

REFERENCES

- Akue Unalekka. Nosocomial Infection Prevention. Bangkok: J.C.C. Publishing, 1998.
- Aporn Chue-prapaisin. <u>Operational Research</u>. Prince of Songkla: Faculty of Nursing, Prince of Songkla University, 1998.
- Benja Yoddamnern et al. <u>Qualitative Research Methodology</u>. Nakhon Pathom: Population and Society Research Institute, 1992.
- Chalee Chuntakarnbandit et al. <u>Research Methodology: Guideline for Public Health</u>

 <u>Researcher.</u> Nakhon Sawan: Sawanwithee Publishing, 1993.
- Chanpen Uttama et al. <u>Research and Development</u>; <u>Alternatives for Work</u>

 <u>Development</u>. Khonkaen: Sirichai Publishing, 1991.
- College of Public Health Chulalongkorn University. <u>Participatory Action Research</u>. Bangkok: Public Health College of Chulalongkorn University. (copy)
- Lian Sai-yot et al. Educational Research Technique. Bangkok: Suviriyasarn, 1995.
- Medical Department, Ministry of Public Health. <u>AIDS Bulletin</u>. Nonthaburi: Aksornsamai, 1999.
- Nisa Chuto. Program Evaluation. Bangkok: P.N.Printing, 1995.
- Noi Ketsinghnoi, N. et al. <u>Participation of Tumbon Administration Organization</u>

 <u>Member in Student Affair Administration: Anti-drug Campaign in Chiang Khong</u>

 <u>and Doi Luang District in Chiang Rai</u>. Thesis. Master of Art in Education

 Administration, Naresuan University. 2001.
- Nursing service delivery point. <u>Infection Control Implementation in Community</u>

 <u>Hospital</u>. Bangkok: Veteran Association Press, 1992.

- Orn-anong Pinsakul. Effects of Participatory Problem Solving on Practice of Infection

 Control of Nurse at Male Medical Ward of Lampang Hospital. Master Thesis of

 Nursing, Chaing Mai University, 1999.
- Permanet Secretary, Office of, Ministry of Public Health. <u>Community Hospital</u>. Bangkok, 1984.
- Phayao Provincial Health Office. <u>Accident Report of Officer in Phayao Province in 2000</u>. Phayao: Phayao Provincial Health Office, 2000.(copy)
- Phayao Provincial Health Office. <u>Hepatitis B Situation Report in Phayao in 2000</u>. Phayao: Phayao Provincial Health Office, 2000. (copy)
- Phayao Provincial Health Office. <u>HIV Situation Report in Phayao in 1989 to December</u> 31st, 2000. Phayao: Phayao Provincial Health Office, 2000. (copy)
- Phayao Provincial Health Office. <u>Nosocomial Infection Report in Phayao in 2000</u>. Phayao: Phayao Provincial Health Office, 2000. (copy)
- Phayao Provincial Health Office. <u>Pulmonary Tuberculosis Situation Report in Phayao</u> in 2000. Phayao: Phayao Provincial Health Office, 2000. (copy)
- Sawanee Sisongsom. <u>Participation of Community in Diabetes and Hypertension</u>

 <u>Control Program.</u> Thesis. Master of Education, Chiang Mai University, 1991.
- Somwang Danchaivichit et al. <u>Infection Control and Prevention</u>. Bangkok: Thammasat University Press, 1995.
- Somwang Danchaivichit et al. <u>Nosocomial Infection</u>. Bangkok: Ruen Kaew Printing, 1996.
- Somwang Pithiyanuwat. <u>Project Evaluation</u>. Bangkok: Chulalongkorn University Press. (n.d.).

- Sri-parinya Thu-prachang. <u>Participation in Development of Rural Environmental</u>

 <u>Quality Conservation</u>. Master Thesis of Social Science in Environment, Graduate School, Mahidol University, 1996.
- Tawatchai Worapongsatorn. <u>Principle of Research with Public Heatlh Examples</u>. Bangkok: Chulalongkorn University Press, 1993.
- Thanapong Chinwong et al. <u>Care System Development for Diabetes Patient in Community and in Service Place. Maharaja Hospital, Nakorn Ratchsrima</u>. Nakhon Ratchasrima Provincial Health Office, 1996.
- Udomsak Imsawang et al. Manual of Common Communicable Disease for Public

 Health Technical Officer. Bangkok: Thailand Agriculture Co-operation

 Association, 1996.
- Wannee Santisutham. <u>Bulletin of Nosocomial Infection Control Association of Thailand</u>. Bangkok: Supawanich Printing, 2000.
- Wenzel, R.P. <u>Prevention and Control of Nosocomial Infections</u>. 3rd ed. Maryland USA: A Wverly Company, 1997.
- Wichit Srisupan et al. <u>Bulletin of Nosocomial Infection Control Association of Thailand</u>. Bangkok: Supawanich Printing, 1996.
- Wilawan Pichiansatian et al. Effective of education and provition of facilities in the

 Emergency room, Maharaj Nakorn Chiangmai Hospital Hospital on the practice
 of the University precautions by Emergency room nurses Chiang Mai: Faculty of
 Nursing, Chiang Mai University, 1995.
- Wilawan Pichiansatian et al. <u>Infection Control Nursing</u>. Volume 1. Chiang Mai: Faculty of Nursing, Chiang Mai University, 1999.



Appendix A

Questionnaire on Infection Control in Medical and Health Service, Dokkhamtai hospital,Dokkhamtai District, Phayao Province

Part 1	Org	anization and administration				
	1)	Infection control committ	ee exists			
		() No committee	() Yes			
	2)	Infection control committ	ee meeting			
		() No meeting	() Yes,times			
	2	Date				
	-	Date				
		Date				
		Date				
	Ī	Date				
	3)	Infection control supervis	ion			

() No supervision () Yes,times

Part 2 Infection surveillance

- 1) Surveillance in personnel
- 1.1 Annual physical check-up (Oct.1999 Sep. 2000)

Personnel	Service delivery point	Total number	Check-up total number	Percentage
Doctor				
Nurse				
Lab staff				
Patient assistant				
Employee				
TOTAL				

1.2 Accident at work (Oct.1999 - Sep. 2000)

Personnel	Service	Total	No. of staff	%	No.	%	Positive	%	No.	Treated	%
	delivery	no.	getting		HIV tested						
	point		accident								
Doctor										-	
Nurse											
Lab staff										-	
Patient											
assistant											
Employee										-	
TOTAL											

2) Surveillance in patients (Oct.1999 – Sep. 2000)

Month	Ward of	Site of the	No. of	No. of	No. of	Infection
	the	infection	patient D/C	nosocomial	infection	rate
	infection			infected patient		
					_	
					1	
					_	
TOTAL						

3)	Surveillance in environment sanitation (Oct.1999 – Sep. 2000)
	1) Examination of sterilized equipment
	() No examination
	() Yes () physicallytimes No. of positive faulttimes,
	identify
	() chemicallytimes No. of positive faulttimes,
	identify
	() biologicallytimes No. of positive faulttimes,
	identify
	2) Examination of wastewater treatment system
	() No examination
	() Yestimes No. of positive faulttimes,
	identify
Part 3 Pre	vention and Control
1)	Solid waste management
	1.1 Waste reduction
	- Management
	- Problems
	1.2 Waste separation
	- Management
	- Problems
	1.3 Waste transportation
	- Management
	Problems

1.4	Waste disposal
	- Management
	- Problems

Questionnaire / observation form of trash bins and its use in Dokkhamtai hospital

Item	Evaluation				
	Existing / Advantage	Should improve			
1. Trash bins appropriate					
2. Trash bins number is					
adequate					
3.Convinience to use					
4.The use of trash bins					

Trash bins mapping

Appendix B

Questionnaire on infection control ofservice delivery point Dokkhamtai hospital, Phayao province

1. Prevention and control

Item	Eva	luation
	Advantage	Should improve
Place arrangement		
-Ventilation		
-Arrangement of equipment, in order and convenient		
to use		
-Cleanliness of operational ground		
-Cleanliness of floor, wall, and ceiling		
-Cleanliness of restrooms		
Personal hygeine		
-Befor/after operation hand washing		
-Hand washing when contaminated and before		
contact to low immuned patient		
-Hand washing before contact to infectious patient		
and after contact to contamination		
-Hand washing before operation		
Operational technique		
-Wet dressing		
-IV injection		
-Operation		

Item	Eva	aluation
	Advantage	Should
		improve
Use of protective barriers (adequate, appropriate to		
activity)		
-Gloves (sterile, rubber, disposable gloves)		
-Gown		
-Mask		
-Apron		
-Goggles		
-Boots		
-Cap		
Clean, Disinfection, Sterilization		
-Clean, decontaminate medical equipment, Where?		
-Sterilization, How?		
-Inspection of effectiveness of sterilization, by?		
-Wrapping in sterilization (wrapping, adequate)		
-Expiration of sterile object (Sterilized / Expired		
date)		
-Storage shelf arrangement (first in – first out)		
-Transportation of contaminated / sterile equipment		
Clothes management		
-Blood / bodily fluid contamination		
-Non blood / bodily fluid contamination		
Needle and sharp tools		
-Appropriate container		
-Adequate number of container		
-Convenience to use		
-Use of container		

Item	Eva	uation
	Advantage	Should
		improve
Solid waste management		
-Separation of trash bin		
-On site separation / gloves separation		
-Waste collection		
-Waste transportation		
*Use of protective barriers		
-Rubber gloves		
-Apron		
-Mask		
-Boots		
*When transport		
-Waste disposal / gloves disposal		
Eduacation on practice at patient and relative service		
(Announcement / Notice board / talk in group or		
person)		

Appendix C

Questionnaire for Service Provider on Infection Control Dokkhamtai Hospital, Phayao Province

-Answer all questions truthfully in order for work development, this is anonymous
-Mark / in () and fill in the blank or table
Part 1 General information
1. Sex () Male () Female
2. Position () Medical staff () Non medical staff
3. Location of your service 1
4. Opinion on activities at your work location
() Not risky to tranmission
() Risky to transmission
Identify risky activity 1
Part 2 Management
1. On duty, do you use of protective barriers, if want some, what are they?
() No need
() Yes, I want to use
2. In the past 3 months, use of protective barriers sufficient to use?
() Sufficient
() Not sufficient, because

Part 3	Part 3 Surveillance of infection								
1. D	1. During October 1999 – September 2000, did you experience accident at work?								
(() Never () Yes,times of accident								
2. D	etails of eac	ch accident	at worl	k (during C	Octobe	r 1999	9 – Septen	nber 200	00)
		T		T				I DI I	1
Episod	1	Activity	Part	Location	_	orting	Reason	Blood	Anti-retrovira
	Place of accident	doing at accident	of	of accident		ter dent	of not	tested	drug taken? How long?
	accident	accident	body	accident	Yes	No	reported	uate	How long:
					163	110			
						-			
					-			_	
	-				-			ļ	
					<u> </u>	L			
3. H	lave you had	d annual ph	vsical	check-up?	(Octo	ber 19	99 – Septe	ember 2	.000)
J. 1.	are you muc	- a.m.aa. p.	., 5.0		(0000		Jopa		,
() Never () Yes, for.		tim	es				
Part 4	4 Prevention	and contro	ol						
Tait	7 I TO VOILLION	i and contr	01						
1. F	rom which s	source did	you gai	n knowled	ge of	prever	ntion and o	control?	
() Training	() M	leeting	(() Joi	urnal /	book	() Pan	nphlet
() VDO / TV	V ()N	otice b	oard	() Ot	hers	• • • • • • • • • • • • • • • • • • • •		
2 1	Tarra 11011 aug	an animad a		oudodas s	f =====	antion	and contr	al fram	ony maating
2. H	iave you eve	er gained so	ome kn	owledge of	preve	ention	and contr	oi iroin	any meeting.
tr	aining, or se	eminar?							
() Never								
() Yes, on	topic		• • • • • • • • • • • • • • • • • • • •	• • • • • • •	da	ate (dd/mr	n/yy)	
	to	pic			dat	e (dd/:	mm/yy)		
	topicdate (dd/mm/yy)								

topic......date (dd/mm/yy).....

3. Mark (/) at any of these modes of transmission of the diseases if you think they can communicate through.

Disease	Mode of transmission					
	Blood	Bodily fluid	External	Stool	Respiratory	Other
		except saliva, perspiration,	contact			
				11)	1	
		and urine				
HIV virus						
Hepatitis B						
Pulmonary			_			
ТВ						

Appendix D

F	ollow-up /	Supervision	Form	for	Infection	Control,
	Dokkhan	ntai Hospital	Date	••••	• • • • • • • • • • •	• • • • • •

1. Organization for infection control

Item	Service delivery point		
	Existing / Advantage	Should	
		improve	
IC committee			
-Role of IC committee			
-Meeting			
-Infection control supervision / follow-up			
Policy for infection control work			
Administration for infection control work			

2. Infection surveillance

Item	Service delivery			
	point			
	Existing / Advantage	Should		
		improve		
Client				
-Whose role				
-How				
-What emphasis	:			
Staff				
-Staff physical check-up				
-Staff accident (reporting, ARV drug				
taking)				
Environmental sanitation				
-Equipment				
-Aquaeus IV / Reagent				
-Drinking, tap, waste water				

3. Questionnaire / observation form of trash bins and its use in Dokkhamtai hospital

Item	Evaluation			
	Existing / Advantage	Should improve		
1. Trash bins appropriate				
2. Trash bins number is				
adequate				
3.Convinience to use				
4.The use of trash bins				

Trash bins mapping

4. Questionnaire on infection control ofservice delivery point

Item	Service	edelivery
	point	
	Advantage	Should
		improve
Place arrangement		
-Ventilation		
-Arrangement of equipment, in order and convenient to use		
-Cleanliness of operational ground		
-Cleanliness of floor, wall, and ceiling		
-Cleanliness of restrooms		
Personal hygeine		
-Befor/after operation hand washing		
-Hand washing when contaminated and before contact to		
low immuned patient		
-Hand washing before contact to infectious patient and		
after contact to contamination		
-Hand washing before operation		
Operational technique		
-Wet dressing		
-IV injection		
-Operation		
Use of protective barriers (adequate, appropriate to		
activity)		
-Gloves (sterile, rubber, disposable gloves)		
-Gown		
-Mask		
-Apron		
-Goggles		
-Boots		
-Cap		

Item	Service	delivery
	point	
	Advantage	Should
		improve
Clean, Disinfection, Sterilization		
-Clean, decontaminate medical equipment, Where?		
-Sterilization, How?		
-Inspection of effectiveness of sterilization, by?		
-Wrapping in sterilization (wrapping, adequate)		
-Expiration of sterile object (Sterilized / Expired date)		
-Storage shelf arrangement (first in – first out)		
-Transportation of contaminated / sterile equipment		
Clothes management		
-Blood / bodily fluid contamination		
-Non blood / bodily fluid contamination		
Needle and sharp tools		
-Appropriate container		
-Adequate number of container		
-Convenience to use		
-Use of container		
Solid waste management		
-Separation of trash bin		
-On site separation / gloves separation		
-Waste collection		
-Waste transportation		
*Protective barriers		
-Rubber gloves		
-Apron		
-Mask		
-Boots		
*When transport		
-Waste disposal / gloves disposal		
Eduacation on practice at patient and relative service		
(Announcement / Notice board / talk in group or person)		

Appendix E

Survey Form of Waste Management in Dokkhamtai Hospital

Service delivery point /	Morning		Afternoon	
Group	Correct	Incorrect	Correct	Incorrect
OPD				-
ER				
LR				
OR				
Special Clinic				
Ward				
Special Ward				
Central Supply				
Laundry				
Laboratory Room				
Dental Clinic				
Community Health				
Communicable Disease				
Control				

Appendix F

Medical staff level: Test of Infection Control Training

Please circle around the most suitable choice

- 1. What type of work is HIV risky to medical staff?
 - a. Body cleansing to HIV patient
 - b. Injection to HIV patient
 - c. Counseling to HIV patient
 - d. Delivery performing to HIV patient
 - e. The correct answers are b and c
- 2. How do you prevent from HIV AIDS transmission?
 - a. Wash up once blood or bodily fluid contact
 - b. Take AZT after needle stick accident
 - c. Wear appropriate protective barriers as mentioned in a standard
 - d. Correctly disinfected and decontaminated tools before use
 - e. None is correct
- 3. What mode of tranmission can Hepatitis B communicate?
 - a. Talk closely to Hepatitis B patient
 - b. Hepatitis B patient 's perspiration contact
 - c. External touch in assistance to Hepatitis B patient
 - d. Bodily fluid spill into eyes at delivery
 - e. None is correct

- 4. Which is incorrect?
 - a. Separte room of TB patient
 - b. General ward should not be air-conditioned
 - c. Wear surgical mask when assisting patients
 - d. Wear surgical mast to TB patient when taking the patient to x-ray
 - e. None is incorrect
- 5. What happens if medical staff do not follow the prevention and infection control practice?
 - a. HIV transmission
 - b. Patient can be infected by other diseases
 - c. Nosocomial infection
 - d. No negative impact
 - e. Communicable diseases spread among medical staff and patient
- 6. Which of these is correct for floor cleaning?
 - a. Sweep and wipe with dry cloth
 - b. Sweep and wipe with wet cloth
 - c. No sweeping, wipe with cloth with detergent, and dry with dry cloth
 - d. Wipe with wet cloth, frequently shake the cloth
 - e. All correct
- 7. How many minutes does it take to disinfect the floor?
 - a. 5 minutes
 - b. 10 minutes
 - c. 20 minutes
 - d. 30 minutes
 - e. 40 minutes

- 8. Which part of in-patient building should pulmonary TB, measle, chicken pox patients stay?
 - a. Anywhere up to convenience
 - b. Together with HIV patient
 - c. Only in good ventilation room
 - d. Close to window, upwind
 - e. Building corner
- 9. What kind of disinfectant is used for blood or bodily fluid contaminated floor?
 - a. Savlon
 - b. 70% Alcohol
 - c. Detergent with water
 - d. All wrong
 - e. All correct
- 10. What is the impact to agent from high temperature and humidity?
 - a. Earlier germ killed
 - b. Terminate germ's growth
 - c. Faster infestation of germ
 - d. No effect on germ
 - e. The correct answers are a and b
- 11. What to do first after a needle stick accident?
 - a. Rinse with clean water
 - b. Use bandage
 - c. Squeeze blood, wash with soap and wipe with 70% alcohol
 - d. Use dry cotton to wipe blood
 - e. Wipe with 70% alcohol

12. What is appropriate time to take anti-retroviral (ARV) drug after contacting blood or bodily fluid?
a. Within 4 hours
b. Within 2 hours
c. Within 5 hours
d. Within 8 hours
e. Within 3 hours
13. Should you report after accident of contacting blood or bodily fluid?
a. If too risky, report
b. If not risky, no report needed
c. Always report
d. Up to convenience
e. Sometimes
14. What is the appropriate blood test after contacting blood or bodily fluid?
a. After accident, at 3 and at 6 months
b. Once after accident
c. After accident and at 3 months
d. At 3 months
e. After accident and at 6 months
15. What time duration a person has to take ARV drug after the accident?
a. 2 weeks
b. 5 weeks
c. 4 weeks
d. 6 weeks

e. 3 weeks

- 16. What are important roles of nurse in infection control?
 - a. Completely record patient's symptoms in Nurse's note
 - b. Usually observe signs and symptoms regarding to infection
 - c. Suggest infection control practice to patient and the relatives
 - d. Consult and advice with collegues when problem found
 - e. All correct
- 17. When should you perform hand washing with Chlorhexidine 4% at least 30 seconds?
 - a. At delivery
 - b. Urination
 - c. Aquaeous IV fluid
 - d. Choose a and b
 - e. Choose b and c
- 18. Before performing at delivery, what should be done for hand washing?
 - a. Normal hand washing
 - b. Hygienic hand washing
 - c. Surgical hand washing
 - d. All correct
 - e. None is correct
- 19. Antiseptic means?
 - a. Chemical used for disinfecting medical equipment
 - b. Chemical used for decontaminating on body and tissue
 - c. Chemical for universal disinfecting
 - d. All correct
 - e. None is correct

20. Which is correct?

- All equipments used with patient should be soaked in disinfectant before cleaning
- b. Equipments soaked in Glutaraldehyde 2%(Cidex) do not have to rinse in distilled water before use
- c. Rubber hose / tube can be decontaminated by any method
- d. Sterilization can decontaminate all kinds of microorganism and spore
- e. All correct
- 21. Which is NOT correct about protective barriers use?
 - a. Only when necessary
 - b. Use appropriately to type of work
 - c. Only single mission use
 - d. Use quality barriers
 - e. Wear for a long time to save cost
- 22. What is common mistake of using gloves?
 - a. Answering phone call
 - b. Temperature measurement
 - c. Blood pressure measurement
 - d. Touching door knob
 - e. All correct
- 23. What is incorrect for using gown?
 - a. Do not wear out of the confinement
 - b. Wear 1 gown to care several patients
 - c. Carefully remove the gown immediately after use
 - d. Hand wash after remove gown
 - e. Wear gown for activities suspecious of blood or bodily fluid contamination

- 24. What is the most correct about nosocomial infection?
 - a. Systematically and continually monitor and observe nosocomial infection
 - b. Monitor and observe nosocomial infection and analyze data gained then report to concerning service delivery points to find appropriate intervention
 - c. Systematically monitor and observe nosocomial infection and report to concerning service delivery points
 - d. The correct answers are a and b
 - e. The correct answers are b and c
- 25. What is NOT the goal of infection control?
 - a. Reduce risk of nosocomial infection
 - b. Redue suffering of patient
 - c. Reduce nosocomial infection treatment cost of patient
 - d. Reduce nosocomial infection treatment cost of hospital
 - e. Reduce disinfectant use in hospital
- 26. What is NOT the benefit from infection control?
 - a. Know the incidence and transmission of nosocomial infection
 - b. Be an important information when the hospital face legal trouble
 - c. Minimize risk of hospital personnel at medical service
 - d. Increase quality and efficiency of patient care
 - e. Find uncommon or epidemic infection in time
- 27. What is incorrect meaning of nosocomial infection?
 - a. Infection affected from patient receiving external microorganism while staying at hospital
 - b. Infection affected from patient receiving internal microorganism while staying at hospital

- c. Infection affected from patient receiving microorganism, and the patient admitting with symptoms or during incubation period
- d. Infection affected from patient receiving microorganism while being diagnosed or treated at hospital
- e. Infection to patient after 48 hours of admission, in case of incubation period unknown
- 28. What is the most important source of information for nocosomial infection investigation?
 - a. Registration
 - b. Symptom observation
 - c. Laboratory test
 - d. Radiography
 - e. All correct
- 29. What is incorrect about dust control?
 - a. Using vacuum cleaner
 - b. Using a broom
 - c. Using a mop to wipe dust
 - d. Use wet cloth
 - e. The correct answers are b and c
- 30. What type of waste is used formalin?
 - a. Domestic waste
 - b. Infectious waste
 - c. Sharp waste
 - d. Chemical waste
 - e. Radioactive waste

Appendix G

Non-medical staff: Test of Infection Control Training

Please circle around the most suitable choice

- 1. What mode of transmission can HIV AIDS communicate?
 - a. External contact to AIDS patient
 - b. Blood / bodily fluid of AIDS patient
 - c. Respiration
 - d. All correct
- 2. How can you prevent from AIDS?
 - a. Wearing appropriate protective mask (as directed in the standard)
 - b. Taking AZT after needle stick
 - c. Washing once contact blood / bodily fluid
 - d. All correct
- 3. What mode of transission can Hepatitis B communicate?
 - a. Blood
 - b. Physical contact
 - c. Respiratory
 - d. All correct
- 4. What mode of transission can Tuberculosis (TB) communicate?
 - a. Blood
 - b. Physical contact
 - c. Bodily fluid contact to skin
 - d. All correct

5.	Wh	at risk occurs if not following the prevention and infection control practice?
	a.	HIV AIDS
	b.	Hepatitis
	c.	Tuberculosis
	d.	All
6.	Wł	nat kind of disinfectant is usually used for general floor cleaning?
	a.	Detergent and water
	b.	Lisol reagent
	c.	70% Alcohol
	d.	0.5% Vergon reagent
7.		nat kind of disinfectant is used for blood or bodily fluid contaminated floor aning?
		Detergent and water
		Lisol reagent
	c.	70% Alcohol
	d.	Only water
8.	WI	nat are impacts of high temperature and humidity on germ?
	a.	Germs easily die
	b.	Germs grow and proliferate
	c.	No effect
	d.	Growth degenerate
9.	Нс	w long does it take to soak the blood or bodily fluid contaminated floor?
	a.	5 minutes
	b.	10 minutes
	c.	20 minutes

d. 30 minutes

- 10. Anti-retroviral drug should be used within how many hours after the accident?a. 2 hours
 - b. 5 hours
 - c. 8 hours
 - d. 10 hours
- 11. What is a high risk accident?
 - a. Patient's blood spill into eyes
 - b. Saline or lumbar puncture needle of HIV patient sticks
 - c. Air needle at saline bag
 - d. Patient's saliva spill onto skin
- 12. What is the first-aid for needle stick accident?
 - a. Rinse with water
 - b. Squeeze blood, wash with soap, then wipe with alcohol
 - c. Use dry cloth
 - d. Use bandage
- 13. What is the purpose of hand washing?
 - a. Eliminate natural dirt e.g. perspiration, lipid
 - b. Reduce germs on hands
 - c. Both a and b are correct
 - d. Both a and b are incorrect
- 14. When should we wash our hands?
 - a. After touching blood, bodily fluid, or contaminated equipment
 - b. Before touching any patient
 - c. Before nursing any patient
 - d. All correct

15. Which of the followings is NOT a disinfectant?	
a. Alcohol	
b. Sodium hypochlorite	
c. Normal saline (0.9%NSS)	
d. Povidine-iodine solution	
16. What is disinfecting?	
a. Elimination of contaminants on medical equipment or skin	
b. Soaking medical equipments in solvent	
c. Boiling medical equipments	
d. Steaming medical equipments	
17. What protective barriers should be used when cleaning medical equipment?	
a. Rubber gloves, plastic dam	
b. Rubber gloves, goggles	
c. Rubber gloves, goggles, and mask	
d. Rubber gloves, goggles, mask, apron, and boots	
18. How many routes can germ invade our body?	
a. 1	
b. 2	
c. 3	
d. 4	
19. Which is NOT necessary to wear gloves when touching?	
a. Blood	
b. Stool	
c. Urine	

d. Perspiration

20. What is the most important prevention?

- a. Wearing gown
- b. Wearing gloves
- c. Hand washing
- d. Wearing mask

21. What is correct for removing gloves?

- a. Becareful not to touch outside surface of the gloves
- b. Touch only outside surface to remove
- c. As you wish
- d. Wash before removal

22. What are considerations choosing protective barriers?

- a. Convenient
- b. Necessary and suitable
- c. Use all that available
- d. Up to personal pleasure

23. Which of the following is infectious waste?

- a. Tissue
- b. Blood contaminated gauze and cotton
- c. Vaccine and container
- d. All correct

24. What is What is correct about infectious waste?

- a. Trash can be littered into any bin
- b. Container for sharp waste must be strong
- c. Waste collection is free of rule
- d. Waste collection should wait till the bag is very full

- 25. What is NOT a good characteristic of waste collection house?
 - a. Should be close to building for transport convenience
 - b. Ventilated, not humid, flat floor and able to be washed
 - c. Spaceous enough to keep all waste generated
 - d. Two compartments: general and infectious waste

Appendix H

Focus Group Discussion Key Questions

1. Assessment of infection control situation

- 1.1 What assessment on infection control was about?
- 1.2 Who plays the role of assessment?
- 1.3 How was the assessment done?

2. Planning for infection control problem solution

- 2.1 How were the findings from assessment utilized?
- 2.2 What are the goals of infection control implementation?
- 2.3 Who plays role in the planning for IC?
- 2.4 What are the processes for the solution?

3. Problem solution and obvious in IC development

- 3.1 How the administration was developed?
- 3.2 How the administrator perceives and supports?
- 3.3 What was done for the surveillance?
 - -How clients deal / improve for infection control?
 - -How service provider deal / improve for infection control?
 - -How environmental sanitation deal / improve for infection control?
- 3.4 How was the information surveillance applied for the development?

3.5 Prevention and control

- -How hospital area arrangement deal / improve for infection control?
- (Bed, bath, room separation, entrance and exit in hospital)
- -How equipment management deal / improve for infection control?
- (Wet dressing cart, sterilization drum and set, solution, aquaeus, disinfectant)
- -How cleaning, decontamination, sterilization deal / improve for infection control?
- (Area management, equipment, disinfectant)
- -How service technique deal / improve for infection control?
- (Hand washing, patient isolation, infection control practice, single cath, aquaeus IV)
- -How environmental / food sanitation deal / improve for infection control?
- (Waste disposal, sharp waste, corps management, pest control, water management, food sanitation)
- -How academic development deal / improve for infection control?
- (Orientation for new recruitment, training, study tour, public relation)

4. Follow up and Evaluation of infection control

- 4.1 How to follow up, evaluate infection control?
- 4.2 Who played such role?
- 4.3 What are the results?

5.Problem and obstacle

Appendix I

Pictures from Activities



Dokkhamtai hospital



IC committee meeting



Before: ICN



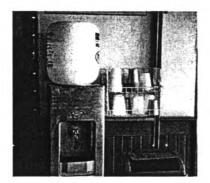
After: ICN and ICN assisstant



Before: TB and HIV patient attend at same place



After: TB patient attend separately



Before: Share drinking glass



After: Use disposable cup fore drinking





After: Separate trolley for sterile equipments

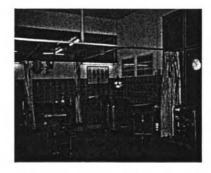
After: Separate trolley used

Before: Patient trolley used for equipments

equipments transportation



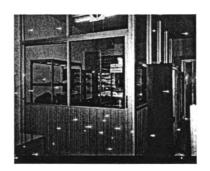
Before: Limited room for working



After: Enlarge room for working



Before: Not one way system at central supply



After: Make one way system at central supply



Before: Surveillance done only at ward



After: Additional surveillance at special ward and LR



Before: Disorganized



After: Campaign the routine clean-up

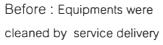


Before: Some of sterile set had no label



After: Label all sets





points



After: Equipments cleaning at central

supply

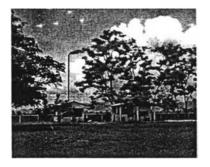


Before: Mixed non-infectious

and infectious waste



After: One-way route of waste collection and separate waste



Before: Full of smoke when

burned



After : Reduce use of disposable

syringe



After: Mapping of bins and rearrange the

position and re-categorize

Before: Excessive number of

bins and mix waste



Provide health education



Notice board on IC



Study tour on IC work





Training on common communicable disease and prevention and control



Monitoring and evaluation

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