

NEWSLETTER



香港危重病學護士協會有限公司
Hong Kong Association of Critical Care Nurses Ltd.

Hong Kong Association of Critical Care Nurses Limited (HKACCN Ltd)

Vol. 12, No. 1, November 2011

President's Message

LEUNG Fung Yee
President
HKACCN



Dear Members,

It has been fourteen years since Mr. Stephen HA, our Founding President and a group of nurse leaders in critical care established the Hong Kong Association of Critical Care Nurses. They paved the way guiding us towards defining and promoting the standard of critical care practice in Hong Kong. Then, followed by the great leadership of our former President, Dr. Esther WONG, our Association has achieved substantially in the subsequent 10 years. It is my privilege to stand between the past and the future and to contemplate the history we have made and have yet to make.

There is no doubt that we are experiencing the toughest time in critical care environment. On one hand we are in severe shortage of manpower, but on the other, we are facing the challenges of increasing workload, more frequent night duties, heightened public expectation, rapid technological advancement and intensifying complexity of patient management. While we are heavily burdened by our daily work, we strive to support our members with prime objective - to promote quality of care to critically ill patients.

In achieving it, the Professional Development Committee led by Mr. David CHAN and Ms. MAK Wai Ling has administered numerous educational courses, seminars and workshops for members to keep abreast of advanced knowledge and skills. In October, we successfully organized the first Instructor Course to train up our own ACLS and BLS instructors teaching the cardiac life support programmes in collaboration with the American Heart Association. Now, our programmes receive participants from public and private hospitals, both locally and regionally from Mainland China and Macau.

To expand our scope of collaboration and networking, we join the Hong Kong Infection Control Nurses Association to co-organize the 4th & 5th International Infection Control Conference; we team up with other professional organizations, such as the College of Nursing HK, HK Society for Nursing Edu-

cation, Chinese Civil Servants Association and others to organize Nursing Forums in HK, Guangzhou and later in Macau to explore issues related to nursing professionalism. Meanwhile, we are in the process of collaboration with the Hong Kong Midwives Association to co-organize a Critical Care Obstetric Course in order to enhance our care to the critically ill obstetric patients. This type of training is definitely an imminent need for ICU nurses. Being in touch with the world, we continue to receive groups of visitors and experts from overseas to exchange them with information and expertise in critical care nursing.

Our work in meeting our Association's mission and objectives is notable. We are proud to have a dedicated board of directors committed to serve our members. We truly want what is best for our members, critically ill patients and their significant others.

I wholeheartedly thank you all for continuing to support the Association which has made us one of the most respected professional organizations in HK and world-wide.

**Best Wishes to the
14th Anniversary of
the HKACCN!**



Message from the Editor

CHIANG Chung Lim Vico
Chief Editor
HKACCN

Critical Care Without Walls?

In August 2007 issue of our HKACCN Newsletter, I indicated that nurses should not deny the needs of patient's families, and their roles and functions during the course of patient's illness and recovery. The practice of critically ill patient and its family as a dyadic unit of care contributes to better quality of the holistic nursing for this population of patients. Such approach of practice is also beneficial to the recovery of patients after their discharge from the ICU and hospital (Chiang, 2011). In UK, critical care outreach services (CCOS) has been developed since 2000 with three purposes, 1) avert ICU admissions by early identification and management of deteriorating patients, 2) support both the continuing recovery of discharged ICU patients on wards and after discharge from hospital, and 3) share critical care skills with ward staff and the community, and using information gathered from the

wards and community to improve critical services for patients and their families (Department of Health, 2000). It appears that the care of critically ill patients and their families as a dyadic unit can extend from the ICU to community with possibly better outcomes through the practice model of CCOS.

After a decade of CCOS development in UK and Australia, the evidence from a systematic review (McGaughey, et al., 2009) highlights the diversity and weak methodological quality of most CCOS studies that further multi-site RCTs are needed to determine the effectiveness. Whiting & Edbrooke (2006, p.278) said it right, the evidence of CCOS effectiveness is inconsistent but 'The implications for outreach are that understanding will become more sophisticated as we learn why research so far has delivered mixed results ... We can only continue to evaluate its key components ensuring their effectiveness and evolution in the context of changing needs and the ever-increasing demands placed upon it'. Theoretically CCOS may contribute to better patient and family outcomes during their process of recovery as well as organizational outcomes of less hospital admissions and ICU readmissions. In Hong Kong, do we have the room to consider, though a matter of evidence to be further developed and we are experiencing the shortage of manpower, such concept of 'critical care without walls' (Hillman, 2002) for better outcomes of our patients, families and organizations?

Meanwhile, time flies as usual and we must now celebrate the 14th anniversary of the HKACCN. **Happy Anniversary, HKACCN!** And I wish you all enjoy reading this new issue of the HKACCN Newsletter.

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Oral Care is Critical Care for Mechanically Ventilated Patients

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RN, ICU, Union Hospital

Ventilator-associated pneumonia (VAP) is the com-

monest infection acquired by patients in the intensive care unit. The range of reported rates is 9% to 67% and there are 4.4 to 15.7 cases of VAP per 1000 ventilator days (CHP, 2010). Oral care is a nursing intervention that can help to reduce the incidence of VAP (Munro, 2004; Pear, 2007; Feider, Mitchell & Bridges, 2010). However, among the most commonly recommended prevention strategies, oral care is often neglected for the critically ill patients or performed inadequately. A mechanically ventilated patient's mouth is merely swabbed for her/his comfort.

Local and overseas organizations or the initiatives for patient safety, including the Centers for Disease Control and Prevention (CDC), the Association for Professionals in Infection Control and Epidemiology (APIC), Institute for Healthcare Improvement (IHI), American Association of Critical Care Nurses (AACN) and Centre for Health Protection (CHP) have developed evidence-based patient care treatment practices and published the best practice examples for the reduction of VAP.

Comprehensive oral hygiene has consistently been recognized by many professional organizations as critical to the prevention of pneumonia in hospitalized critically ill patients (Table 1) (Pear, 2007; CHP, 2010).

Research indicates that vigorous oral hygiene is necessary to reduce oral colonization of bacteria in order to prevent or reduce VAP. The set of comprehensive oral care for ventilated patients may include the following nursing interventions (Garcia, 2005),

1. written oral care protocol and training should be in place;
2. conduct an initial admission as well as daily assessment of the lips, oral tissue, tongue, teeth and saliva of each patient on a mechanical ventilator;
3. use a small, soft toothbrush to brush teeth, tongue and gums at least twice daily to remove dental plaque;
4. consider the use of antiseptic oral rinse such as 0.12% aq. chlorhexidine at set interval;
5. use moisturizer to enhance the maintenance of healthy lips;
6. avoid using lemon-glycerine swabs for oral care to moisten oral mucosa because lemon-glycerine compounds are acidic and cause drying of the oral tissues;
7. perform suction to oral cavity / pharynx frequently; and
8. keep head of bed elevated at least 30° unless medically contraindicated, and position patient properly so that oral secretions pool into the buccal pocket (this is especially important when performing activities like feeding and teeth brushing).

Oral care policies and practices vary from region to region, hospital to hospital, and even within intensive care units. Further research in the imple-

mentation of evidence-based and user-friendly oral care policies, and evaluation of their effectiveness in reduction of VAP continues to refine and update the current polices and guidelines.

the prevention of hospital-acquired pneumonia. *Kimberly-Clark Health Care Education*, 3. Available: http://vap.kchealthcare.com/media/62818/16h0546_08_01_ci_oc.pdf

Component	CDC	APIC	IHI	AACN	CHP
Head of bed elevation (semi-recumbent patient position 30° – 45°)	√	√	√	√	√
Daily sedation vacation and daily assessment of readiness to extubate	√	√	√		√
Peptic ulcer disease prophylaxis	√	√	√		√
Oral hygiene and care	√	√	√	√	√
Cleaning of equipment	√	√			√
Avoid routinely replacing ventilator circuits	√	√		√	√
Hand hygiene	√	√			√
Sub-glottic secretion drainage	√	√		√	√
Prevention of oro-pharyngeal colonization	√	√			

Table 1: Preventive measures of pneumonia in hospitalized patients

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Introducing nurse-led defibrillation in Hong Kong: The current situation as perceived by nurses in intensive care

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This purpose of this research in brief is to provide an extract of findings from the full paper (Hui, Low & Lee, 2011) of a study that was conducted in 2006 to explore intensive care (ICU) nurses experiences of introducing nurse-led defibrillation in an acute regional hospital. With the exception of Kwok, Lee, Lau & Tse (2003) and Chan *et al.* (1998), no other published studies on nurse-led defibrillation could be retrieved locally when we conducted this study. Findings of this study are contributing to the Hong Kong literature and will inform future researchers who have interest in pursuing work in this area. Other related nurse-led defibrillation literature in Hong Kong can be found elsewhere (Lee & Low, 2010).

BACKGROUND OF THIS STUDY

Previous studies have shown defibrillation as an effective therapy for VF, with the ability of improving survival of sudden cardiac arrest if performed early within four to five minutes (Cook, 2003; Kwok *et al.*, 2003). Since 1997, the International Liaison Committee on Resuscitation (ILCOR) (Kloeck *et al.*, 1997) has recommended that resuscitation personnel should be authorized, trained, equipped and directed to operate a defibrillator if their professional responsibilities require them to respond to persons in cardiac arrest. This recommendation includes all first responders, in both hospital and out-of-hospital settings. Although performing early defibrillation within the chain of survival will ensure the highest possible survival rate of in-hospital cardiac arrest, the low survival rate of in-hospital sudden cardiac arrest (around 10-20%) as a result of resuscitation has become a cause for concern (Zafari *et al.*, 2004). Limited attention is given to understanding the survival rate of in-hospital sudden cardiac arrest cases and the potential contribution of nurses in caring for these patients in Hong Kong. While earlier work in the UK has demonstrated that in-hospital survival rates of cardiac arrest can be improved by nurse performed defibrillation (Coady, 1999), nurse-led defibrillation is not currently practised in Hong Kong hospitals (as demonstrated

by no published local work). Nurse-led defibrillation is believed to improve the survival rate of patients with sudden cardiac arrest, enhance nurses' role, and advance nursing practice. It is again this background that this study arose.

METHODOLOGY

The main study examined the experience of ICU nurses in caring for patients with cardiac arrest, and their perceptions of introducing nurse-led defibrillation for patients presented with VT or VF using an exploratory and descriptive research methodology. The setting was an adult ICU with 20 beds and an emergency admission unit in an acute care hospital in Hong Kong. The nursing staff (n=79) comprised 71 registered nurses, five nursing officers, two nurse specialists and one advanced practice nurse. Purposive sampling was used to select 12 informative nurses who had cared for patients in cardiac arrest with VF or VT. Content analysis was used to analyze the unstructured interview data.

KEY FINDINGS

Only the findings of ICU nurses perceptions of introducing nurse-led defibrillation for patients presented with VT or VF will be presented here.

Perceived knowledge about managing defibrillation

All nurses correctly stated the aims of using defibrillation, types of defibrillation, and patients who needed to be defibrillated, indicating that their general knowledge about defibrillation was satisfactory. However, some nurses described having insufficient knowledge in cardiac care and lacked confidence in ECG interpretations, partly because most ICU patients suffered from respiratory failure. Although only 50% were trained in advanced cardiac life support (ACLS), those trained in ACLS described having limited opportunities to apply their defibrillation knowledge. While some nurse strongly believed that the performance of defibrillation was still the doctor's duty and the duties of nurses were to assist them, others challenged this traditional belief and believed that nurses also had responsibilities in practising timely defibrillation to save the patients' lives.

Constraints of nurse-led defibrillation

Several constraints that prevented nurses from wanting to implement nurse-led defibrillation in the ICU included limited exposure and experience in defibrillating VT or VF patients, lack of confidence, and fear of making mistakes. Whilst nurses believed that they were theoretically prepared to influence the patient's resuscitation outcomes, memory faded over time due to the lack of practice. Many stated that the low incidence of VT or VF in ICU, which varied annually. While the low number of cases meant little practice time for ACLS-trained nurses, some nurses did not mind 'doing less' as this guaranteed that no mistakes (e.g. incorrectly

managing a scenario, making the wrong interpretation and doing harm to the patient) would be made and not having to shoulder any responsibilities.

Supporting nurse-led defibrillation

Most nurses described supporting nurse-led defibrillation provided that adequate support was available. This included obtaining support from the hospital, collaborating with the doctor, providing training opportunities and sponsorship, and considering the use of alternative equipment. Obtaining support from the hospital to ensure that all nurses were issued with the ACLS certificate to perform defibrillation was regarded as highly important. With the hospital's recognition and acknowledgement of this qualification, ICU nurses would be enabled to advance their practice and boost confidence. In the trial of nurse-led defibrillation programmes, it was essential to reach a consensus and move towards closer collaboration between nurses and doctors, particularly when doctors make influential decisions about patient care and outcomes. Some participants suggested making compromises with the doctor about the practicalities of the programme and asking them to provide the initial supervision until nurses gain confidence in managing the defibrillation scenario on their own. The provision of opportunities and sponsorship (in terms of time or financial aid) for training would demonstrate the support of the hospital for nurse-led defibrillation, although only a few privileged staff members were nominated to attend the training, which could diminish their motivation to update these courses. It was suggested that the hospital should consider increasing regular training, such as in-hospital resuscitation training and in-house CPR drills for nurses, to build up and refresh their defibrillation skills. A transition phase of using alternative equipment such as AED was proposed to build up nurses' confidence before proceeding to use of the manual defibrillator.

Conclusions

The study shed light on the experience of nurses views about performing nurse-led defibrillation in an ICU setting. The findings increased our knowledge about the procedure nurses followed when assisting in defibrillation, and the perceived constraints and supportive measures required for implementation of nurse-led defibrillation. The need for a consistent policy to promote nurse-led defibrillation practice was also emphasized. A nurse-led defibrillation programme would require considerable effort in terms of clear hospital guidelines and support, effective ACLS training and supervision, certification to acknowledge practice expertise, consideration of a transition to the use of AEDs, and a change in nurses' traditional philosophy and responsibilities. Indeed, nurse-led defibrillation is an approach of delivering prompt care to critically ill patients, and a way ahead for intensive care nursing in Hong Kong. Further

research in other specialties, including the CCU and accident and emergency departments, is recommended to obtain the viewpoints of nurses of various specialties so as to explore the possibility and support the decision of introducing nurse-led defibrillation in hospitals.

References

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UPCOMING PROGRAMS

I) ECG Course for Beginners



Course Objectives:

- To enhance frontline nurses' knowledge on basic ECG concept and common arrhythmias.
- To promote the competence of frontline nurses in caring patients with common arrhythmias.

Target Group and Capacity:

All nurses; 36 per class

Duration:

Total 12 contact hours (2-hour lecture for 6 sessions)

Date and Time:

ECG 4 3 Nov – 8 Dec 2011

6 Thursday evenings for each identical course, 6:30 - 8:30 pm

Venue:

HKACCN
Rm 501, 5/F Great Smart Tower,

230 Wan Chai Road, Hong Kong

Speakers:

Nursing experts from critical care areas

Language medium:

Both English & Cantonese

Award:

Certificate will be issued for those who have attended all the lectures and have passed the Quiz (12 CNE Points) (80% attendance is required)

Program Fee:

HK\$1200 (Member), HK\$1800 (Non-member)

II) Basic Life Support and Advanced Cardiac Life Support Courses



a) Basic Life Support (for Health Care Provider) (BLS – HCP) Course

This BSL – HCP Course is organized by the HKACCN Ltd. The HKACCN Ltd is an official AHA training site under Laerdal International Training Center (ITC), which is the ITO of AHA CPR and ECC Course in Hong Kong, China and Macau.

Content:

- CPR skills for all ages (adult, child, infant) according to AHA 2005 CPR Guidelines
- Ventilation with pocket mask and BVM
- Use of Automated External Defibrillator (AED)
- Foreign Body Airway Obstruction Management

Target Groups:

- Health care providers, such as nurses, doctors, paramedics, and ambulance personnel
- Nursing and medical students
- Other interested personnel

Date and Time:

8:30am – 1:00pm (a half-day program)
5 Nov; or 3 Dec 2011

Venue:

TSK A&E Training Centre / HKACCN office

Award:

AHA BLS Provider Card – valid for 2 years (4 CNE points; 2 – 7 CME points)

Program Fee:

HK\$400

b) Advanced Cardiac Life Support (ACLS) Provider Course

This Advanced Cardiac Life Support (ACLS) Provider Course is organized by the HKACCN Ltd. The HKACCN Ltd is an official AHA training site under Laerdal International Training Center (ITC), which is the ITO of AHA CPR and ECC Course in Hong Kong, China and Macau.

Content:

- Adult CPR skills and use of AED (According to AHA 2005 CPR Guideline)
- Management of 10 core cases related to resuscitation including: Pulseless VT/VF, asystole, PEA, bradycardia (heart block), unstable tachycardias, stable tachycardias, respiratory arrest, acute coronary syndrome, and acute stroke.

Target Groups:

- Health care providers, such as nurses, doctors, paramedics, and ambulance personnel
- Nursing and medical students
- Other interested personnel

Date and Time :

8:30pm – 4:30pm (a 2-day program)
19 – 20 Nov (New); 21 – 22 Nov (New); 17 – 18 Dec 2011

Venue :

TSK A&E Training Centre / HKACCN office

Award :

AHA ACLS Provider Card – valid for 2 years (13 CNE points; 5 – 13 CME points)

Program Fee :

HK\$1300

ENQUIRIES for ALL COURSES:

2861 2972 (Mr. Leo LAM)

Email: hkaccn@yahoo.com.hk



For detailed information and application form:

<http://www.medicine.org.hk/hkaccn/activities.htm>

(報名及繳費:填妥報名表格,連同劃線支票,親自遞交或郵寄至HKACCN Ltd.)

III) CCM Inter-hospital Grand Round

Joint program of HKACCN and HKSCCM, one evening on ad hoc basis (2 hours)

Award: CNE 2

Program Fee:

Free of charge (All are welcome)

Venue:

Lecture Theatre, M Block, QEH

Topics and dates to be announced (see

<http://www.medicine.org.hk/hkaccn/activities.htm>)

CONFERENCE ANNOUNCEMENT

28–30 March 2012

ANZICS New Zealand National Conference 2012

Place: Hamilton, New Zealand

Website: <http://www.anzics2012.co.nz/>

23–25 May 2013

5th EfCCNa Congress & FSAIO Spring Congress

Place: Belgrade, Serbia

Website: <http://www.efccna2013.org/>

2013 (dates TBA)

2013 11th World Congress of Critical Care (WFCCN)

Place: Durban, South Africa

Website: <http://www.criticalcare2013.com>

USEFUL LINKS

International Day for Natural Disaster Reduction on 13 Oct

<http://www.icn.ch/news/whats-new/international-day-for-natural-disaster-reduction.html>

International Nurses Day 2010

Theme: Closing the gap: Increasing access and equity

<http://www.icn.ch/publications/2011-closing-the-gap-increasing-access-and-equity/>

Australian Collage of Critical Care Nurses (ACCCN)

<http://www.acccn.com.au/>

Australian & New Zealand Intensive Care Society (ANZICS)

<http://www.anzics.com.au/>

British Association of Critical Care Nurses (BACCN)

<http://www.baccn.org.uk/>

Canadian Association of Critical Care Nurses (CACCN)

<http://www.caccn.ca/en/index.html>

European Federation of Critical Care Nurses (EfCCNa)

www.efccna.org

World Federation of Critical Care Nurses (WFCCN)

www.wfccn.org

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