Roles of Infection Control Nurses in Royal Thai Army Hospitals

Yawares Chaisombat MNS*, Wanchai Moongtui PhD**, Poonsap Soparat MSc**, Wanchai Buppanharan MD***, Somwang Danchaivijitr MD****

*Kawila Camp Hospital, **Faculty of Nursing, Chiang Mai University, Chiang Mai, ***Department of Medicine, Faculty of Medicine, Vachira Hospital, Srinagarindviroj University, Bangkok, ****Department of Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok

Objective: To study the performance according to the assigned roles of infection control nurses (ICNs) in Royal Thai Army hospitals.

Material and Method: Interviewing ICNs in 6 hospitals.

Results: During April and May 2002, 11 ICNs in 6 hospitals were interviewed. Two hospitals had been accredited and 4 were applying for hospital accreditation. Full-time ICNs were identified in 5 and part-time in 6. The ICNs were graduated with bachelor and master degrees in 5 and 6 respectively. Two ICNs graduated with master degree in IC. All could perform their roles in administration, education, surveillance, personnel health, consultation and quality improvement. Only 7 ICNs had experience in outbreak investigation. None were principle investigators in research except for their master degrees. The main problem was the absence of ICNs posts in all except 1 hospital.

Conclusion: Infection control nurses in Royal Thai Army hospitals in the present study could perform their roles according to assignment except involvement in outbreak investigation in some and in research as the principle investigators in all.

Keywords: Roles, Infection control nurses, Army hospitals

J Med Assoc Thai 2005; 88 (Suppl 10): S89-91 Full text. e-Journal: http://www.medassocthai.org/journal

Nosocomial infection (NI) is a common problems in all hospitals worldwide. Proper NI control programs can reduce the incidence of NI by one third^(1,2). There are 37 hospitals belonging to the Royal Thai Army. The hospitals serve members of the army, their families as well as the general public. The biggest hospital is also a medical school hospital with 1200 bed capacity. There are 2 and 34 hospitals with 400 and 30-200 beds respectively. Nosocomial infection control has been introduced into Royal Thai Army hospitals for less than one decade. The prevalence of NI was 9.1% in 1998 and 11.1% in 2000. Full-time infection control nurses (ICNs) have been assigned in the medical school and part-time ICNs in the others. These parttime ICNs are unable to carry out all job descriptions as ICNs in developed countries^(3,4). In Royal Thai Army hospitals, ICNs are assigned to be responsible for 8 roles viz : administration, education, surveillance, investigation of outbreaks of NI, personnel health, consultation, quality improvement and research. Their performance in each roles as well as problems in practice need to be evaluated. The results will help to improve the performance of ICNs in Royal Thai Army hospitals.

Material and Method

A descriptive study on the roles of ICNs was done during April and May 2002. Two and 4 Royal Thai Army hospitals that have been accredited and that have applied for accreditation were enrolled respectively. There were 11 ICNs in six hospitals. They were interviewed using a semi-structured interview form. It was

Correspondence to : Danchaivijitr S, Department of Medicine, Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok 10700, Thailand. E-mail: sisdc@mahidol.ac.th

tested for content validity and was modified according to the advice of 5 experienced IC practitioners. Data were collected and analyzed using frequency table distribution with number and percentage.

Results

The study involved six Royal Thai Army hospitals and 11 ICNs (Table 1). Their mean age was 39.4 years. Full-time ICNs were present only in the biggest hospital. Other hospitals assigned part-time ICNs. Demography of the ICNs is shown in Table 2. All were female, middle-aged, and over one half had a master degree (in IC in 2). Two ICNs had worked for IC for more than 3 years. Eight ICNs including 2 with a master degree in IC attended IC courses, and 3 did not.

All ICNs were involved in administration, education, surveillance, personnel health, consultation, and quality improvement in IC. Seven ICN (63.7%) had experience in outbreak investigation. None had done research on their own except for their master degree. Problems in practice are shown in Table 3. The lack of ICN position was the main obstacle for career ladder and for retaining experienced personnel in IC profession. Lack of budget for immunization of HCWs, especially against hepatitis B and influenza for some high risk personnel was found. Education on IC was also needed.

Discussion

Prevalence rates of nosocomial infections in Royal Thai Army hospitals were higher than the average rates of the country⁽²⁾. Administrators of the hospitals were well aware of the impacts of an NI. Certain progress has been made since the NI rates were made known in the development of NI control program. Five full-time ICNs have been assigned in the Pramongkutklao Hospital but for the remaining 36 hospitals, only part-time ICNs were appointed (Table 1). Only 1 ICN had worked for 5 years and another for 4 years, the other 9 ICNs in the present study had work experience of less than 3 years (Table 2). If more ICN positions could be allocated, and the progress in their career could be guaranteed, ICNs could remain in the job for a longer duration. This will lead to having more experienced and competent ICNs in the hospital infection control system.

Infection control nurses in the Royal Thai Army hospitals could perform most of the roles set by the Department of Nursing, Ministry of Public Health. However, only 7 of 11 ICNs had been involved in outbreak investigation. This could be due to the absence of outbreaks or that they were not identified^(5,6). The

Fa	ble	e1	. H	Iosp	ital	s an	d I	CN	ls	enro	olle	t
-----------	-----	----	-----	------	------	------	-----	----	----	------	------	---

Hospitals]	CNs	Bed Capacity
L	No	Categories	1 5
Pra Mongkutklao	5	FT	1200
Anantamahidol	2	РТ	400
Suranaree	1	РТ	400
Prajaksilpakom	1	РТ	250
Sappasitprasong	1	PT	200
Surasakmontri	1	РТ	150

FT = full-time, PT = part-time

Table 2. Demography of 11 ICNs

Demography	Ν	%
Gender – Female	11	100
Education		
Bachelor degree	5	45.5
Master degree	6	54.5
In IC	2	18.2
Other	6	36.4
IC Experience (yr.)		
1	3	27.3
2	4	36.3
3	2	18.2
>3	2	18.2

Table 3. Problems in IC practice

Problems	%
No ICN position No budget for immunization Lack of knowledge in research Excessive workload Lack of knowledge in outbreak investigation	45.5 36.4 27.3 27.3 18.2
Lack of knowledge in giving consultation	9.1

most common problem of ICNs in the present study and elsewhere in this country is the lack of knowledge and experience in research. This topic should be emphasized in educating ICNs.

Conclusion

The study in 11 ICNs in Royal Thai Army hospitals revealed that they could perform their duties according to the assigned roles except those on outbreak investigation and research.

Acknowledgement

The authors wish to thank all ICNs who participated in the study and Mahidol University for funding the research.

References

- Haley RW, Culver DH, White JW, Morgan WH, Emorli TG, Munn VP, et al. The efficacy of infection control programs in prevention and control of nosocomial infection in U.S. hospitals. AJIC 1985; 13: 182-203.
- Danchaivijitr S, Tangtrakool T, Waitayapiches S, Chokloikaew S. Efficacy of hospital infection control in Thailand 1988-1992. J Hosp Infect 1996; 32: 147-53.
- Horan-Murphy E, Barnard B, Chenoweth C, Friedman C, Hazuka B, Russell B, et al. APIC/CHICA-Canada Infection Control and Epidemiology: Pro-

fessional and Practice Standards. Association for Professionals in Infection Control and Epidemiology, Inc, and the Community and Hospital Infection Control Association-Canada. AJIC 1999; 27:47-51.

- Murphy CL, McLaws ML. Who coordinates infection control programs in Australia? AJIC 1999; 27:291-5.
- Goldrick BA, Turner JG. Education and behavior change in prevention and control of infection. In : Soule DM, Larson EL, Preston GA, editors. Infections and nursing practice: prevention and control. St.Louis: Mosby, 1995: 175-92.
- Hoffman KK, Clontz EP. Education of health care worker in prevention of nosocomial infection. In: Mayhall CG, editor. Hospital epidemiology and infection control. Maryland: Williams & Wilkin, 1996: 1086-93.

บทบาทของพยาบาลควบคุมโรคติดเชื้อในโรงพยาบาลสังกัดกรมแพทย์ทหารบก

เยาวเรศ ไชยสมบัติ, วันชัย มุ้งตุ้ย, พูนทรัพย์ โสภารัตน์, วันชัย บุพพันเหรัญ, สมหวัง ด่านชัยวิจิตร

วัตถุประสงค์ : ศึกษาการปฏิบัติงานตามบทบาทที่กำหนดของพยาบาลควบคุมโรคติดเซื้อในโรงพยาบาลสังกัด กองทัพบก

วัสดุและวิธีการ : สัมภาษณ์พยาบาลควบคุมโรคติดเชื้อในโรงพยาบาล 6 แห่ง

ผลการศึกษา : ระหว่างเดือนเมษายน-พฤษภาคม พ.ศ. 2545 ผู้วิจัยสัมภาษณ์พยาบาลควบคุมโรคติดเซื้อ 11 คน ของโรงพยาบาลสังกัดกรมแพทย์ทหารบก 6 แห่ง 2 แห่งได้ผ่านการรับรองคุณภาพแล้ว อีก 4 แห่งกำลังรอเยี่ยมสำรวจ พบว่าพยาบาลทำงานเต็มเวลา 5 คน สำเร็จการศึกษาปริญญาตรี 5 คน ปริญญาโท 6 คน โดย 2 คนสำเร็จปริญญาโท ด้านควบคุมโรคติดเซื้อ พยาบาลทั้ง 11 คนสามารถปฏิบัติงานตามบทบาทที่กำหนดได้แก่ การบริหาร, การให้การศึกษา, การเฝ้าระวังโรค, สุขภาพบุคลากร, การให้คำปริกษา และการพัฒนาคุณภาพ มีเพียง 7 คนที่มี ประสบการณ์การสอบสวนการระบาด และทุกคนไม่เคยเป็นหัวหน้าโครงการวิจัย ยกเว้นการทำวิทยานิพนธ์ ปัญหา ที่พบที่สำคัญคือ การไม่มีกำหนดตำแหน่งพยาบาลควบคุมโรคติดเชื้อ

สรุป : พยาบาลควบคุมโรคติดเซื้อของโรงพยาบาลสังกัดกรมแพทย์ทหารบกที่ศึกษาสามารถปฏิบัติงานตามบทบาท ที่กำหนดไว้ยกเว้นประสบการณ์ด้านการสอบสวนการระบาดและการวิจัยโรคติดเชื้อในโรงพยาบาล