Functıonal Health Patterns Model –A Case Study

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ABSTRACT

Gordon's Functional Health Patterns is a method develops By Marjorie Gordon in 1987 proposed functional health patterns as a guide for establishing a comprehensive nursing data base. By using these categories it's possible to create a systematic and standardized approach to data collection, and enable the nurse to determine the following aspects of health and human function: Health Perception Health Management Pattern, Nutritional Metabolic Pattern, Elimination Pattern, Activity Exercise Pattern, Sleep Rest Pattern, Cognitive-Perceptual Pattern, Self-Perception-Self-Concept Pattern, Role-Relationship Pattern, Sexuality-Reproductive, Coping-Stress Tolerance Pattern,Value-Belief Pattern.

Key Words: *Functional Health Patterns, Gordon, Nursing*

INTRODUCTION

Gordon's Functional Health Patterns is a method develops By Marjorie Gordon in 1987 proposed functional health patterns as a guide for establishing a comprehensive nursing data base. The model is a method used by nurses in the nursing process to provide a comprehensive nursing assessment of the patient. Taxonomy II of NANDA Nursing Diagnosis classification is based on Gordon's functional health patterns. Gorden's functional health pattern includes 11 categories which is a systematic and standardized approach to data collection..

Data Collection

General Information;
Name, age, adress, phone no and etc.

1. Health Perception – Health Management Pattern;
describes client's perceived pattern of health and well being and how health is managed.

2. Nutritional – Metabolic Pattern;
describes pattern of food and fluid consumption relative to metabolic need and pattern indicators of local nutrient supply.

3. Elimination Pattern;
describes pattern of excretory function (bowel, bladder, and features)

4. Activity – Exercise Pattern;
describes pattern of exercise, activity, leisure, and recreation.

5. Sleep – Rest Pattern;
describes patterns of sleep, rest, and relaxation.

6. Cognitive – Perceptual Pattern;
describes sensory, perceptual, and cognitive pattern.

7. Self-perception – Self-concept Pattern;
describes self-concept and perceptions of self (body comfory, image, feeling state).

8. Role – Relationship Pattern;
describes pattern of role engagements and relationships.

9. Sexuality – Reproductive Pattern;
describes client's pattern of satisfaction and dissatisfaction with sexuality pattern, describes reproductive patterns.

10. Coping – Stress Tolerance Pattern;
describes general coping patterns and effectiveness of the pattern in terms of stress tolerance. **11. Value – Belief Pattern;**
describes pattern of values and beliefs, including spiritual and /or goals that guide choices or decisions.

A Case Study

General Information

Name Surname: A.Ö.	**Clinic:** Internal Medicine
Gender: Female	**Room no:** 28
Birth Date: 01.01.1983	**Admission date:** 11.11.2014
Birth Place: City Center	**Doctor:** E.A.
Education: High School	**Protocol No:******
Adress: City Center	**Allergy:** Ampicilin
Phone no: ****	**marital status:** Married

Health Perception – Health Management Pattern

Patient history: In 2012, the patient complained of nausea, vomiting and body itching. Therefore, she had hepatosplenomegaly diagnose. She had chronic heart failure, anemia and she underwent splenectomy surgery in January 2014. After this surgery because of heart failure she begun digoxin. Then May 2014 in She admitted medical center because of chronic heart failure and respiratory distress. Antibiotics were started because the pneumatic infiltrate on chest radiograph. Then the patient's creatinine and liver enzymes were higher in the examinations. Patients with chronic liver failure was diagnosed and began treatment. He was discharged in June 2014. The patient admitted to the hospital due to the development of edema, she has been accepted to medical center for further evaluation and treatment.

Surgery: Splenectomy (2014) **Family History:** No feature
Diagnosis: Cronic Kidney Disease
Theatment: Vital signs control – limited to 800 cc-weight control
Famodin 40 mg p.o. 2×1
Secita 10 mg p.o.1×1

Nutritional – Metabolic Pattern

Length: 158 cm	**Weight**: 46 kg
Nutritional Status: Independent-oral	**Nausea:** N/A
Dairly meals no: 3 main meal, 3 snacks	**Weight loss:** N/A
Dairly liqued taken: limited to 800 cc	**Teeth Status:** There is teeth decays
Special diet: salt free diet	**Oral mucosal integrity:** No problem
Anorexia: Sometimes	

Elimination Pattern

Bowel Elimination Status: Independent
Constipation : N/A
Diarrhea: Dairly 2-3 times juicy and light yellow stool
Distention : When lying long time. Walks little around.
Fecal inkontinance : N/A **Hemorrhoids :** N/A
Colostomiy: N/A **Bowel Sounds :** 7/minute
Stoma : N/A

Bladder Elimination Status: Independent
Bladder inkontinence : N/A **Dysuria:** N/A
Cystostomy: N/A **Ureterestomy :** N/A
Urine colour : Dark yellow (700 cc output) **Urine clarty** : Clear
Bladder catheterization: N/A

Activity – Exercise Pattern

Sputum : Sometimes in the morning **Dyspnea:** N/A
Cough: Sometimes in the morning **Cyanosis:** N/A
Triflow: N/A **Nebulization:** N/A
Breath and cough exercise: N/A **Oxygen therapy :** N/A
Tracheostomy : N/A **Endotracheal tube:** N/A

Any physical barriers that restrict the movement: N/A
Auxiliary agents that used by the patient: N/A
Changing the position: Patient do by herself.
Standing up : She needs help sometimes.
Walking: Patient do by herself.
Changing the clothes: She needs help sometimes.

Sleep – Rest Pattern

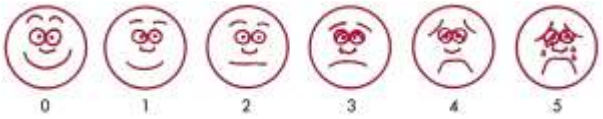
Avarage sleeping hours : 5 hours
Daytime sleeping : Often in the lunch time.
Habits that help you fall asleep (reading book, drinking milk and etc.) : Listening music and speakig with mother.
Waking up tired: Usually because of irregular sleeping at night she waking up tired and feeling tired all day.
Factors that affecting sleeping in hospital room: Treatments in the night, taking vital sign , and the noises.

Cognitive – Perceptual Pattern

Vision problems: N/A **Glasses:** N/A **Lens:** N/A

Hearing Problems: N/A **Hearing Aid :** N/A

Pain: N/A
Pain Nature ☐ Princking ☐ Thorobbing ☐ Flammable ☐ Blunt
Pain Frequency ☐ Continuous ☐ İntermittent
Pain Duration .....
Pain Violance .....



Factors that increase the pain: N/A
Factors that decrease the pain:N/A

Role – Relationship Pattern

Job: N/A

Family members: Father, Mother and Sister

Role in family: Girl

Any barriers to communication: She is boring at hospital and she is worring about her disease.

Accept the treatment and participate care: No problem

Sexuality – Reproductive Pattern

For female patients;
last menstrual period: Last month
Frequnecy of changing ped: Two times
Dairly ped: N/A

Vital Signs:
Body Tempeture: 36.7 ^{o}C (Tympanic)
Pulse: 86 /mn (radial- rhythmic)
Apical pulse: 96 /mn (rhythmic)
Respiration: 20 /mn
Blood Pressure (right arm): 120/80 mmHg **(left arm):** 110/80 mmHg

Functional Health Patterns	Supporting Signs and Symptoms	Nursing Diagnosis	Aim	Planning	Intervations	Evaluation
Health Perception – Health Management Pattern	-Having peripheral venous catheter -Staying in the hospital for a long time -Having several cronic diseases -Limiting to 800 cc liquid -Eating half of the diet	Infection Risk	Increase the enfection risk minumum level	-Observe site of the peripheral venous catheter about infection signs. -Follow the number of leukocytes. -Wash hands before and after touching patients. -Be careful about aseptic technique. -Give care of peripheral venous catheter dairly. -Wear gloves if needed. -Be aware of about diet and liquid intaken.	-Site of the peripheral venous catheter was observed about infection signs. -The number of leukocytes was followed for three days. -Hands were washed. -Peripheral venous catheter was given care dairly. -Gloves were weared when needed. -Patient was encouraged about her diet and liquid intaken.	-There is no infection signs. -There is no problem about the number of leukocytes. -She finished ¾ of meal and drinked 800 cc liquid.
Nutritional – Metabolic Pattern	-Lenght: 1.58 Weight: 46 -Feeling anorexia -Having salt free diet -Eating half of the diet	Eating less from body needs	Provide adequate and balanced nutrition and to minimize the risk of losing weight.	-Follow the weight dairly. -Observe signs of malnutrition such as hair loss, dry and pale skin, weakening of the muscles. -Follow the laboratory findings. -Be aware of about diet and liquid intaken. -Try to serve meals with dietician which patients like. -Keep the clean patients	-The weight was followed dairly. -Signs of malnutrition such as hair loss, dry and pale skin, weakening of the muscles was observed. -The laboratory findings was followed for three days. -Meals served with dietician. -Patients room was kept clean after intervations.	-There is no weight loss. -She finished ¾ of meal and drinked 800 cc liquid. -There is no signs of malnutrition. -There is no problem about laboratory findings.

				room. -Make treatment and care intervations after meal time.		
Nutritional – Metabolic Pattern	-Limiting to 800 cc liquid - Having dark yellow urine - Having Diarrhea	Liquid - volume imbalance	Increase Liquid-volume imbalance minumum level	-Follow vitals signs 4 hours intervals. -Follow the weight dairly. -Make intake-output list. -Follow the laboratory findings -Use machine for infusioning intravenous liquids. -Check the urine colour and amount.	-Vital signs was follwed. -The weight was followed dairly. -The laboratory findings was followed for three days. - Urine colour and amount was checked dairly.	-Vital signs are in normal values. -There is no problem about laboratory findings -Intake:700cc Output:800cc
Elimination Pattern	-Making 2-3 times juicy and light yellow stool dairly -Limiting to 800 cc liquid -Bowel sounds: 7/mn	Diarrhea	Make normal bowel elimination	-Record the elimination times and frequence. -Make intaken-output list. -Follow the laboratory findings. -Listen bowel sounds. -Give lint-free diet.	-Intake-output list was made. -The laboratory findings was followed for three days. -800 cc liquid was drinked. -Lint-free diet was given. -Bowel sounds were listened.	-Intaken:700cc Output:800cc -There is no problem about laboratory findings -Bowel sounds: 7/mn

Activity– Exercise Pattern	-Feeling tired all day -Waking up tired and feeling tired all day. -Changing clothes and making bad with help.	Lack of individual care due to feeling tired.	Minimize the lack of individual care	-Define of the tire reasons with details. -Define priority activities and make an activity plan -Plan activities after meals because of using energy -Place items accessible easily -Provide help for activities which need extra energy suc as clothing, bathing	-Tire reasons was defined due to lack of enough sleep -Priority activities defined such as nutrition, elimination. - Bathing was put after lunch in the activity plan. -Activities which need extra energy were make together.	-She felt less tired. -Her mother helped her for making dairly activities.
Sleep – Rest Pattern	-Sleeping less due to treatment and care practices -Avarage sleeping hours dairly: 5 hours	Sleepnessle ss	Ensure adequate sleep and rest of the patient	-Set treatment and care intervations before patient sleeping. -Define habits that help patient fall asleep (reading book, drinking milk and etc.). –Change the drugs which have side effects on sleepness after discuss the physicians. -Minimize lights and noise in the room. -Find activities to prevent daylight sleepness.	-Care intervations were made before patient sleeping. -Music was helped the patient fall asleep. -Light and noise was made minimized in the room. -Daylight sleep was minimized by watching television.	-Patient' avarage sleeping hours dairly: 6 hours
Cognitive – Perceptual Pattern	-Lack of information about diagnoses and treatment -Lack of information the purpose of the tests and lying in	Lack of information	Provide information	-Determine the patients level of information about diagnosis and treatment. -Provide information to the patent with physician.	-Diagnosis and treatment that patients receive was questioned. -Information provided to the patient with physician.	-She told what diagnosis and treatment she have.

	hospital.					
Role–Relationship Pattern	-Lack of information about hospital laying time -Not having diagnose yet -Feeling anxiety -Worrying about cancer diagnose	Anxiety	Increase the anxiety	-Listen the patient about her feelings and thoughts. -Give information before every care and treatment intervations -Teach different exercises for preventing from anxiety.	-Patient told about her feelings and thoughts. -Information was gave to the patient before every information -Different exercises were taught to the patient such as breath exercise and etc.	-She was worring about cancer diagnose.

References

1. Berman A, Synder S, Kozier B, Erb G. Fundamentals of Nursing. USA: Pearson Publishing, 2008.
2. Birol, L. Nursing Process. İzmir: Etki Publishing, 2004.
3. Gordon, M. Nursing Diagnosis: Process and application, Third Edition. St. Louis: Mosby, 1994.
4. Potter P, Perry A. Fundamentals of Nursing. USA: Mosby Elsevers Publishing, 2009
5. Taylor, C., Lillis, C., Lemone, P., Lynn., P. Fundamentals of Nursing. USA:LWW Publishing, 2008.