HONG KONG INFECTION CONTROL NURSES' ASSOCIATION
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Newsletter
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Mission of the HKICNA: promulgating infection control best practice in health care organization and the community.
This newsletter is the official publication of HKICNA and published bi-annually, usually in March and September. Members are entitled to a free subscription. It welcomes articles pertaining to prevention, surveillance and control of infections, and related complications in health care organization and community. Please visit ***http://www.hkicna.org*** *to submit.*

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Commemorative issue: 20th anniversary

This year, 30th April is the 20th anniversary of HKICNA. A list of advisors has been invited to write a congratulation message. Those include dignitary international advisors: Professor William JARVIS, Professor Didier PITTET and Dr Wing-hong SETO; advisor: Dr Helen TINSLEY; advisors of Newsletter and Association: Professor Joanne CHUNG and Dr Wing-kin TO; member of Research Review Panel: Ms Patricia LYNCH. HKICNA has to thank each of them for writing the messages below and their kind advices, support and mentorship as well.

We also have to thank our advisor: Dr Raymond YUNG; honorable legal advisor: Ms Catherine CHEUNG; honorable auditor: Mr Jefferson PEH; Research Review Panel: Professor Paul CHAN (CUHK), Ms Glenys HARRINGTON (Alfred Health Hospital, Australia) and Dr Samson WONG (HKU); course speakers: Dr. Yat-wa KWAN (PMH), Dr Sik-to LAI (PMH), Professor Yuguo LI (HKU), Dr Wai-kwong LUK (TKOH), Dr. Sik LUK (PMH); Dr. Dominic TSANG (QEH), Dr. Kam-cheung WONG (WTS), Dr Yat-sun YAU (QEH), and all those who have ever supported HKICNA.

Lastly, but not the least, we have to thank each of you for joining us to make all our activities successful.

Time to celebrate our bicentennial

Wing-hong SETO
Chief Infection Control Officer, HAHO
International Dignitary Advisor , HKICNA

Infection Control in 1985 was firmly established in Hong Kong when the Department of Health alone deployed 24 full time ICNs for this work. The deployment of these nurses was really a milestone. It was a bold move in the context of the region when only part time staff was assigned to such work. These early batch of nurses did remarkably well and established the initial infrastructure for infection control, which still stand today in Hong Kong. In 1989, just a few years later the same group of nurses set up the Hong Kong ICNA which again is presently still functioning effectively. Not only that, they grew from strength to strength and today, it is one of the foremost nursing society in the territory. They are highly esteemed in the region and in their biannual international conference, colleagues from all over the world converge to learn and be updated. An active and progressive IC society is essential for the development of the field and we in Hong Kong have one of the best in the world within our shores. I heartily congratulate them for their 20th anniversary and I am sure they will further outdo themselves in the years ahead.

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Patricia CHING
Chairlady, HKICNA

Two thousand and nine is a year to commemorate the twentieth year anniversary of the Hong Kong Infection Control Nurses' Association (HKICNA). I still remember 20 years ago, the 30th of April 1989 marked the day of our inauguration. There were only 40 members present to announce the commencement of this congregation of infection control nurses. The HKICNA is the first academic association founded and developed solely by nurses. During these 20 years, HKICNA matured with recognition locally and in region. We have achieved the goal in promoting infection control in healthcare. Presently the membership grows from 40 to 1000 and we have our own annual training course, biannual newsletters and website. We also formed a platform for infection control nurses and other nurses to publish their work. Every two yearly HKICNA organizes an international conference to bring renowned speakers to update us cutting edge knowledge on infection control and patient safety. It is also an arena for local ICNs to report their research. As the chairlady of HKICNA, I am proud to proclaim our success. This is by and large through the concerted efforts of the relentless and hard working team of the council members together with the professional advice from local and international advisers. I would also like to particularly thank one important person Dr. Seto who inspired, supported and guided the group of humble nurses to initiate HKICNA 20 years ago. It was just on the fifth year that the profession of ICN was established in the public hospitals. He strongly advised us then that an academic body by ICNs should be established as a flagship for networking locally and internationally. He is insightful as always. We thank you Dr. Seto and we salute you. This year marked our 20 year's effort and success. It is also paramount to appraise our goal for advancement to the journey of our third decade. We ICNs should pursue our endeavors in the excellence in infection prevention and patient safety.

Congratulations on Your 20th Anniversary Hong Kong Infection Control Nurses Association!!!

As hard as it is to believe, the Hong Kong Infection Control Nurse's Association (HKICNA) is 20 years old. Unlike the stock market, I do believe that past performance does predict the future (at least for infection control organizations. And let's hope it is a better predictor than the stock market has been for the economy!). So, let's review what you have achieved in this short span of time. First, your organization (HKICNA) was founded in April 1989 and today you have >1000 members. One of the largest infection control organizations in the world! Second, you have had your HKICNA Conference biannually since 2004 and attendance has grown with each meeting. The meeting content has been cutting edge and attendees always take away knowledge that they can apply to improve patient safety and reduce adverse events. Third, you initiated your Newsletter in 2001 and have issued it twice a year since then (15 issues and counting). This informs your members and others about the latest news in infection control and healthcare epidemiology. Fourth, you developed and run your education course in infection control and healthcare epidemiology annually. Each year attendance in the course continues to increase and, as a result, the breadth and depth of infection control knowledge in Hong Kong and the Southeast Asia region continues to grow. Fifth, you have been able to establish a scholarship ($1,000) to the top students at the infection control course. So far, 17 scholarships have been awarded and such support tremendously enhances the ability of the course to attract all those in the region who would benefit from it. Sixth, in 2003, you established a research granting process (maximum grant $100,000 per proposal). To date, there have been two outstanding grantees who have received such awards. Hopefully, as training and experience expand, more and more infection control personnel will apply for and receive such grants and further expand our knowledge of healthcare epidemiology and infection prevention and control. Seventh, your organization has sponsored members to participate in overseas infection control events. To date, >100 successful applicants have taken advantage of this tremendous opportunity to expand their knowledge and then bring that back to Hong Kong.

Thus, for being an organization for such a short time, tremendous accomplishments have been achieved by the HKICNA (in many cases, more than larger organizations around the world). I am convinced that your exceptional performance will continue. You have focused on infection prevention and are expanding the cadre of personnel who can take the proven infection prevention measures that are our evidence base and expanding the application of this knowledge not just in healthcare facilities in Hong Kong, but in other areas of the world, in particular Southeast Asia. Patient safety and seeking zero tolerance for healthcare-associated infections is becoming a critical component of infection control programs in Hong Kong (and elsewhere) because of the leadership of the HKICNA. As a leader in infection control and healthcare epidemiology in all of Southeast Asia, your impact is felt and appreciated by all the patients who lives are improved because of your efforts. Let me be the first to congratulate you on your successful first 20 years and wish you continued success in the years to come. It has been an incredible journey so far, I cannot wait to see what you achieve in the next 20 years.

William R. JARVIS, M.D.
President, Jason and Jarvis Associates, USA
International Dignitary Advisor of HKICNA

Dear HKICNA,

On 30 April 2009, the Hong Kong Infection Control Nurses' Association will celebrate its milestone 20th anniversary of activity. From humble beginnings, the Association is now a flourishing institution with over 1000 members. Its many activities include a biannual conference and an annual course in infection control which is well known for its quality in many countries outside Hong Kong. I had the pleasure to be invited to deliver keynote lectures at the 2006 and 2008 editions of the conference and to be witness to the great enthusiasm of members to progress and improve patient safety across the region.

In 2005, Hong Kong was among the first to pledge its commitment to the WHO World Alliance for Patient Safety First Global Patient Safety Challenge "Clean Care is Safer Care". Hong Kong was also selected as a pilot site for the WHO South East Asia region to test the implementation strategy proposed in the WHO Guidelines for Hand Hygiene in Health Care and is achieving great results. This is also due to the leadership and strong commitment to the project by Professor Wing Hong Seto, a greatly valued member of the core group of international experts who helped shape the Guidelines. In particular, through his pioneering research in Hong Kong in infection control – also 20 years ago – to investigate the educational needs of healthcare workers in patient care and the role of communication to change practices in the hospital, he has certainly been an inspiring model for the Association.

My message to you would be to build upon lessons learned from your experience during the pilot test phase and to promote excellence through research activities. May I assure you of my entire support.

Finally, 2009 is the Chinese Year of the Ox symbolising prosperity through fortitude and hard work. I have no doubt that the Association will prosper even more this year and meet the challenge to improve patient safety in Hong Kong and I look forward to meeting you all at the next conference in 2010.

Kind regards,

Professor Didier Pittet
Director, Infection Control Programme
University of Geneva Hospitals and Faculty of Medicine
Geneva, Switzerland
and
Lead, WHO World Alliance for Patient Safety
First Global Patient Safety Challenge
International Dignitary Advisor of HKICNA

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Dear HKICNA,

It is indeed a privilege to write about HKICNA and infection control development in Hong Kong during this meaningful time - the 20th anniversary of HKICNA. In fact, the history of HKICNA is even longer than my time in microbiology and infection control. I joined this field 1 year after ICNA was established in 1989 and I have witnessed the growth of the association and development of infection control in Hong Kong over the past twenty years.

I can remember that during the early stage when HKICNA was first established, the most important event was the annual dinner where members could enjoy a good evening with meal and lecture. Of course, there are much more than that you can get from HKICNA now. If you are the regular reader of this newsletter, you would appreciate that it is a very good platform for us to share our local experiences and studies related to infection control. Apart from the newsletter, I also

share the view with HKICNA that we should promote more research activities related to infection control in Hong Kong. I am delighted that HKICNA is having a research fund for the members to apply; hopefully, more members can take the chance to do more local researches. We all agree that we do need more local data, but not just referring data from other countries that may not be relevant to us in Hong Kong. Finally, I think no one will disagree that infection control knowledge is very important in modern healthcare system. In recent years, HKICNA has been organizing infection control course and international conference regularly, aiming to train those healthcare workers who want to acquire or update their infection control knowledge. The success of these courses and conferences are not only demonstrated by the number of the attending participants, but also the background of the participants. I am happy to see that they include not only infection control nurses, but also nurses from other specialties and even doctors and allied health staff. This would certainly benefit the entire healthcare system in Hong Kong in future.

How about the future of HKICNA ? With the current strong background, I think HKICNA can have more international collaboration with other infection control association in other parts of the world especially the neighboring area. If this can be done, one may explore the opportunity of research collaboration or even publishing some consensus guidelines for our region.

Finally, I would like to take this opportunity to give a quick review of infection control development in Hong Kong. I remember that when I first joined this field almost 20 years ago, most hospitals had only 1-2 infection control nurses, and many hospitals even didn't have a full time ICN. It was only after our traumatic experiences in 2003 that all public hospitals in Hong Kong can achieve the ICN/beds ratio of 1:250. Now, I can see more administrators understand the importance of infection control, not just because of those emerging infectious diseases such as SARS, Avian Influenza or different kinds of bioterrorism threats, but also the fact that we are facing more severely ill patients, immunocompromised patients, patients having invasive procedures and patients with different kinds of medical devices. Therefore, we are happy that more resources are given for infection control when compared with 20 years before. On the other hand, I fully understand the hardship of being an ICN nowadays as the increase of resources can never compensate the increase of workload and responsibility of an ICN. I think we should understand that there will not be unlimited resources for us, therefore, hopefully, ICNs can have a better lives when our effort on education to the frontline starts to meet our expectation – better infection control practices and less infection of our patients. Furthermore, I am thinking that if ICN can have more cooperation or even merge with a very closely related team, quality improvement team; so that we can manage our patients in a comprehensive way, not just concentrate on the infection control aspect. I guess some synergy can be achieved by the cooperation which is very important when we are always lacking enough resources. Another challenge that the infection control practitioners are now facing is how to handle the mass media. We including myself always complain the mass media that they are usually dominating the news, not telling the truth, etc. Like it or not, we have to face it. Maybe we can try to think this positively, as we know the mass media has the potential to alter and influence the social attitude and norms, should we use them as a tool to deliver infection control messages to general public so as to change their perception and behavior when using our health care services ? I guess HKICNA may do something on this!

Once again, congratulations!

Dr Wing-kin TO
ICO, CMC & YCH
Consultant, Dept of Pathology, KWC
Advisor of HKICNA
Specialist Advisor of Newsletter

Dear HKICNA,

Congratulations! What an auspicious occasion, both to celebrate the growth and accomplishments already achieved, and to plan for the future. Twenty years is long enough to have a good sense of the past and the potential for the future.

Although I am far from Hong Kong and have only been there 4 times, I can see some of your accomplishments clearly: You foster a sense of cooperation, a strong reach for excellence, and a climate of development and innovation. You support less well-developed organizations in the region and reach out to other disciplines. You work together and have fun together and expect to keep doing this for a long time, and you incorporate laboratorians, physicians and others into your mix. You have faced the great difficulty of SARS and the potential for influenza with grace and perseverance that is admired by me and many others.

You asked me to think about the future and what the HKICNA could contribute to the country and to the field on infection prevention. Research. Most of the research reported comes from countries with huge budgets and little experience outside that narrow world. All the teaching is based on that experience and it is not relevant for most of the world. The priorities are often wrong and so is the direction. So my first recommendation would be to conduct research that would outline more clearly what is important in Hong Kong and in the region you support. The second suggestion would be to identify some of the unsolved problems and improve one or more of those situations. An example from the 2008 conference was the person who asked, "What can we do about women who come from other places, arrive in the ER with no prenatal care and already in labor?" That whole issue of community education, hospital and public resources coming together is huge. It is exactly the sort of tough challenge your capable group could master.

Again, congratulations and best wishes,

Ms. Patricia LYNCH
Past Chair, International Federation of Infection Control
Research Review panel of HKICNA

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Dear HKICNA,

First of all, sincere congratulations to all concerned on your 20th anniversary.

Many of the faces and names I remember from the early years are now senior, highly experienced, respected staff and continue to be very active in promoting the training, practice and audit of infection control in both public and private health institutions in Hong Kong. Infection Control is now a well recognized and mature service. As a group you have many achievements, both past and present, of which you can be proud. As we all know, infection control in Hong Kong, especially at the beginning was neither glamorous, high profile or popular from a nursing career perspective, but as a group--- through hard work, training, commitment, team work and the use of hard data along with evidence based practice--- you have provided highly valued and respected support to both patients and clinicians. Over the past few years in our health care services we have faced challenges from many infectious hazards-- some old and some new-- where infection control expertise was critical to successful containment of the risks.

I here mention just some of the factors which, from a personal point of view, I think have contributed to your success

1. As a group and from very early days you were most willing to share information between institutions on good practice and current infection control hazards-- often informally but nonetheless effective in providing early warnings, especially in a pre IT networked era. Teams in different hospitals together formed a cohesive group and supported each other, especially during difficult periods or when sharing best practice. There is pride in the recognition, both internal and external, of your professionalism, leadership and effective teamwork.
2. The need for benchmarking performance internationally has been widely accepted from the very beginning.
3. Effective communication and teamwork with colleagues in key areas such as laboratory, administrative, CSSD, pharmacy and clinical staff has always been emphasized and remains a key component for successful infection control. ICNs are special in that they are one of the few teams within a hospital or institution who have the 'big picture' on activity and performance and so can move quickly to mobilise support hospital wide when needed. Requests for expert infection control comment now come from all aspects of health care planning and service delivery--- from the design of buildings to how to safely manage patient workload during the 'winter surge'.
4. Challenging a clinical team leader or senior manager on patient care or asking for resources is never easy, but ICNs in Hong Kong have shown that this can be done successfully with the help of hard local data, along with a positive and constructive attitude. Occasionally courage and determination are needed to deal with a difficult or crisis situation. Many other HK nurses could learn such skills from ICNs.
5. The concept of quality of care within health care services for patients and staff, with associated measurements of process and outcomes, has become increasingly important. ICNs are already well trained and knowledgeable on these principles and practices.
6. There is a strong and ongoing commitment to continuing education, research, training (including postgraduate) and mentorship, not just within staff of your own specialty but also the spreading of knowledge and skills to all front line staff. Long may this continue.

It is good to celebrate all that has been achieved over the past 20 + years.

What of the next 20 years? Many infection control challenges remain-- why, for example, is it so difficult for front line staff to protect themselves and their patients by maintaining good hand hygiene? Undoubtedly new challenges will also emerge as medical technology develops, new and known infectious hazards appear or resist control, and patients become empowered.

It is my sincere hope that you can build on your existing strengths to meet all these old and new challenges in future, so that in 20 years time, you and your successors will look back in the knowledge that as much has been achieved as you and your predecessors did in the first 20 years.

Congratulations to you all and best wishes for the future.

Dr Helen TINSLEY
Retired Hospital Chief Executive, CMC
Advisor of HKICNA

Dear Colleagues of Hong Kong Infection Control Nurses' Association,

Congratulation to you all for your accomplishments in the last 20 years and many happy returns on your 20th Anniversary.

I feel indeed very honoured to share my feelings in this special occasion. The first thing comes to my mind is the question on succession: do we have a succession plan for potential leaders in Infection Control and why succession plan matters.

The need for having a line of executives and professional talents in place, and the practical need for succession planning, regardless of the size of an organization or professional group, is something people have written a lot already. Clearly, this is something our Infection Control colleagues need to think about seriously.

There is a good reason to a succession plan, which is for the good of an organisation's human capitals. Continuing our infection control development beyond one generation of leaders requires planning. A succession plan smoothes the transition and ensures the continued success of what we have been pursuing. A succession plan is as important as a strategic development plan of any organization.

It is inevitable that leaders will retire or leave the current positions and successors are needed. The odds that the "perfect" person will find his or her way to a leadership opportunity at just the "right" time are so improbable that not planning for it is ludicrous. However, a great deal can be done if we put the plan in a definite timeframe to develop leader (s), whether it involves job rotations in different functional areas, international assignments or mentoring. While succession planning is a challenging task, it is worth taking on as we could watch our Infection Control professionals grow and succeed the work of the Association.

A succession plan has been developed to expand the 'Infection Prevention and Control' future plan 2009 of NHS Trust in UK. How about us in Hong Kong? This issue cannot be ignored if we want to keep the good work going by calling on new capability.

Once again, congratulation and best wishes.

Joanne CHUNG
Professor of Nursing
School of Nursing
The Hong Kong Polytechnic University
Advisor of HKICNA
Specialist Advisor of HKICNA Newsletter

Council: 2009-2010

The election for Council: 2009-2010 was completed in December 2008. HKICNA has to thank the ordinary members who took part in the election.

The results will be endorsed in the coming Annual General Meeting scheduled on 9th May 2009. The term of the council members is two calendar years.

Members of Council of 2009-2010 are listed below:

Executive Members	Other Members	Alternate Members
Chairman: LAM Hung-suet, Conita (CICO Office, HAHO)	CHING Tai-yin, Patricia (QMH)	CHEUNG Kit-chiu, Elizabeth (HKSH)
Vice-Chairman: LEUNG Fat-ying, Annie (CMC)	KAN Chun-hoi (TMH)	LAM Siu-sheung (PMH)
Secretary: WONG Wai-ching, Isadora (DKCH)	LEE Suet-yi, Shirley (QEH)	
Treasurer: OR Mei-chun, Agnes (KH)	TAI Wai-ming, Josepha (QMH)	
	TSOI Wai-lun (UCH)	
	YIP Kam-siu, Ida (PYNEH)	

HKICNA would like to acknowledge the council members of 2007-2008 for their dedication.

Below are submissions invited from the authors of successful poster submissions of the 3rd HKICNA conference.

A case - control study on the duration of antimicrobial prophylaxis for hepato-biliary surgeries

Ivan WONG, RN, PgD, Lisa WONG, RN, BScN, Josepha TAI, RN, MHSc(N),
Patricia CHING, RN, DNA.
Infection Control Unit, Queen Mary Hospital

Introduction

Antimicrobial prophylaxis in surgery plays an important role in reducing the rate of postoperative wound infection, preventing the postoperative mortality and morbidity, reducing the cost of health care, and shorten the length of hospitalization. To achieve these, antibiotics selected for prophylaxis in surgery should be effective against most pathogens and should be administered at the right time such that there were adequate antibiotic concentrations in the tissue when the skin incision was made.

In Queen Mary Hospital (QMH), antimicrobial prophylaxis is recommended for hepato-biliary surgeries[1] (e.g. hepatectomy, pancreatico-jejunostomy, wedge resection of liver, Kasai operation, exploration of the common bile duct, Whipple operation etc.) as surgical prophylaxis is beneficial in operations that involve entry of the gastrointestinal tract.[2] Additionally antimicrobial prophylaxis is advised to be discontinued within 24 hours for prolonged usage has not shown beneficial in prevention of surgical site infection, whereas it might increase the chance of emergence of resistant microbial strains to these antimicrobial agents if prolonged use.[2]

The infection control team in QMH with the wound surveillance program and antibiotics stewardship program monitors closely the selection, the timing and the duration of the antimicrobial prophylaxis in surgery. In particular, guideline was set to limit the use of antimicrobial prophylaxis in clean-contaminated surgery for not more than one day. Any surgeon who was not in compliance with the endorsed guideline will be issued with an antibiotic audit letter signed by the Consultant of the Division of Microbiology.

Aim

The aim of the study was to review the antimicrobial prophylaxis in hepato-biliary surgeries as its past compliances was fair.

Method

A retrospective case-control study was conducted from year 2002 to 2007 in QMH, a 1400 bed tertiary care hospital. All elective and emergency hepato-biliary surgery wounds that were classified as clean-contaminated were reviewed.

Patient developed surgical site infection within 30 days of operation was classified as case whereas control was patient with no evidence of infection. As for the diagnosis of surgical site infection (SSI), it was determined by the criteria set in the National Nosocomial Infection Surveillance (NNIS).[3]

Prospective data on the selection, timing and duration of the antimicrobial prophylaxis was collected daily by the infection control nurse who then input the data into the surgical wound surveillance program for subsequent analysis.

Result

Total 1259 patients that fitted the inclusion criteria were reviewed. Within which, 47.3% (596 patients) received antimicrobial prophylaxis for one day while the remaining 52.7% (663 patients) has more than one day surgical prophylaxis. In terms of SSI, 22 patients in the one day antibiotic prophylaxis group developed SSI, making the SSI rate to be 3.7%. As for the group that has more than one day (range 2 to 7 days) antibiotic prophylaxis, 24 patients reported to have SSI with SSI rate 3.6%.

Univariate analysis between the two groups reviewed no statistically difference in the SSI rate (OR 1.02, p = 0.93, 95% C.I. 0.54 and 1.91).

Duration	Patient with SSI	Patient without SSI	Total patients
Antibiotics for 1 day	22	574	596
Antibiotics for more than 1 day	24	639	663

Remark: p>0.93, OR: 1.02, 95%CI: 0. 54-1.91

Conclusion

Reviewed data showed that antimicrobial prophylaxis given more than one day did not contribute to the reduction in SSI. Instead prolonged antibiotics administration would increase medical cost and staff workload. In future, the infection control team would continuously monitor the compliance of antimicrobial prophylaxis especially in the hepato-biliary surgeries.

Reference

1. Antimicrobial prophylaxis in surgery. (1999). The medical letter. 41 (issue 1060).
2. Bratzler, D.W., Houck, P.M. (2005). Antimicrobial prophylaxis for surgery: an advisory statement from the National Surgical Infection Prevention Project. The American Journal of Surgery. 189: 395-404.
3. Mangram A.J., Horan, T.C., Pearson, M.L. (1999). Guideline for prevention of surgical site infection. American Journal of Infection Control. 27: 97-132.

Using Isolation room for controlling MRSA

Carol LEUNG, RN, BScN; Hau-ling TANG, RN, BScN; Chi-ping CHEN, RN, BScN.
Infection Control Team, Yan Chai Hospital

Background

Methicillin Resistant Staphylococcus Aureus (MRSA) is one of the most common nosocomial pathogens in hospital and commonly causes serious and potentially life threatening infections, such as bloodstream infections, surgical site infections, or pneumonia. Numerous reports have shown that MRSA infections increase not only the morbidity but also the duration of hospitalization (1-3).

Widespread contamination of the hospital environment with MRSA was reported (4) and Lemmen et al suggests that the inanimate environment serves as a secondary source for MRSA. (5) There is also evidence suggesting beneficial relationship between private rooms and reduction in risk of acquiring Multi-drug resistant organisms (MDRO). (6) Furthermore, CDC (2006) recommends to assign priority for single patient rooms to patients with known or suspected MDRO colonization or infection ,when single patient rooms are available and UK guideline (2006) also recommends "isolation should be in a designated closed area".

Therefore, isolation of MRSA patients in a designated single room has been initiated in an acute hospital as one of the measures to control hospital-acquired-MRSA incidences including colonization and infection.

Objective:

To control hospital acquired MRSA incidences.

Period of the study

June 2007 till May 2008

Method:

Study design : an interventional study.

Definition of Hospital-Acquired MRSA : a patient is reported MRSA positive in a clinical specimen 48 hours after admissions or the MRSA is associated with previous admission of the study hospital. This included infection and colonization.

Intervention : A patient would be placed into an isolation room for contact precautions immediately after MRSA was reported positive. This intervention was initiated in December 2007.

Daily, Infection Control Nurse (ICN) performed laboratory-based surveillance and reviewed all MRSA positive reports. ICN would review each new MRSA patient notes and monitor the contact precaution compliance which included the monitoring of putting a MRSA patient into an isolation room. If the MRSA patient was not placed into an isolation room, ICN would ask the ward nurse the reason why and advised to follow.

Results:

The results are summarized below:

Period	BEFORE Intervention	AFTER Intervention
	June 2007 to November 2007.	December 2007 to May 2008.
Placement of MRSA patients into a single room for contact precautions	46% (37 / 83)	82% (80 / 97)
MRSA Hospital Acquired Infection / Colonization rate	3.1 / 1000 patient admission	2.8 / 1000 patient admission

Before the intervention had been initiated, there were 46% (37 out of 83 patients) of MRSA patients placed into an isolation room for contact precaution. It increased to 82% (80 out of 97 patients) after implementing the intervention while the MRSA HA rate fell from 3.1 to 2.8 per 1000 patients admission.

Conclusion:

The result demonstrates that the Hospital Acquired MRSA rate fell from 3.1 to 2.8 / 1000 patients admission after initiating intervention. It suggests that placing MRSA patient into a single room for contact precaution is effective to control the MRSA transmission in the hospital.

References :

1. Cosgrove SE, Qi Y, Kaye KS, Harbarth S, Karchmer AW, Carmeli Y: The impact of Methicillin Resistance in Staphylococcus Aureus bacteremia on patient outcomes: mortality, length of stay, and hospital charges. Infect Control Hosp Epidemiol 2005, 26:166-174.
2. Abramson MA, Sexton DJ: Nosocomial methicillin-resistant and methicillin-susceptible Staphylococcus aureus primary bacteremia: at what costs? Infect Control Hosp Epidemiol 1999, 20:408-411.
3. Engemann JJ, Carmeli Y, Cosgrove SE, Fowler VG, Bronstein MZ,Trivette SL, riggs JP, Sexton DJ, Kaye KS: Adverse clinical and economic outcomes attributable to methicillin resistance among patients with Staphylococcus aureus surgical site infection. Clin Infect Dis 2003, 36:592-598.
4. Hardy KJ, Oppenheim BA, Gossaub S, Gao F, Hawkey PM. A study of the relationship between environmental contamination with MRSA and patients' acquisition of MRSA. Infect Control Hosp Epidemiol 2006; 27:127-132.
5. Lemmen SW, Hafer H, Zolldann D, Stanzel S, Lutticken R. Distribution of multi-resistant gram-negative bacteria in the hospital enviroment. J of Hosp Infect 2004, 56;191-197.
6. Mulin B, Rouget C, Clement C, Bailly P. et al. Association of private rooms with ventilator-associated Acinetobacter Baumanii pneumonia in a surgical ICU. Infect Control Hosp Epidemiol 1997; 18:499-503.

An Experimental Study On The Source Of Fungal Spores At An Adult Bone Marrow Transplant Unit

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Infection Control Unit, Queen Mary Hospital

Background

The Bone Marrow Transplant (BMT) unit of Queen Mary Hospital was opened since year 1990 for patients undergoing haemopoietic stem cell transplants. All positive pressure isolation rooms are equipped with high efficiency particulate air (HEPA) filters (CDC, 2000) and are changed every 12 to 18 months with air sampling performed accordingly. To protect the immunocompromised patients further, rooms are cleansed daily with beddings all changed. Though cotton pillows could not be washed as if other linen, the pillow cases are changed daily and the plastic pillow cover are discarded on every patient discharge.

In October 2006, a dramatic increase in the number of particle was found inside one patient room in the BMT unit during air sampling after changing of the HEPA filter. It was discovered that a cleaner had just changed all the beddings including the plastic pillow cover and with vigorous shaking of the cotton pillow, leading to the hypothesis that the environmental contamination might be linked to the shaking of the cotton pillow. An investigation has to be conducted to determine the number of particles and the type of organisms dispersed from different types of pillow under conditions of shaking and not.

Methodology

An exploratory study design was used to determine the particle count and identify the types of organisms in the following conditions with sequence of (1) pillow with no cover, (2) pillow with plastic cover and pillow case, (3) shaking pillow with plastic cover and pillow case, and (4) shaking pillow with no cover.

Particles of size 0.5 and 5 microns (um) were count up using a particle counter (IQAir Particle Scan model) which was placed on a bedside table 20 inches away from the head of the bed. Both the highest and lowest readings shown within 2 minutes on the LED display were recorded. Subsequent air sampling for culture was initiated after room cleansing with the air sampler (Pbi model) placed on the bedside table in one of the patients' room, directly in front of the pillow and 20 inches away from the head of the bed. Three types of pillows were studied and that included the current cotton pillow and the other two new ones, latex and latex foam. The air sampler collected 1000 liters of air in 10 minutes and the sabouraud plates were incubated at room temperature for 5 days with colonies of organisms counted and identified by standard methods used in laboratory.

Results

Cotton pillow when shake with no cover dispersed extensive numbers of particles as shown in Table 1, whereas latex foam rubber pillow in comparatively dispersed less number of large particles (5 um).

Table 1. Number of particles in different types of pillow

		Particle size (um)	
Pillow	Investigation	0.5	5
Cotton	Pillow only	14 - 353	0 - 14
	Pillow with plastic cover and pillow case	14 - 268	0 - 14
	Shake pillow with plastic cover and pillow case	28 - 621	0 - 14
	Shake pillow only	452 - 1822	14 - 84
Foam	Pillow only	42 - 339	0 - 14
	Pillow with plastic cover and pillow case	42 - 298	0
	Shake pillow with plastic cover and pillow case	70 - 480	0 - 28
	Shake pillow only	42 - 494	0 - 28
Latex foam rubber	Pillow only	0 - 211	0
	Pillow with plastic cover and pillow case	0 - 314	0 - 14
	Shake pillow with plastic cover and pillow case	28 - 324	0
	Shake pillow only	296 - 678	0

Table 2 gives the number of colonies and species of fungi that were isolated from the 3 types of pillow on the sabouraud plates. Overall, 50% of the plates isolated Rhizopus species (6/12). Regarding to the number of colonies, cotton pillow no matter it has cover or not on shaking dispersed the highest number ($p<0.001$).

Table 2. Fungal culture from different types of pillow

Pillow	Investigation	Colonies	Fungus
cotton	Pillow only	1	Syncephalastrum sp.
	Pillow with plastic cover and pillow case	0	
	Shake pillow with plastic cover and pillow case	7	Rhizopus sp.
	Shake Pillow only	Heavy	Rhizopus sp.
Foam	Pillow only	3	Rhizopus sp.
	Pillow with plastic cover and pillow case	1	Rhizopus sp.
	Shake pillow with plastic cover and pillow case	1	Rhizopus sp.
	Shake Pillow only	1	Rhizopus sp.
Latex foam rubber	Pillow only	0	Cladosporium sp.
	Pillow with plastic cover and pillow case	1	Phaeoannellomyces werneckii
	Shake pillow with plastic cover and pillow case	2	Mycelia sterilia
	Shake Pillow only	1	Cladosporium sp.

Discussion

Efforts have been placed in preventing exposure to fungal spores by maintaining a low level of humidity, keeping windows closed, repairing water leaks, cleaning regularly with bleach-based products and proper maintenance of the heating, ventilation, and air conditioning (HVAC) system. Nevertheless, given that we spent one third of our time sleeping with proximity of the respiratory tract to the pillow, immunocompromised patients will mostly be at risk if pillow is inhabited by house dust mite which eat fungi and in turn, the fungi using the house dust mites' faeces as a major source of nitrogen and nutrition (along with human skin scales) hence there is a miniature ecosystem inside the pillows.

Woodcock et al. (2005) claimed that Aspergillus was the most common fungus found in pillows, whereas our study revealed that majority of the fungal spores belongs to the mucorales though rarely encountered but can cause life whelming systematic infection. The difference might be related to the methodology as air sampling can only capture particles that dispersed into the air, thus our result cannot conclude that these are the only fungus inside the pillow. Conversely our study demonstrated that using plastic covers though cannot completely prevent fungal exposure, can greatly minimize the numbers of fungi being dispersed into the environment if used with washable pillows such as latex foam rubber. In summary, washable pillows should be in place to prevent fungal infection in those immunocompromised patients.

Conclusion

Cotton and foam pillows compared with the latex foam rubber contained more fungi species in especially the Rhizopus species, suggesting that cotton and foam pillows should not be used in high risk area of bone marrow transplant and hematology as infection risk could be posed to these severely immunocompromised patients. It is therefore highly recommended to use latex foam pillow in high risk areas as fungal contamination was shown to be a minimal. To date, the BMT unit has replaced all cotton pillows with latex foam rubber which can be washable in between patients.

Reference

Centers for Disease Control and Prevention. (2000). Guidelines for preventing opportunistic infections among hematopoietic stem cell transplant recipients: recommendations of CDC, the Infectious Disease Society of America, and the American Society of Blood and Marrow Transplantation. MMWR. 49 (No. RR-10), 1-125.

Woodcock, A.A., Steel, N., Moore, C.B., Howard, S.J., Custoric, A. & Denning, D.W. (2005). Fungal contamination of bedding. Allergy. 61, 140-142.

News-clippings
3rd International Infection Control Conference – Breakthrough in Infection Control
30th August - 1st September 2008, Hong Kong

Introduction:

Hong Kong Infection Control Nurses' Association (HKICNA) organized the 3rd conference at HKCEC on 30th August till 1st September 2008. This event was jointly held with 5 collaborating societies including Hong Kong Emergency Nurses Association , Association of Hong Kong Operating Room Nurses, Hong Kong Society of Endoscopy Nurses , Hong Kong Sterile Services Management Association , and Hong Kong Society of Microbiology and Infection.

Over 800 delegates joined us from 17 countries and 19 places including: Australia, China, Canada, Germany, Hong Kong, India, Korea, Macau, Malaysia, Nigeria, Philippine, Saudi Arabia, Singapore, Sweden, Switzerland, Taiwan, USA, U.K., and Vietnam. 23% and 20% of the delegates joined us from China and overseas respectively while 57% were local ones.

The success of the conference was once again orchestrated by infection control, nursing and other health care professional. The next one has been scheduled on 27-29 August 2010.

Below are the highlights of the conference and the gala dinner to share with all of our members, especially for those who were not available to join us.

Opening ceremony: (photo 1-9)

The opening ceremony of the conference was officiated by the Chief Infection Control officer: Dr SETO Wing-hong who is our dignitary international advisor.

Conference programs

In the 2 days conference, there were 4 concurrent sessions on the first day while 3 on the following day. Totally, 21 scientific sessions, 2 keynote and 2 plenary sessions were run successfully. As usual, 2 half day pre-conference workshops were also held.

Gala dinner (photo 10-18) & lucky draw (photo 19-28)

A gala dinner was held at East Ocean Seafood Restaurant at Wan Chai, Hong Kong. Over 250 participants including speakers, delegates and industries enjoyed this gala evening. A lucky draw of 10 watches, specially made for HKICNA by St. Gallen Horology Company Limited, was held.

Closing Ceremony: (photo 29-30)

A closing ceremony was held immediately after the last session. Speakers, guests , delegates and council members took part altogether to give it a perfect ending.

Acknowledgment:

HKICNA is indebted to the conference advisors & members of Scientific Committee including Professor Paul CHAN (Associate professor, CUHK), professor Joanne CHUNG (Professor, School of Nursing, HKPU), Dr Wing-hong SETO (CICO, HAHO & Cluster Director of Q & RM & Consultant, Microbiology, QMH), Dr Wing-kin TO (Consultant, microbiology, Department of Pathology, KWC; ICO, CMC & YCH), Dr Samson WONG (assistant professor, Microbiology, HKU) and Dr Raymond YUNG (Consultant in-charge, IDCTC, HAHO & Head, Infection Control Branch, CHP) for their kind support and advises.

HKICNA has to give heartfelt thanks to all speakers, chairs and co-chairs. Without their participation, mentorship, enthusiasm and support, this conference would never be possible. Our thanks have to be extended deeply to all Infection Control Nurses who made this conference a success.

Undoubtedly, we have to thank our collaborating societies including Hong Kong Emergency Nurses Association, Association of Hong Kong Operating Room Nurses, Hong Kong Society of Endoscopy Nurses, Hong Kong Sterile Services Management Association and Hong Kong Society of Microbiology. Wish to collaborate with them in 2010 and extend to other societies as well.

Lastly, but not the least, we sincerely acknowledge support from the industries including B. Braun Medical (HK) Ltd, BD Asia Ltd, Baxter Heathcare Ltd, Foot Specialist Footcare & Products Co. Ltd., Honeyclave Medical Ltd, ICNet Ltd, ICU Medical Inc. (USA), iCaves Limited, International Copper Asia, Johnson & Johnson (HK) Ltd, Kimberly-Clark Far East Pte Ltd, 3M Hong Kong Ltd, Mekim Ltd, Molnlycke Health Care, Peter's Choice Products Company, Safe Tech bio-Technological Products (HK) Limited, Science International Corporation, St. Gallen Horology Company Limited, Swedish Trading Company, Vickmans Laboratories Ltd, HKCEC and all others who supported this conference or HKICNA. Wish to have your continuous support again.

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

News and Information

A. Congress / Symposium:

1. **28th NZNO National Division of Infection Control Nurses Conference**

   26-28 August 2009 Nelson, Newzealand http://www.confer.co.nz/icn09

2. **Victorian Infection Control Professionals Association Conference (VICPA 2009)**

   7-9 October 2009 Melbourne, Australia http://www.aica2009.com

3. **Conference by Federation of Infection Societies (FIS), UK**

   11-13 November 2009 Birmingham, UK. http://www.infection2009.com

4. **SHEA's (The Society for Healthcare Epidemiology of America) 20th Annual Scientific Meeting**

   18-21 March 2010 Atlanta, USA http://www.shea-online.org

5. **2010 National Annual Educational Conference by Community and Hospital Infection Control Association (CHICA)**

   29 May - 3 June 2010 Vancouver, Canada http://www.chica.org/conf_registration.html

6. **APIC (Association for Professionals in Infection Control & Epidemiology) 37th Annual Conference**

   11-15 July, 2010 New Orleans, USA http://www.apic.org

B. New / Revised Guideline

1. **CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008**

   http://www.cdc.gov/ncidod/dhqp/pdf/guidelines/Disinfection_Nov_2008.pdf

C. Scholarship

HKICNA runs infection control course for nurses yearly. A scholarship of $1000 cash is awarded to the top student. Starting from 2008, the awards of scholarship have been increased to 5.

305 nurses participated in 2008 course and the top 5 students are:

- KH YUEN Wing Mei
- TMH BO Chui Yan
- QMH LEUNG Mei Ling, WONG Wing Ting
- UCH MA Shuk Ching

The award will be presented on 9th May 2009: AGM of the 20th anniversary of HKICNA.

D. Infection Control Course for Nurses 2009

The Infection Control Course 2009 has been tentatively scheduled on 7th September to 23rd November 2009 for 11 consecutive Monday evenings. The details will be uploaded on web, when confirmed, probably by July 2009. Please keep close watch of our web.

E. Sponsorship

To promote and support infection control, HKICNA will try to sponsor members participating infection control events. The coming one will be the 4th infection control congress of APSIC in Macau: 5-8 July, 2009. The details will be available http://www.hkicna.org soon. Please keep close watch.

F. 20th Anniversary of HKICNA: AGM on 9th May 2009

HKICNA is going to celebrate this momentous event on 9th May this year. The details are attached for members to join us and available on web too.

Research Grant : 2009-2010

Online application - http://www.hkicna.org

Application Online

Every active HKICNA member is eligible to apply for the research grant. For the details of application, please visit http://www.hkicna.org before the closing date.

Members of Research Review Panel :

1. Professor Paul CHAN, Associate Professor, Department of Microbiology, The Chinese University of Hong Kong, Hong Kong.
2. Professor Joanne CHUNG, Professor, School of Nursing. The Hong Kong Polytechnic University, Hong Kong.
3. Ms Glenys HARRINGTON, Infection Control program co-ordinator, Alfred Health Hospital, Australia.
4. Professor William JARVIS, Clinical Associate Professor, School of Medicine, Emory University; Adjunct Assistant Professor, Rollins School of Public Health, Emory University, and president of Jason and Jarvis Associates, USA.
5. Ms Patricia LYNCH, Past Chair, International Federation of Infection Control, USA.
6. Professor Didier PITTET, Director, Infection Control Program, The University of Geneva Hospitals, Switzerland; Lead, WHO, World Alliance for Patient Safety.
7. Dr Wing-hong SETO, CICO, HAHO; director of Q&RM, Hong Kong West Cluster, Hong Kong.
8. Dr Wing-kin TO, Infection Control Officer, Yan Chai Hospital and CMC; consultant, microbiology, KWC, Hong Kong.
9. Dr Samson WONG, Assistant Professor, Microbiology. The University of Hong Kong, Hong Kong.

Funding for Application:

Maximum HKD$100,000 per proposal, the amount granted is subject to the panel's decision.

Vetting Criteria:

1. **FRIEND** –**F**easible, **R**elevant, **I**nteresting, **E**thical, **N**ovel, **D**eliverable.
2. **Theme** –Related to infection control.

Closing date for Application:

30th May 2009

Result of the Application:

Applicants not notified by 30th August 2009 should consider their applications unsuccessful. The result will also be released in the coming issue of this newsletter by September 2009 too.

Undertaking:

The successful candidate is required to sign an undertaking with HKICNA.

4th International Conference of Infection Control
27.8-29.8.2010
Hong Kong

Confirmed Speakers :

Elaine LARSON,

William JARVIS,

Didier PITTET

Michael TAPPER,

Wing-hong SETO

Organizer

Hong Kong Infection Control Nurses' Association (HKICNA)

Tear off below

To have updated information, please enter below and fax /e-mail back

To: HKICNA
http://www.hkicna.org

Fax: 852-31523944
Email: hkicna@hkicna.org

1. Name: _____ 2. Hospital : _____

3 E-mail: _____ 4. Fax: _____

5. Address: _____

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