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APPENDICES



APPENDIX A
QUESTIONNAIRE

I.D.Number.....

Instruction

Questionnaire of “ The study of Prevalence Rate and the Factors Affecting Nosocomial urinary Tract System Infection Among Patients with Indwelling Urinary catheters Thungsong Hospital, Nakhon Si Thammarat Province.”

The questionnaire was composed of part:

Part 1 : Patient’s data

- 1.1 Personal Characteristics...4. questions
- 1.2 Medical Treatment.....14. questions
- 1.3 The Results of Urine Exam and Urine Culture
- 1.4 Conclusion of the Diagnosis of Nosocomial Urinary Tract System Infection
(To be filled out by the researcher)

Part 2 : Nursing Activities for Preventing Urinary Tract Infection from Indwelling Urinary Catheters

- 2.1 Personal Characteristics of the Nurses ...6. questions
- 2.2 Self – Evaluation by Nurses Regarding Urinary Catheterization and Nursing Care for the Patients with Indwelling Urinary Catheters...25 questions
(To be filled out by the nurses who performed urinary Catheterization and nursing care for the patients with indwelling urinary catheters)
- 2.3 Observation of the Nurses’ Performance Regarding Urinary Catheterization and Nursing Care ...25 questions
(To be filled out by the head nurses / researcher)

Part 3 : Assessment of the Procedures of Disinfection and Sterilization of urinary Catheterization and Flush Sets

(To be filled out by a staff of the Central Supply Unit)

Researcher
Nuchanok Boonmuang
Thungsong Hospital, Nakhon Si Thammarat Province

Part 1 : Patient's Data

1.1 Personal Characteristics

- 1) First name.....Last name.....
- 2) Age.....Years
- 3) Sex 1. () male 2. () female
- 4) Marital status
 1. () single 2. () married 3. () widowed/divorced/separated

1.2 Medical Treatment

- 5) Diagnosed disease.....
- 6) Date of Admission.....
- 7) Antibiotics received
 0. () No
 1. () Yes
- 8) Underlying disease(s)/illness history
 0. () No
 1. () Yes
 - () Diabetes
 - () Hypertension
 - () Other (Please Specify).....
- 9) Have ever been diagnosed or treated by inserting any medical instrument into urinary tract?
 0. () Never
 1. () Ever
- 10) Indication for having indwelling urinary catheter
 1. () Dysuria because of any causes
 2. () Have urine measured every hour to evaluate kidney function
 3. () Major surgery that needs to have an empty bladder during the operation
 4. () For nursing convenience e.g. the patient urinates all the time
 5. () Other (specify).....

11) The date of 1st insertion of urinary catheter.....

The date of taking the catheter off.....

The total day of having indwelling urinary catheter.....day

12) The person who inserted the urinary catheter :

1. () technician nurse
2. () professional nurse
3. () physician

13) Department that performed urinary catheterization

1. () ICU
2. () Medical – Surgical (Male)
3. () Medical – Surgical (Female)
4. () Obstetric – Gynaecology
5. () Special
6. () Pediatrics
7. () ER
8. () OR

14) Bladder irrigation

1. () No
2. () Yes

15) Urine measurement per day (24 hours)

1. () every hour
2. () every 2 hours
3. () every 4 hours
4. () every 8 hours
5. () every 12 hours

16) Type of the urine bag

0. () without valve
1. () with a valve

17) Changing of the urine bag during catheterization

0. () No
1. () Yes

18) Size of the catheter.....

1.3 Urine Analysis

- Urine Exam

No.	Date	Result	Remark

- Urine Culture

No.	Date	Type of the bacteria		Sensitivity of antibiotic
		Type I	Type II	

1.4 Diagnosed of Nosocomial Urinary Tract Infection

0. No1. Yes1. Asymptomatic Bacteriuria2. Symptomatic Bacteriuria3. Other

Part 2 : Nursing Activities for Preventing Urinary Tract Infection from Indwelling
Urinary Catheters

Instruction : Please fill out the blank and / or check (✓) the choice provided that is
closest to yourself.

2.1 Personal Characteristics

1. Work Site (Department / Ward)

1. () ICU
2. () Medical – Surgical (Male)
3. () Medical – Surgical (Female)
4. () Obstetric – Gynaecology
5. () Special
6. () Pediatrics
7. () ER
8. () OR

2. Position

1. () technician nurse
2. () professional nurse

3. Sex

1. () Male
2. () Female

4. Age.....Years

5. Education

1. () Diploma
2. () Bachelor Degree
3. () Master Degree
4. () Other (specify).....

6. Year(s) of work experience.....years

2.2 Self – Evaluation By Nurses Regarding Urinary Catheterization and Nursing care for the Patients with Indwelling Urinary Catheters

Instruction : Please check (✓) in the column that is closer to your practices

No.	Activity	Never (0)	Some time (1)	Every time (2)
1.	Explaining the patient about the objectives of having indwelling urinary catheter			
2.	Preparing the proper urinary catheterization set			
3.	Preparing the container/bin for the disposed waste			
4.	Preparing the patient by closing the curtain and closing the patients' eyes			
5.	Washing hands by using antiseptic solution (pevidine scrub) and drying handss with disposal cloth			
6.	Unpacking the urinary catheterization set with aseptic technique			
7.	Choosing the appropriate size of the catheters			
8.	Wearing globes with aseptic technique			
9.	Pull out the plastic that covered the end of the catheter			
10.	Cleansing the genital organs by sterile water			
11.	Putting the sterile sheet cover the surrounding area of the genital organs			
12.	Changing the globes before inserting the urinary catheter			
13.	Cleansing the opening part of the urethra by Betadine solution			
14.	Insrting the urinary catheter gently into the urethra while taking off the plastic that covered the catheter			
15.	Hanging the urine bag kept below the level of the bladder			
16.	Using plasters to prevent the contraction of the urinary catheter			
17.	During inserting the catheter, if the catheter can't get in or bleeding occurs, stop and consult the physician			

No.	Activity	Never (0)	Some time (1)	Every time (2)
18.	Keeping the catheter fixed from moving or contracting by putting the plasters at the correct part			
19.	Cleansing the genital organs by soap and water and drying everytime			
20.	Washing hands before and after pouring urine of the individual patient			
21.	Cleansing the outlet of the urine bag with Alcohol 70% before and after opening-closing the urine bag			
22.	Using the clean vessel to measure the urine			
23.	Clipping/closing the urinary catheter everytime after the urine measurement			
24.	Checking for the right condition of the catheter (looking for the conditions as broken, folds etc.)			
25.	Not placing the urinary catheter on the floor			

2.3 Observation of the Nurses' Performance Regarding Urinary Catheterization and Nursing Care for the Patients with Indwelling Urinary Catheters

Instruction : Please check (✓) in the column that is closer to your practices

No.	Activity	Did not Practice (0)	Practiced (1)
1.	Explaining the patient about the objectives of having indwelling urinary catheter		
2.	Preparing the proper urinary catheterization set		
3.	Preparing the container/bin for the disposed waste		
4.	Preparing the patient by closing the curtain and closing the patients' eyes		
5.	Washing hands by using antiseptic solution (pevidine scrub) and drying hands with disposal cloth		
6.	Unpacking the urinary catheterization set with aseptic technique		
7.	Choosing the appropriate size of the catheters		
8.	Wearing gloves with aseptic technique		
9.	Pull out the plastic that covered the end of the catheter		
10.	Cleansing the genital organs by sterile water		
11.	Putting the sterile sheet cover the surrounding area of the genital organs		
12.	Changing the gloves before inserting the urinary catheter		
13.	Cleansing the opening part of the urethra by Betadine solution		
14.	Inserting the urinary catheter gently into the urethra while taking off the plastic that covered the catheter		
15.	Hanging the urine bag kept below the level of the bladder		
16.	Using plasters to prevent the contraction of the urinary catheter		
17.	During inserting the catheter, if the catheter can't get in or bleeding occurs, stop and consult the physician		

No.	Activity	Did not Practice (0)	Practiced (1)
18.	Keeping the catheter fixed from moving or contracting by putting the plasters at the correct part		
19.	Cleansing the genital organs by soap and water and drying every time		
20.	Washing hands before and after pouring urine of the individual patient		
21.	Cleansing the outlet of the urine bag with Alcohol 70% before and after opening-closing the urine bag		
22.	Using the clean vessel to measure the urine		
23.	Clipping/closing the urinary catheter every time after the urine measurement		
24.	Checking for the right condition of the catheter (looking for the conditions as broken, folds etc.)		
25.	Not placing the urinary catheter on the floor		

Part 3 : Assessment of Procedures of Disinfection and Sterilization of Urinary catheterization and Flush Sets

Instruction : Please check (✓) in the column provided that is closer to performance

Observation

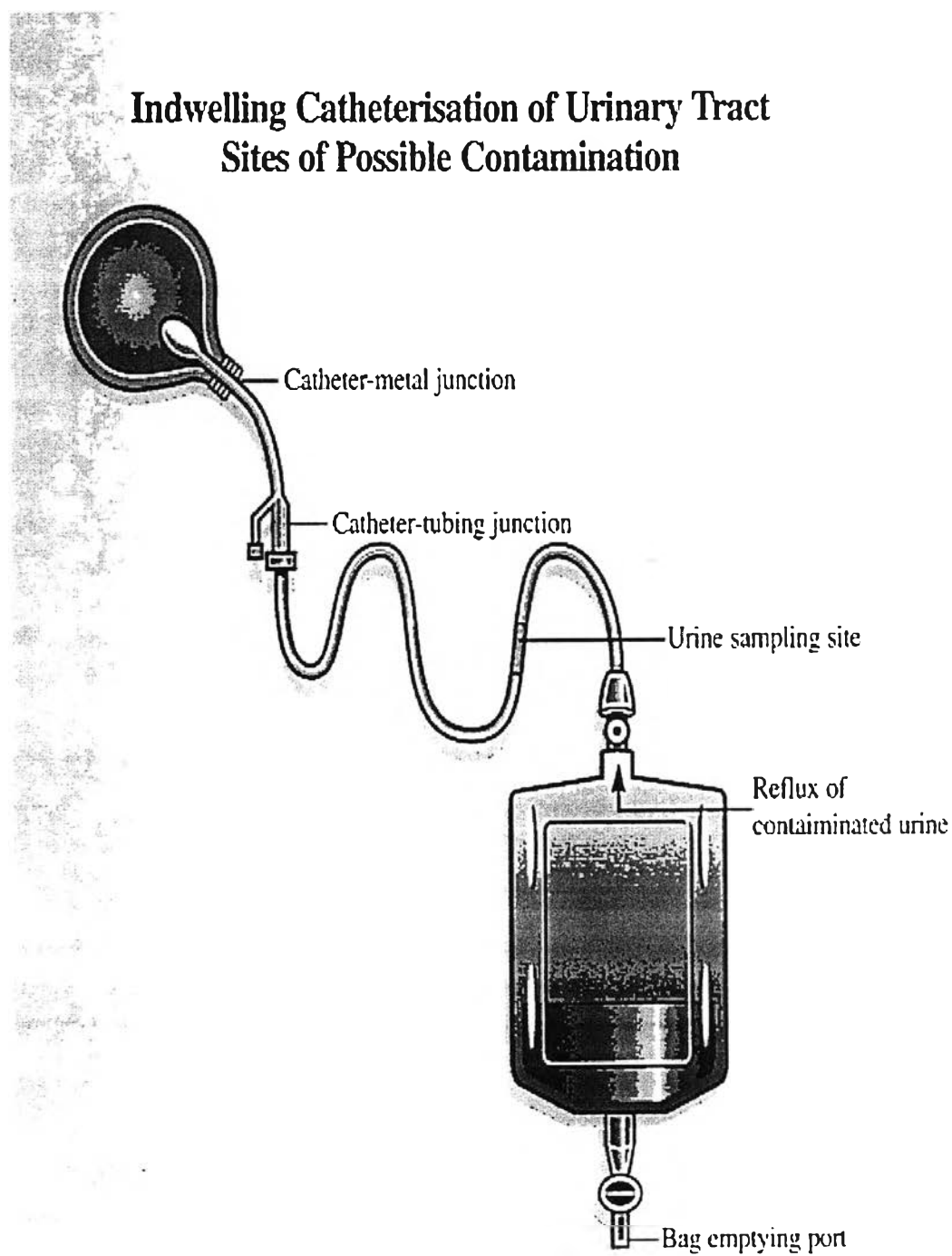
No.	Disinfection / Sterilization procedures	Incorrect (0)	Correct (1)
1.	Washing the urinary catheterization set by using sunlight detergent		
2.	Letting the washed set dried / drying with clean cloth		
3.	Wrapping the dried set with the clean cloth, using plasters and autoclave tape		
4.	Steaming at 121° celsius for 30 minutes		
5.	Opening the autoclave's cover to let off humidity after finishing steaming		
6.	Keeping the sterile set aseptically before sending to the patient wards		
7.	Sending the sets to the patient wards by wrapping the sets with sterile cloth, and putting in the carriers with the cover		
8.	The wards keep the sterile sets in the appropriate place and first in – first out management was employed		
9.	Checking the sterile set for the expired date and do not use the expire ones		

APPENDIX B**Table 22: Nosocomial infection in Thungsong hospital,2002**

Site of Infection	Percentage of infection
1.UTI.	23.9%
2.SSI.	19.5%
3.LRI.	10.5%
4.URI.	3.2%
5.Pneumonia	16.5%
6.Other	26.4%
Total	100%

APPENDIX C

Figure 1: The Closed Drainage System of Urinary Catheter



APPENDIX D

Figure 2: Six Step of Health Care Taker's Hand washing for Prevent Infection



Procedure 1

Wet hands and wrists. Apply soap.



Procedure 2

Right palm over left, left over right.



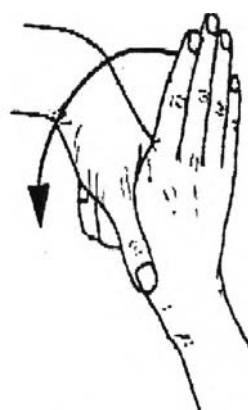
Procedure 3

Palm to palm, fingers interlaced.



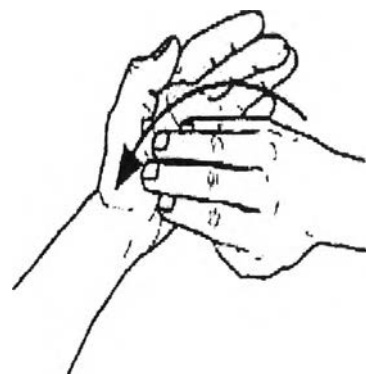
Procedure 4

Back fingers to opposing fingers interlocked



Procedure 5

Rotational rubbing of right thumb clasped in left palm and vice versa.



Procedure 6

Rotational rubbing backwards and forwards with tops of fingers and thumb of right hand in left and vice versa

NOTE: Repeat procedures 1-6 until the hands are clean. Rinse hands and pat dry.

Curriculum Vitae



Name : Mrs. Nuchanok Boonmuang
 Date of Birth : May 15, 1961
 Place of Birth : Nakhon Si Thammarat Province

Institution Attended : Suratthani Nursing College, 1982
 Diploma in Nursing
 Songkhla Nursing College, 1989
 Nursing Science and Higher Certificate in Midwifery
 (Bachelor of Nursing)

Experience

1982 – 1987 : Nurse at Obstetric – Gyneacology Ward , Thungsong Hospital
 1988 – 1989 : Study at Songkhla Nursing Collage
 1989 – 1990 : Nurse at Emergency Room, Thungsong Hospital
 1991 – 1992 : Nurse at Pediatric Ward, Thungsong Hospital
 1992 – 1993 : Nurse at Special Ward, Thungsong Hospital
 1994 – 2003 : Nurse at ICU, Thungsong Hospital

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