sexuality among Women with Gynecological Cancer in South Korea

Sangeun Jun¹, Hyunjin Oh² ¹College of Nursing, Keimyung University, South Korea, ²College of Nursing, Gachon University, South Korea

Purpose: To identify and explore the lived experiences of sexuality among Korean women after gynecologic cancer diagnosis and treatment. **Methods:** Ten women with gynecologic cancer were recruited from a University Hospital in South Korea. Group interviews were conducted in four focus groups with two to four participants per group. Qualitative content analysis was used to identify themes that elucidated the experience of changed sexuality in participants. **Results:** Three themes and 8 subthemes were identified: (a) negative symbolic meaning surrounding a diagnosis and treatment for gynecological cancer (b) changes in sexuality with gynecologic cancer (physical and psychological concerns about sexual life, and couples in appearance only), (c) life after cancer: my focus is on survival (health promotion, positive attitudes, and sisterhood).

Conclusions: The experiences of changed sexuality among women living with gynecological cancer can significantly impact personal and social life. This exploratory study suggests these concerns are not totally separated from overriding issues of surviving cancer. Since sexuality is influenced by multidimensional and dynamic relationships with partners, support services for women and their partners may alleviate concerns surrounding sexual practices.

P-166 Symptom Cluster and Quality of Life in Breast Cancer Survivors

Juhee Nho¹, Sun-Seog Kweon² ¹College of Nursing, Chonnam National University, South Korea, ²Department of Preventive Medicine, Chonnam National University Medical School, Gwangju-Jeonnam Regional Cancer Center, Chonnam National University Hwasun Hospital, South Korea

Purpose: Breast cancer survivors experience a number of symptoms, concurrent, not only experience symptoms alone. Each symptom in the cluster is independent, but strongly interrelated, and one symptom can impact another symptom through its effect on a third symptom. Symptom cluster effects on quality of life, however association between symptom cluster and quality of life in breast cancer survivors remain unclear. This study was to assess symptom cluster and quality of life and to identify the impact of quality of life on symptom cluster in breast cancer survivors. **Methods:** A total of 241 patients treated for breast cancer survivors recruited between July, 2011 and May, 2014. Each subject was completed a survey including the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire and the Breast Cancer-Specific Quality of Life Questionnaire. Described are the presence and frequency of 12 symptom scales and their associations with 8 quality of life domains (physical, emotional, role, social, cognitive, sexual function, future perspective, body image). **Results:** The patient population has mean age 46.9(±8.7) years. Symptom cluster 1 consisted of anxiety, depression, appetite loss, fatigue, insomnia, dyspnea, and accounted for 25.69% of the total variance. Symptom cluster 2 consisted of arm symptom, breast symptom, pain, systemic side effects, nausea/vomiting, constipation, and accounted for 25.53% of the total variance. The higher-symptom group of symptom cluster 1 had significantly poorer quality of life in all domains except social and sexual function than the lower-symptom group. Also, the higher-symptom group within symptom cluster 2 had significantly poorer quality of life in all domains, except for sexual function. **Conclusions:** Breast cancer survivors with symptoms may have a specific cluster pattern. Some symptom cluster may have a negative impact on quality of life. More attention to the reduction and management of disease and treatment-related symptoms could improve quality of life among breast cancer survivors.

P-167 Development and Evaluation of Information Support Program for Spouses of Women with Breast Cancer Using Mobile Phone

Eun Jin Kwon¹, Myungsun Yi² ¹Graduate School of Nursing, Seoul National University, Korea, ²College of Nursing, Seoul National University, Korea

Purpose: The purpose of this study was to develop information support program for spouses of women with breast cancer using mobile phone and evaluate its effectiveness. **Methods:** Information support program was developed by analyzing needs for spouses of women with breast cancer using literatures and implemented to access the program on the Naver café. Nonequivalent control group pre- and post-test design was utilized to identify effectiveness of the program on self-efficacy, breast cancer knowledge, couple communication, and stress in spouses of women with breast cancer. A total of 63 spouses who participated in the study recruited from a tertiary hospital in Korea during 2014-2015. The subjects were assigned to the experimental group (n=31) or the control group (n=32). Repeated measures ANOVA, ANCOVA using PASW 21.0 program were used to identify effectiveness of the program. **Results:** Information support program, called 'Bravo your life', contained breast cancer knowledge, caring experiences of spouses of women with breast cancer, couple communication, and coping strategies. Data analysis revealed that the scores of general self-efficacy, breast cancer knowledge, and stress were significantly changed in the experimental group than in the control group. But, the scores of breast cancer specific self-efficacy, mutual constructive pattern, demand-withdraw pattern, mutual avoidance pattern were not significantly changed in the experimental group than in the control group. **Conclusions:** The results of the study indicate that information support program for spouses of women with breast cancer using mobile phone would help improving self-efficacy and breast cancer knowledge, and relieving stress of spouses.

P-168 Clinical Characteristics of Oncologic Patients with DNR Decision at a Tertiary Hospital

Na Young Kang¹, Hyun A Kim¹, Jeong Yun Park² ¹Department of Nursing, Asan Medical Center, Korea, ²Department of Clinical Nursing, University of Ulsan, Korean

Purpose: To identify clinical characteristics of oncologic patients at the point of their DNR decision. **Methods:** We retrospectively analyzed the records of 197 died patients who agreed to a DNR order in the hemato-oncology department at a tertiary hospital between January 2014 and December 2014. **Results:** Of the 197 patients, 121 (61.4%) was male and 76 (38.6%) was female, and were 58.7 years on average. Patients with gastrointestinal cancer were 94 (47.7%) patients. The patients' mean hospital stay was 20 days. The DNRs were signed by patients in 1%, spouses in 47.2%, and children in 44.7%. The mean duration from the admission to DNR decision was 13 days, and the mean duration from DNR decision to death was 7 days. Vital signs changed in 147 (74.6%), oxygen saturation changed in 151 (76.6%), and the conscious level changed in 91 (46.2%). Changes in the results of clinical pathology tests included elevation of CRP (C-reactive protein) observed in 68%, leukocytosis in 65.5%, and anemia in 38.1%. **Conclusions:** Study results indicate that DNR decision or its refusal was made by medical staff mostly based on the opinions of guardians rather than of the patients, and this suggests that patients' self-determination be not respected. Thus it is urgent to establish institutional devices for enhancing cancer patients' autonomy and regulating the adequate point of time for the withdrawal of treatment.

P-169 Nursing Students' Attitudes towards Palliative Care in Thailand

Werayuth Srithumsuk^{1,2} ¹Faculty of Nursing Science, Phetchaburi Rajabhat University, Thailand, ²Intravenous and Chemotherapy Nurses Society of Thailand

Purpose: Every human being must eventually face the reality of death and dying, but nurses deal with the phenomenon frequently during the daily care of patients. Student nurses are also involved in the case of people at the end of life, and death is a significant and noticeably frequent event in the practice of nursing. Examining one's attitude towards death and dying needs to begin in the student years, when attitudes towards working with dying patients are considerable literature supports the idea the educational programs positively change student nurses' negative attitudes towards death and caring for people at the end of life. The purpose of this study was to examine the nursing students' attitude toward palliative care. **Methods:** The attitude of nursing students was measured using Frommelt Attitude toward Care of the Dying (FATCOD) scale in each 4 years of nursing students and descriptive statistics were described in this study. **Results:** The results showed that the mean scores of attitudes towards palliative care of forth year student was highest with 4.32±0.67 and lowest in first year student with 3.68±0.92. However attitudes towards palliative care of 4th year with 3rd year, 2nd year were not significant difference but in the opposite result with 1st year student (p<.05). **Conclusions:** This study provides evidence showing that the attitudes towards palliative care of nursing care in a higher years were showed more positive attitudes because more clinical experience to provide nursing care for the patient built them with positive attitudes towards palliative care.

P-170 The Levels of Fighting Spirit and Adaptation among Patients with Colon Cancer According to the Income State

Seo Yeon Kim, Eunyoung E. Suh ¹College of Nursing, Research Institute of Nursing Science, Seoul National University, Korea

Purpose: To investigate the levels of fighting spirit and adaptation patterns according to the income status among patients with colon cancer. **Methods:** Data were collected from June to November, 2014 using the structured questionnaires. The study participants were 157 patients suffering from colorectal cancers at a university hospital and a community hospital in Seoul. These participants were categorized into three groups based on their income status. Descriptive statistics, t-test, ANOVA, correlation and stepwise multiple regression were used to analyze the data. **Results:** Fighting spirit scores were not significantly different by the income levels, but the patients of low income level showed the lowest fighting spirit score (47.40±6.27) among three groups. Adaptation scores were significantly higher in the high income group than that of low income group (p<.002). The fighting spirit and adaptation showed a positive correlation (r=.501, p<.001). Stepwise regression analysis revealed that the adaptation was explained by fighting spirit, the degree of activities, marital status, and income level, for 43.5% of the variance. The most influencing factor was the fighting spirit. **Conclusions:** Based on the results of this study, nursing interventions are necessary to promote positive adaptation by predicting

maladaptive factors of low-income cancer patients in early stages of their cancer treatment.

P-171 Caregiver Burden, Coping and Quality of Life according to Gender among Spouses of Cancer Patients Undergoing Chemotherapy

Yun Jung Woo¹, Eunyoung E. Suh², ¹Oncology, Asan Medical Center, South Korea, ²College of Nursing, Research Institute of Nursing Science, Seoul National University, Korea

Purpose: To compare the caregiver burden, coping, and quality of life of male spouses with that of female spouses for gastrointestinal cancer patients undergoing chemotherapy and to identify any relationships between variables related to factors for quality of life. **Methods:** Research design was a descriptive correlational study with a total of 165 (64 men and 101 women) spouses. The collected data were analyzed with t-test, Mann-Whitney U-test, Two-way ANOVA, Spearman correlation coefficient and stepwise multiple regression. **Results:** The female spouses had higher scores than male spouses for caregiver burden, and lower scores for mental health and overall health as variables of quality of life. The male spouses had lower scores for social relationship as a variable of quality of life. There was a negative correlation between caregiver burden and quality of life in the male spouses and female spouses. There was a positive correlation between quality of life and problem-focused coping in the female spouses. A significant predictor of influencing quality of life in male spouses was caregiver burden (18.9%), and that in female spouses were caregiver burden and problem-focused coping (31.4%). **Conclusions:** There is a difference between female and male spouses in variables of quality of life, correlation, and influencing factors on quality of life.

P-172 Changes in Life Sustaining Treatment of Terminally Ill Cancer Patient after Do-Not-Resuscitate Decision

Hyun A Kim¹, Jeong Yun Park², Jeong Hye Kim², Ji HyunYun¹ ¹Department of Nursing, Asan Medical Center, South Korea, ²Department of Clinical Nursing, University of Ulsan, Korean

Purpose: To investigate changes of life-sustaining treatment of terminally ill cancer patient before and after DNR decision. **Methods:** The data was collected using chart audits of 200 died patients who agreed to a DNR order in the hemato-oncology department at a tertiary hospital between January 2013 and December 2013. **Results:** The median age was 59 years and 62% were male. The most frequent principal diagnosis was lung cancer. Life-sustaining treatments whose rate of maintenance after DNR decision was high were in the parenteral nutrition support (88.4%), IV opioid continuous narcotic analgesic administration (95.6%), Foley catheterization (98.1%), oxygen supply via nasal cannula (55.2%), blood sugar test (89.7%), central venous catheterization (100%), high-dose chemotherapy (66.7%), radiotherapy (75%), and ventilator care (100%). As to change in comfort care after DNR decision, those showing a high maintenance rate were pressure ulcer care (95.4%), patients education or counseling (86.7%), and oral care (85.2%). **Conclusions:** Most cancer patients had maintenance of life sustain treatment even if DNR decision. To establish end-of-life care with patients after DNR, there should be provide social and legislative policy in a national wide. Furthermore, each medical institution needs to be prudent in making advance directives in a way of respecting the patients' self-determination.

P-173 Effectiveness of Step-by-Step Shoulder Exercise Program for Patients after Mastectomy

Kyung Hee Lim, Ji yeong Lee, College of Nursing Keimyung University, Korea

Purpose: To develop a step-by-step shoulder exercise program for patients after mastectomy and evaluate its effectiveness. **Methods:** Randomized control-group pretest-posttest design was used for the study. The research participants were patients with breast cancer who got a mastectomy in D or Y university hospital in Korea, with 21 persons for the experimental group and 15 persons for the control group. The experimental group received a 7-week Step-by-Step Shoulder exercise program from April 29 to June 17. The data were analyzed with descriptive, χ^2 -test, and paired and independent t-tests using SPSS 21.0. **Results:** General and disease characteristics were homogeneous between the experimental and the control groups. There were significant improvements in the experimental group after the program in terms of flexibility ($t=3.509$, $p<.01$), grip strength ($t=4.585$, $p<.001$), flexion for back scratch ($t=5.079$, $p<.001$), external rotation ($t=2.219$, $p<.05$), lymph edema in armpit ($t=4.241$, $p<.01$), above the elbow 10cm ($t=5.315$, $p<.01$), elbow ($t=5.248$, $p<.01$), below the elbow, 10 cm

($t=2.279$, $p<.05$), wrist ($t=2.334$, $p<.05$), palm boundary ($t=13.691$, $p<.01$), comparing the control group. **Conclusions:** The Step-by-Step Shoulder exercise program was effective in improving shoulder motions and decreasing lymph edema of arms. Therefore, the program can help the patients improve their physical function and return their healthy life.

P-174 Effects of an Educational Program on Knowledge, Self-Efficacy, and Self-Care Performance of Patients with Breast Cancer after Mastectomy

Kyung Hee Lim, College of Nursing, Keimyung University, Korea

Purpose: To examine the effects of an educational program on knowledge, self-efficacy, and self-care performance of patients with breast cancer after mastectomy. **Methods:** Research design for the study was randomized control-group pretest-posttest design. The research subjects were 36 patients with breast cancer who got a mastectomy in D or Y university hospital in Korea (21 persons for the experimental group, 15 persons for the control group). The experimental group received a 5-week educational program including managements for daily life, self-care, cancer treatments, lymphedema, sexual life, breast reconstruction surgery, and diet for patients with breast cancer with mastectomy. The program was provided once a week with 1 hour education session per a week from April 1- April 22. The Knowledge Scale for Patients with Breast Cancer (KS-Br), Self-Efficacy Scale for Self-Management of Breast Cancer (SESSM-B), Self-Care Performance developed by Na (1999) were used as research instruments. The data were analyzed with descriptive, χ^2 -test, and paired and independent t-tests using SPSS 21.0. **Results:** There was no significant difference between the experimental group and control group in demographic and disease characteristics. The experimental group showed significantly higher scores in knowledge ($t=6.278$, $p<.01$), self-efficacy ($t=3.205$, $p<=.01$), and self-care performance ($t=2.115$, $p<=.05$) than those of the control group after the educational program. **Conclusions:** The research results showed that the education program for patients with breast cancer after mastectomy would be effective for increasing the patients' knowledge, self-efficacy, and self-care performance. Therefore, the education program can be utilized as an effective nursing intervention for the women after mastectomy in clinic settings.

P-175 The Meaning of the Quality of Family Caregiving: Perspectives of the Maintenance Hemodialysis Patient

Patcharin Kham-In, Panjit Phothong, Hospital for Tropical Diseases, Mahidol University, Thailand

Purpose: To identify the meaning of quality of family caregiving from perspectives of maintenance hemodialysis patient. **Methods:** A qualitative research method of Husserl Phenomenology was applied as a methodology of this study. The key informants were 7 maintenance hemodialysis patients, who received care from their family caregivers. Data were collected by in-depth interviews. The interviews were tape-recorded and transcribed verbatim. The Colaizzi's method was applied for data analysis. **Results:** Meaning of quality of family caregiving from perspectives of maintenance hemodialysis patient could be divided into two major points. which were (1) family caregiving for patient needs, it is consist of 3 minor points were helping for activity of daily living who had impairment, medically-related and psycho-emotional support (2) Family caregiving not provided care as patient needs and it can divided into two minor points were caring without understanding of physical needs and psycho-emotional needs. **Conclusions:** The results of this study was increased the understanding of the meaning of family caregiving from perspectives of maintenance hemodialysis patient. In addition, it was provided useful knowledge for nurses in educating and giving consultation to the family of caregivers who care for maintenance hemodialysis patient and also the knowledge will be useful for nursing research in the future.

P-176 Effects of Rectal Morphine Management in Patients Who Cannot Swallow Oral Medication

Sermasuk Thunyawon, Boriraksa Clinic, LoeiHospital, Thailand

Purpose: For planning patient care to ensure good quality of life and peaceful death at home. **Methods:** Prior to discharging patients home, caregivers are taught about medication usage, particularly when patients begin to express the inability to swallow, where upon MST is inserted via the rectum as follows: (1) Gloves are worn and Vaseline is used as a lubricant. The index finger is inserted into the rectum. If fecal matter is found, it is removed first. (2) Sustained-release morphine is inserted into the rectum according to the dosage and time used for

oral administration. (3) Morphine Oral Immediate Release (MOIR) would be kept under the tongue should incidental pain or discomfort occur during the day. (4) Ativan (0.5) is kept under the tongue as patients express agitation or labored breathing; the process can be repeated every four hours. **Results:** Number and Characteristics of End-stage Patient Deaths Administered Morphine Rectally Patient Deaths Total 147 Peaceful Deaths 139 (94.55%) Unpeaceful Deaths, Presence of Pain/Exhaustion 8 (5.45 %). **Conclusions:** End-stage patients who return home to spend the remainder of their lives have medication to regulate symptoms of discomfort. Frequently encountered symptoms are pain and exhaustion. The pain relief medication for the afore mentioned symptoms is morphine in tablet form. However, as patient symptoms successively deteriorate, swallowing food and medication becomes impossible. Sustained-release morphine (MST) cannot be ground or broken down as doing so would diminish the effectiveness of the drug. The result would be failure to manage patient symptoms. If patients fail to receive medication on time, pain, exhaustion and agitation would result, which can lead to a death that is not peaceful. Thus, the medication management course for when patients begin to be unable to take medications orally at Boriraksa Clinic is to change the administration of medication from oral to subcutaneous medication via a small medicator called a syringe driver. The hospital, however, has a shortage of syringe drivers for the increasing numbers of patients. Regardless, the literature review discovered that sustained-release morphine can be absorbed directly through the capillaries.

P-177 Clinical Study of Autologous Peripheral Stem Cell Collection on Lymphoma Patients: A Single Center Study

Se Na Lee¹, Jung Hee Kong¹, Han Jin Yoo¹, Eun Sook Choi¹, Sun Young Kong², Hyewon Lee³, Hyeon Seok Eom³ ¹Department of Nursing, ²Department of

Laboratory Medicine Center for Diagnostic Oncology, ³Hematology-Oncology, Center for Specific Organ, National Cancer Center, South Korea

Purpose: Autologous hematopoietic stem cell transplantation (HSCT) has been widely used for treatment of malignant lymphoma. Proceeding HSCT depends on successful peripheral blood stem cell harvest (PBSCH). Here we described our experience of PBSCH in patients with malignant lymphoma, to define the factors associated with successful PBSCH. **Methods:** Patients with non-Hodgkin lymphoma (NHL) and Hodgkin lymphoma (HL) who underwent PBSCH at National Cancer Center from May 2010 to December 2014 were included. Patients' demographics, clinical information during PBSCH, and parameters of apheresis were investigated through retrospective review of medical records. **Results:** Total 72 patients were recruited including 7 (11%) of the second mobilization trials. The median age was 52 years old. Forty-five (62.5%) were B-cell NHL, 23 (32%) were T-cell NHL, and 4 (5.5%) were HL. Median durations of G-CSF use and PBSCH were 5 days, respectively. Median number of CD34 cells was 4.48×10^6 /kgs. Hospitalization period (median 22 days) was associated with PBSCH duration ($p=.014$), RBC ($p=.002$) and platelet ($p=.001$) transfusion, and collected CD34 cell count ($p<.001$). Age was a significantly related to the yield of CD34 cells ($p=.002$) during the hospitalization period, 67(93%) patients complained clinical symptoms; nausea/vomiting 40(55.5%), general ache 35 (44.8%), neutropenic fever 19 (26.4%), headache 17 (23.6%), and catheter-site pain 15 (20.8%). Eleven (11%) experienced catheter-related complications except pain, but PBSCH were not interrupted due to such events. **Conclusions:** We found that the yield of CD34 cells was significantly affected by age. Entire hospitalization duration would be prolonged with the increased transfusion requirement and low yield of CD34 cells.