

# A Nursing Model Example Based on Nursing Care Life Activities Provided with a Holistic Approach to a Patient Receiving Palliative Care

## Palyatif Bakım Alan Hastaya Bütüncül Yaklaşımla Sunulan Hemşirelik Bakımı: Yaşam Aktivitelerine Dayalı Hemşirelik Modeli Örneği

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This work 1<sup>st</sup> International Palliative Care Congress-IPCC 04-06 October 2019, Malatya, TURKEY was presented orally.

**ABSTRACT** Palliative care consists of communication, coordination, symptom control, continuity of care, caregiver support and end of life care. Nursing models provide nursing care by systematizing nursing practices. It is aimed to give care to the patient according to the nursing model based on life activities. Our case is a 32-year-old male with hypoxic brain and myocardial infarction. Nursing care was given with the diagnosis of under/over nutrition, risk of fluid-electrolyte imbalance, deterioration in gas exchange, ineffectiveness of respiratory functions, confusion, and deterioration in family process. The aim of nursing care is to evaluate the complications that may develop by providing care for the patient's problems and to eliminate the lack of information of the family. In our case, care was given for the nursing diagnoses mentioned. The care given had a positive effect on the quality of life of the patient.

**ÖZET** Palyatif bakım; iletişim, koordinasyon, semptom kontrolü, bakımın sürekliliği, bakım veren desteği ve yaşam sonu bakımdan oluşmaktadır. Hemşirelik modelleri ise; hemşirelik uygulamalarını sistematize ederek hastaya bakım sunmaktadır. Olgumuza Yaşam Aktivitelerine Dayalı Hemşirelik Modeline göre bakım verilmesi amaçlanmıştır. Olgumuz 32 yaşında erkek hipoksik beyin ve miyokard infarktüsü tanılarıyla yatmaktadır. Olgumuza beden gereksiniminden az/fazla beslenme, sıvı-elektrolit dengesizliği riski, gaz değişiminde bozulma, solunum fonksiyonlarında etkisizlik, konfüzyon, travma, düşme ve bası yarası riski, aile sürecinde bozulma tanılarıyla modele göre bakım verilmiştir. Hemşirenin bütüncül yaklaşımla planladığı bakımda amacı, hastanın mevcut sorunlarına yönelik bakım vererek gelişebilecek komplikasyonları değerlendirmek ve ailenin bilgi eksikliğini gidermektir. Olgumuzda belirttiğimiz hemşirelik tanılarına yönelik bakım verilmiştir. Olgumuza verilen bakımın hastanın yaşam kalitesi üzerine olumlu katkısı olmuştur.

**Keywords:** Palliative care; nursing care

**Anahtar Kelimeler:** Palyatif bakım; hemşirelik bakımı

Palliative care consists of seven gold standards, including communication, coordination, symptom control, continuity of care, learning activities, caregiver support, and end-of-life care. In palliative care centers, patient and family-centered care should be

provided that respects the values and preferences of the patient, provides clear information that ensures the protection of autonomy, and provides physical comfort and emotional support.<sup>1</sup> Palliative care aims to maximize the functional capacity of the individual

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by remaining sensitive to religious values and beliefs, culture and individuality. It integrates the physical, spiritual, social and psychological dimensions of care by improving the quality of life. It ensures a comfortable death in the last days of life.<sup>2</sup>

In our country, nurses have been using nursing care models widely in the last ten years to determine the problems of individuals and families professionally. Nursing Model Based on Life Activities is a widely accepted model. Developed in 1970 by N. Roper, W. Logan, A. T. Tierney, this model contains 12 basic living fields. These living spaces are the safety of the patient and the environment, communication, breathing, nutrition, excretion habit, personal cleaning and clothing, control of body temperature, movement, working and leisure time, sexuality, sleep and death.<sup>3,4</sup> Accordingly, our patient was given nursing care according to the Nursing Model Based on the Life Activities developed by Roper, Logan and Tierney.

## THE CASE

Written informed consent was obtained from the case, who was given nursing care. "Nursing Model Based on Life Activities". The case is a 32-year-old male graduate of primary school. He is a factory worker and lives in the city center. The case experienced three cardiac arrests at work. Angiography was performed on the case brought to the hospital by emergency teams, and its occluded vein was opened. Our case started to be treated in the intensive care unit with medical diagnoses of hypoxic brain and myocardial infarction. In his medical history, his family has been found to have hereditary heart disease, and he also has epileptic attacks. Tracheostomy was opened on the 15<sup>th</sup> day and percutaneous endoscopic gastronomy (PEG) was opened on the 30<sup>th</sup> day. His wife came to visit every day and listened to her children's voice, music and Quran. Our patient, who opened her eyes ninety days later, underwent foot-leg exercise three times a day with his wife upon the recommendation of a doctor. Our case started to act 60 days later and respond meaningfully to what was said. Our patient who stayed in intensive care for a long time was sent to the palliative care center with the consent of the family.

As a treatment for our patient who has been in the palliative care center for 50 days; Pantoprazole tb 1x40 mg, Enoxaparin sodium 1x0.6 cc, Acetylcysteine amp 3x300 mg, Ipratropium bromide and salbutamol nebule 4x1, Budesonide nebule 2x1, Piracetam tb 3x800 mg, Levetiracetam tb 2x100 mg, Valproic acid tb 2x500 mg, Baclofen tb 2x10 mg, Haloperidol 3x5 dml, Furosemid amp 1x20 mg, Moxifloxacin dml 4x1 are applied.

As a result of the evaluations, under/over nutrition, risk of fluid-electrolyte imbalance, risk of disruption in gas exchange, risk of inefficiency in respiratory functions, risk of confusion, trauma risk, risk of fall, pressure injury, family risk of deterioration/deterioration, etc. nursing diagnoses were made and care was given according to the nursing model based on life activities.

Addiction-independence cycle; the point of total dependence is the highest 10 points, the lowest is 6 points, and the state of independence is the highest 5 points, the lowest is 1 point.<sup>5</sup> According to the nursing model, our case is completely dependent on life activities before receiving nursing care and gets 10 points (Table 1A).

### 1. ENSURING THE SAFETY OF THE PATIENT AND HIS ENVIRONMENT

**Nursing Diagnosis:** Confusion, trauma and risk of falling.

**Objective:** To create a safe environment physically, spiritually and socially.

**Intervention:** Regular administration of anti-epileptic agents. Removal of bearing borders for risk of trauma and fall. Supporting the mattress borders by putting a pillow against the bumps, closing the bed brakes. Keeping the floor dry constantly to prevent the risk of trauma and fall. After cleaning the floor, a slippery floor sign is placed and the family is told to be careful against the risk of falling down until the floor is dry. Informing the family about epilepsy and epileptic seizures, answering questions on the subject. Ensuring the participation of the family in the care of our case.

**Evaluation:** Our case had a seizure only once in 50 days. There was no trauma and fall incident. The

TABLE 1A: Dependence-independence cycle before nursing care.

Life activities	Dependence-independence cycle									
	Completely Dependence					Completely Independence				
	10	9	8	7	6	5	4	3	2	1
Maintaining a safe environment	[Bar chart showing level 6]									
Communication	[Bar chart showing level 6]									
Respiratory	[Bar chart showing level 6]									
Nutrition	[Bar chart showing level 6]									
Personal hygiene and clothing	[Bar chart showing level 6]									
Excretion	[Bar chart showing level 6]									
Control of body temperature	[Bar chart showing level 6]									
Movement	[Bar chart showing level 6]									
Work and have fun	[Bar chart showing level 6]									
Sexuality	[Bar chart showing level 6]									
Sleep and rest	[Bar chart showing level 6]									
Death	[Bar chart showing level 6]									

family, who was educated for falling and trauma, took precautions after the training and no trauma related to the fall occurred. The family was informed about epilepsy and epileptic seizures, The family's questions were answered and the family's participation in the care of our case was ensured.

## 2. COMMUNICATION

**Nursing Diagnosis:** Agitation due to cerebral hypoxia and impaired family process after myocardial infarction.

**Objective:** Our case should be relevant and conscious about the stimuli in the palliative care unit, to ensure that it does not harm itself, the caregivers, and to ensure interpersonal communication.

**Intervention:** To provide communication training to the family to ensure and strengthen the communication of our case. To make our case meet with different family members at certain intervals every day and to ask family members to chat with our case. Establishing eye contact, speaking slowly and in a low tone that he can hear, watching movies and videos, listening to music and reading books, telling family stories that he likes. Informing our case before all treatments and treatments, ensuring orientation of person, place and time.

**Evaluation:** No communication was established with our patient in the first 45 days of hospitalization, By opening and closing the eyelids at the end of the 50<sup>th</sup> day, he began to respond to what was said as yes or no. Our case met with different family members every day. Our patient was shown a movie, his children's video and music was played. The family was supported by training on communication.

## 3. INHALATION

**Nursing Diagnosis:** Change in respiratory function due to disease process (Myocardial infarction, hypoxic brain): Disruption in gas exchange.

**Objective:** To reach normal arterial blood gas values. Providing adequate oxygenation. To reduce / eliminate respiratory distress symptoms.

**Intervention:** The average respiratory rate of our case is 12-20/min, tracheostomy care is performed, postural drainage, aspiration from tracheostomy when sputum increases. Application of bronchodilator according to the physician's request, monitoring of arterial blood gas. To give the patient an appropriate position to increase lung capacity, to provide adequate hydration, to inform the family about tracheostomy care.

**Evaluation:** The breathing of our case is on average 21/min. Tracheostomy care was performed. Pu-

ulent sputum was often aspirated. Daily fluid intake was paid attention in order to relieve the sputum and to dilute his thick sputum and balance was achieved by following the fluid, lung capacity was also increased by giving the appropriate position. As a result of our postural drainage, he started to remove his sputum comfortably and his oxygen saturation level was 98 / min on average.

#### 4. NUTRITION

**Nursing Diagnosis:** Under/over nutrition in body requirement due to PEG use.

**Objective:** To ensure adequate and balanced nutrition of our case.

**Intervention:** Feeding the patient with the formula suitable for the calorie needs with the request of a physician and a dietitian, daily PEG care, ensuring adequate hydration, informing the family about PEG.

**Evaluation:** Since our patient had no oral intake, he was fed with PEG with protein-rich food with the advice of a physician and dietitian. Hydration was achieved. By providing daily PEG care, the family was informed about PEG.

#### 5. THE HABIT OF DEFECATION

**Nursing Diagnosis:** Risk of diarrhea due to feeding with PEG solution and risk of inactivity (bed-dependent) constipation.

**Objective:** To ensure that our case has stool at normal frequency and consistency.

**Intervention:** Paying attention to fluid intake, nutrition under doctor and dietitian control, observing stool frequency and consistency, providing in-bed movement and exercise.

**Evaluation:** Our case is dependent on the bed, Necessary observations were made by removing the toilet requirement with the diaper and condom probe. Fluid intake was balanced, feeding was done under dietitian control. There was no constipation, urine output was normal.

#### 6. PERSONAL CLEANING AND CLOTHING

**Nursing Diagnosis:** Insufficient individual hygiene due to bed dependency.

**Objective:** To meet the individual hygiene requirements of our case and ensure competence for individual hygiene requirements

**Intervention:** Oral care, bed bath, wipe bath and cleaning of the perineum, cutting and maintaining nails. Application of medicines according to the physician's request for oral fungal treatment ensuring the change of position at certain intervals to protect the integrity of the skin, preventing drying of the skin and applying pomade/cream suitable for the skin, preventing wet and moist skin, dressing comfortable cotton clothes that could not tighten the body of our case giving training to care for his spouse and answering his spouse's questions.

**Evaluation:** Since our case was dependent on the bed, bed cleaning and frequent wiping baths were performed and attention was paid to perineum cleaning. Nistatin was treated with 2x3 drops according to the physician's request for oral fungal infection. Oral care was carried out with appropriate solutions every day. His nails were cut according to the frequency of growth and cared for. Comfortable cotton clothes that did not squeeze or sweat the body were dressed. These practices were carried out with his spouse and training was given, his wife's questions were answered.

#### 7. BODY TEMPERATURE CONTROL

**Nursing Diagnosis:** Risk of imbalance in body temperature due to nosocomial infections.

**Objective:** To keep the body temperature in balance.

**Intervention:** Fever measurement of our case at regular intervals, ensuring room hygiene, hand hygiene and personal hygiene. Giving information about the subject to the family, educating the family on hand hygiene, caution against risk factors that can cause infection.

**Evaluation:** The body temperature of our case is in balance. During the 50 days we provided nursing care, it was 36.5 °C on average.

#### 8. MOVEMENT

**Nursing Diagnosis:** Risk of deterioration in tissue integrity due to immobility due to bed dependence.

**Objective:** To protect the tissue integrity of our case, to provide in-bed movement at certain intervals and to position appropriate to our case.

**Intervention:** Evaluation of the pressure wound risk of the patient on a daily basis or with the braden scale of each change in the general condition. giving the patient an appropriate position regularly for at least 45 minutes and at most every two hours. Hourly assessment of pressure zones in the patient's body and observation of injury during positioning. Application of joint range of motion (ROM) exercises, anti-thrombotic treatment according to the physician's request, use of bed linen dry and tense. Keeping the skin of the case clean and dry, arranging the diet so that the tissue nutrition of the case is best provided, use of equipment (position pads, air mattress, etc.) to prevent pressure sores.

**Evaluation:** A change of position was made in our patient within 45 minutes, and joint ROM was performed at certain intervals. Anti-thrombotic therapy was performed regularly. Braden pressure sore risk scoring was calculated as 18 points. Air mattress was used. The skin of the patient was kept dry and clean, and her diet was regulated to provide adequate nutrition to the tissue.

## 9. WORK AND LEISURE TIME

**Nursing Diagnosis:** Depending on the reason for being bed-dependent, social isolation.

**Objective:** To support the communication of our case with the social environment and to strengthen interpersonal communication.

**Intervention:** To ensure the family and friends to visit him for the sociality of our case, to watch the television/his favorite videos.

**Evaluation:** Our case has no working life and is disconnected from social life. Family and friends came to visit our case for social life. The wife of the patient watched our patient's video of their children and loved ones, showed her loved ones by making a video call with her mobile phone.

## 10. SEXUALITY

Our patient was diagnosed with a change in sexual life, but no nursing intervention was performed due to the patient's medical condition.

## 11. SLEEP

**Nursing Diagnosis:** Disruption in sleep pattern due to agitation due to cerebral hypoxia.

**Objective:** To regulate the sleep pattern of our case.

**Intervention:** The case does not sleep during the day, it provides night sleep. Providing a dark, dim and quiet environment during sleep, keeping the surrounding stimuli at a minimum level, applying medication according to the physician's request.

**Evaluation:** During the night sleep, silent dark environment was provided, daytime was not put to sleep. According to the doctor's request, Quetiapine fumarate 1x50 mg and Haloperidol 3x5 drops were given to our patient at 22:00.

## 12. DEATH

Our case is unable to speak and is unable to assess death.

## DISCUSSION

In the last period of chronic diseases irreversible, modern medical implementation remain insufficient. Therefore, there is a need for palliative care, which is a supportive treatment method that provides symptom control including cultural and spiritual needs by addressing patients' pain and troubles in the irreversible period.<sup>6-10</sup> When determining the need for palliative care, it is necessary to correctly identify key aspects of the service, appropriate palliative care models, current obstacles in practice (cultural difference, country policy, religious belief) and future needs.<sup>11-14,16,18,19</sup>

Since patients / families related to palliative care do not have enough information or are less aware, they perceive palliative care as end-of-life care and do not prefer it. In the study of Shalev et al., it was determined that the information about palliative care was incorrect and incomplete.<sup>7</sup> Flierman et al. stated that awareness should be increased in order to benefit from early palliative care in hospitals.<sup>15</sup> In the study of Zimmermann et al., they revealed that patients and their families perceive palliative care as death and hopelessness.<sup>20-22</sup> In order to prevent this situation caused by lack of information, awareness of pa-

tients/families to benefit from early palliative care should be increased and information gaps should be eliminated.

Due to the aging of the population in our country, the number of palliative care programs and palliative care centers are increasing, as chronic diseases, disabled living, bedridden and care needs increase. In the study conducted by Eser et al., relatives of palliative patients were asked about their opinions about day care, and they stated that they wanted to benefit from most services even though the majority of them heard that this was the first time.<sup>6,17</sup>

Palliative care should be given by professional nurses. In the study carried out by Pesut et al., it was stated that the knowledge, trust, attitude, communication skills of the nurses who received palliative care training improved and the stress of the nurses decreased, thus the nursing care provided would be higher quality.<sup>11</sup> At the center of palliative care, the nurse should provide counseling, training and nursing care for the needs of the patient with a holistic approach.<sup>20</sup> The purpose of planned nursing care is to provide nursing care for the current problems of the patient, to evaluate and prevent complications that may develop and to overcome the lack of knowledge of the family. Nursing care was provided for the nursing diagnoses that we mentioned in our case.

As a result according to the dependence-independence cycle, after our nursing care, breathing, excretion, body temperature control decreased from 10 points to 8 points, while communication, movement, sleep and rest decreased from 10 points to 7 points (Table 1B). It was determined that the care given according to the nursing model based on life activities met all the care needs of our patient and had positive contributions on the quality of life.

#### Source of Finance

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#### Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

#### Authorship Contributions

**Idea/Concept:** Ayşe Soylu, Serap Güngör; **Design:** Ayşe Soylu, Serap Güngör; **Control/Supervision:** Medet Korkmaz, Dilek Soylu, Filiz Taş; **Data Collection and/or Processing:** Ayşe Soylu, Serap Güngör, Dilek Soylu; **Analysis and/or Interpretation:** Ayşe Soylu, Serap Güngör, Dilek Soylu; **Literature Review:** Ayşe Soylu, Serap Güngör, Dilek Soylu; **Writing the Article:** Ayşe Soylu, Medet Korkmaz, Dilek Soylu, Serap Güngör; **Critical Review:** Filiz Taş, Medet Korkmaz.

TABLE 1B: Dependence-independence cycle after nursing care.

Life activities	Dependence-independence cycle									
	Completely Dependence					Completely Independence				
	10	9	8	7	6	5	4	3	2	1
Maintaining a safe environment	10	9	8	7	6	5	4	3	2	1
Communication	10	9	8	7	6	5	4	3	2	1
Respiratory	10	9	8	7	6	5	4	3	2	1
Nutrition	10	9	8	7	6	5	4	3	2	1
Personal hygiene and clothing	10	9	8	7	6	5	4	3	2	1
Excretion	10	9	8	7	6	5	4	3	2	1
Control of body temperature	10	9	8	7	6	5	4	3	2	1
Movement	10	9	8	7	6	5	4	3	2	1
Work and have fun	10	9	8	7	6	5	4	3	2	1
Sexuality	10	9	8	7	6	5	4	3	2	1
Sleep and rest	10	9	8	7	6	5	4	3	2	1
Death	10	9	8	7	6	5	4	3	2	1

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