

มหาวิทยาลัยเชียงใหม่
Chiang Mai University

APPENDICES

APPENDIX A

Informed consent

My name is Liu Jun-ey, a graduate student of POHNED at Chiang Mai University, and nurse working in Nursing Department of People's Hospital of Beijing Medical University. I am conducting a study about the computer knowledge, attitudes and skills of nurses working in People's Hospital of BMU. In my study, I need your help in gathering information. I would like to appreciate your participation if you willing to participate in this study.

The purpose of this study is to identify the levels of nurses' computer knowledge and skills, as well as nurses' attitudes toward computer use. The information obtained from this study will help nurse administrators to plan the ongoing computer training. If you agree to participation, you will be asked to complete a questionnaire of nurses' computer knowledge, attitudes, and skills. It will only take about 20 to 30 minutes to complete it. The questionnaire will assess your computer knowledge, attitudes and skills levels. If you have any questions about the questionnaire, I will be glad to explain them to you.

However, your responses to the questionnaire will be kept confidential, and you will not be identified by name or codes. The obtained information will be analyzed and presented as group data.

There are not any risks to participate in this activity. However, your participating is absolutely voluntary, and you may withdraw from the activity at any time prior to completion of the questionnaire. Your refusal will not affect you in any way. Completion of the questionnaire indicates your willingness to participate in the activity.

Thank you for your considering my request. If you agree to participate, I will distribute a questionnaire to you, and collect it back in one week.

Nursing Department of
People's Hospital of BMU

Oct. 1997.

APPENDIX B

Demographic Data Recording Form

Direction: The following are questions concerning your personal data. Please answer these questions by filling or selecting your answers in the blank.

How old are you? _____ years.

How many years have you been working in nursing? _____ years.

What is your educational background / level in nursing?

() Certification () diploma

What is your profession title?

() Junior nurse () Senior nurse () charge nurse

Which ward are you working in?

() Medical () Surgical

() Gynecology and Obstetrics () Pediatric

Did you attend the 2-week formal computer training?

() yes () no

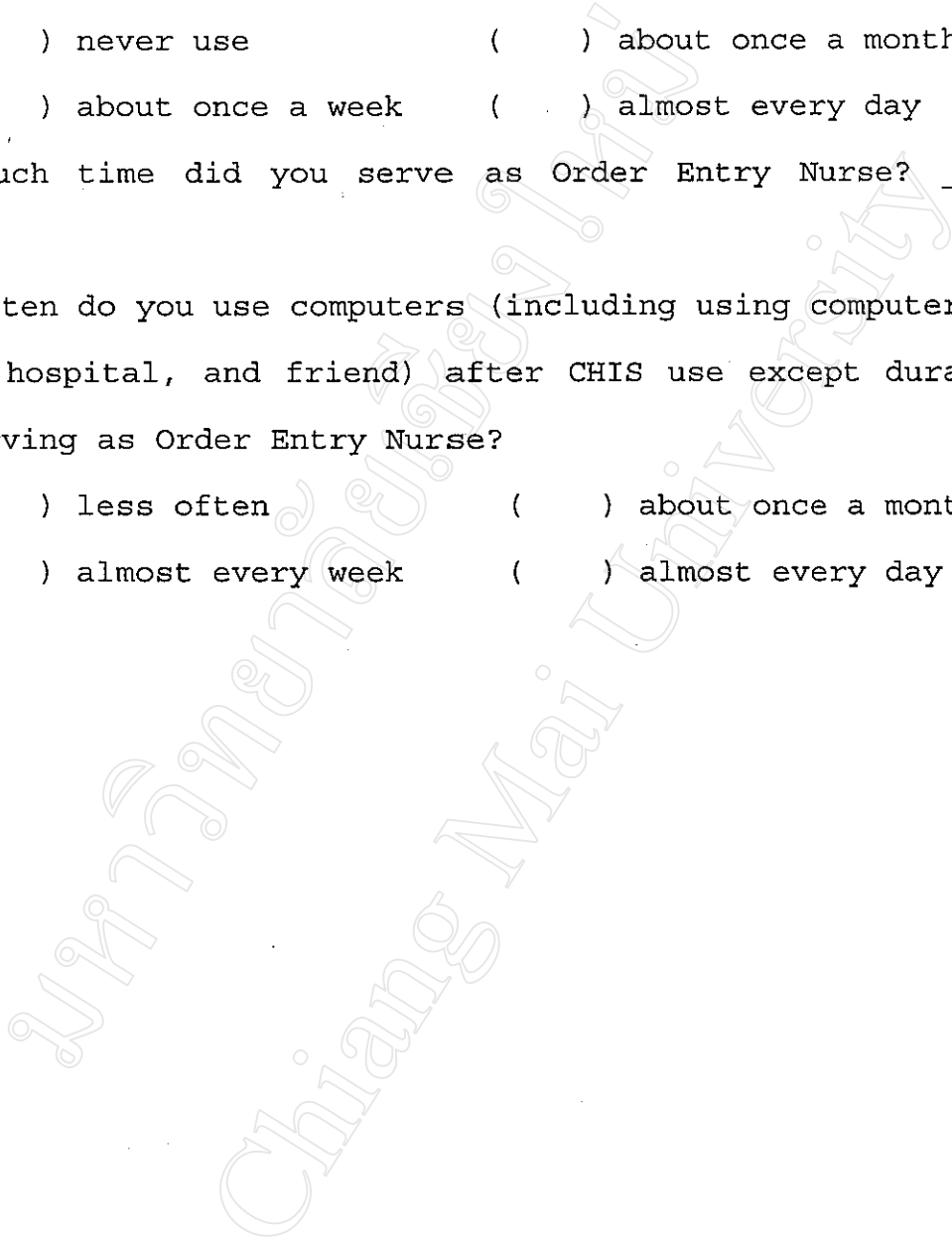
How often did you use computer before the implementation of CHIS?

- never use
- about once a month
- about once a week
- almost every day

How much time did you serve as Order Entry Nurse? _____ months

How often do you use computers (including using computers of home, hospital, and friend) after CHIS use except duration of serving as Order Entry Nurse?

- less often
- about once a month
- almost every week
- almost every day



Nurses' Computer Knowledge Questionnaire

Directions: This section is designed to assess your current level of computer knowledge. It consists of 20-item true or false questions that focus on the use of Windows and CHIS. Please mark your choice using "T" or "F" indicates the right or wrong statement respectively. Please answer ALL of the test questions.

True or false questions (question 1-20)

The basic computer knowledge (question 1- 8)

- () 1. The components of a computer system are Mainframe CRT (cathode ray tube) □ keyboard and printer.
- () 2. The sequences of turning on the computer system are □ first open mainframe □ then open exterior equipment e.g. CRT, printer.
- () 3.
- () 4.
- () 5.
- () 6.
- () 7.
- () 8.

The knowledge in CHIS use (question 9-14)

- () 9. The operational sequences of order entry for using CHIS are entry, identification and inborn.
- () 10. If the patient uses medicines which bring by himself she should select "entrust" in the items of cost selection.
- () 11.
- () 12.
- () 13.
- () 14.

The limitation of CHIS (question 15-16)

- () 15. Many nursing tasks can be computerized, such as, nursing care plan, patient monitoring and patient charting, direct patient, however, nurses' direct patient care can not be accomplished through computers.
- () 16. Some subsystems in CHIS are still not available and CHIS is still at low level than the HIS in developed countries.

The knowledge of system security (question 17-20)

- () 17. The aim of using password is to protect themselves, and in case of mistaking, the owner of the password have to take responsibility.

()18. If one floppy disk lays with another floppy disk with infected computer viruses, it will also be infected.

()19.

()20.

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Nurses' computer attitude scale

Direction: The following statements are concerning your attitudes toward Chinese hospital information system (CHIS). Please read each statement and select in the appropriate answer to indicate your feeling toward CHIS characterizes.

Nurses' computer attitudes scale	1	2	3	4	5
1. CHIS can improve productivity of hospital health care work. (b)					
2. The use of CHIS improves patient care by giving the nurses more time with the patients. (b)					
3. Entry order program in CHIS is lack of flexibility. (s)					
4. Paperwork of nurses has been reduced greatly by the use of CHIS(s)					
5. The implementation of CHIS motivates me to learn more about computer technology. (m)					
6. I prefer to return manual procedure than use computerized system in my work. (m)					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					

Note : 1=strongly disagree, 2=disagree,
 3=neutral, 4=agree, 5=strongly agree

Nurses' Computer skills scale

Directions: Please read each statement and mark "V" on the appropriate answer to indicate how about your present self-perception of computer skills level.

Nurses' Computer skills scale	1	2	3	4
1. My typing skills is not skillful, I can not find or touch on the needed keyboard position fast during order entry operation.				
2. I can accomplish order entry and inborn order sheets fast and easily without any difficult.				
3. If the order entered was wrong, I do know how to correct it, and need of asking for help from others.				
4. I don't know how to retrieve patient's information (e.g., orders, hospitalization expense) using CHIS.				
5. When I use personal computer, I don't know how to detect viruses and clean them exactly.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				

Note: 1=strongly disagree, 2=disagree, 3=agree, 4= strongly agree

APPENDIX C

List of Experts

- Apinun Aramrattana, M.D., Instructor,
Department of Family Medicine,
Faculty of Medicine,
Chiang Mai University,
Thailand
- Aram Pongchiewboon M.D., Instructor,
Department of Anesthesiology,
Faculty of Medicine,
Chiang Mai University,
Thailand
- Chawapornpan Chanprasit R.N. Ph.D., Assistant Professor,
Department of Public Health
Nursing,
Faculty of Nursing,
Chiang Mai University,
Thailand
-

Duangruedee Lasuka

R.N. M. Ed. Instructor

Department of Medical Nursing,
Faculty of Nursing,
Chiang Mai University,
Thailand

He Yusheng,

Professor, Director

Medical Information Center
Beijing Medical University
China

Li Baoluo

Professor

Zhongbang Huizhi Development &
Research Company of CHIS
Beijing, China

Ji Hong

R.N. B.S.N. Instructor

Department of Nursing,
People's Hospital
Beijing Medical University
China

Ouyporn Tonmukayakul

R.N. Ph.D., Instructor

Department of Nursing
Administration,
Faculty of Nursing,
Chiang Mai University,
Thailand

Wanpen Eamjoy

R.N. M.S, Assistant Professor

Department of Surgical Nursing,
Faculty of Nursing,
Chiang Mai University,
Thailand

Wu Xiao-ying

R.N. diploma, Instructor

Department of Surgical Nursing,
People's Hospital
Beijing Medical University
China

Curriculum vitae

Surname, name Liu Jun-e

Date of Birth January 1, 1966

Education Obtained Bachelor degree of nursing science
in 1989, Beijing Medical University.

Experience

1989-present Staff nurse and clinical instructor of
People's Hospital,
Beijing Medical University,
Beijing, P.R. China.