

THE CROSS INFECTION CONTROL IN A MUNICIPAL PUBLIC HOSPITAL IN CHINA

Huang Yang

Student consultant, Luoyang Institute of Science and Technology, People's Republic of China

Corresponding Author Email: maryhuang72@163.com

ABSTRACT

Infection Control has far-reaching effects on ensuring patients' safety and improving quality of care. In the past decades, the Chinese government did not invest adequate resources in the development of the general public hospital, thus the hospitals confronted huge financial pressure. An increasing number of medical-related accidents had occurred in these public hospitals. Subsequently, a growing number of public hospitals in China began to promote lifelong learning among nurses in order to improve the quality of the healthcare services and ensure patients' safety. This paper will discuss the application of risk management in a hospital in China by using examples at hospital, ward and individual levels for the development of monitoring and prevention strategies.

Keywords : *Infection Control; a municipal public hospital in China; risk management*

INTRODUCTION

As a result of health reforms in the past 50 years, many countries, especially the economically developed ones, have established health policy agenda to reduce potential medical incidents (Armitage, 2009). Nowadays, health professionals have shifted their focus from diseases and outcomes of treatment to prevention of risks or harms (Armitage, 2009). Onion (2000) maintains that clinical governance such as risk management can improve patients' safety by eliminating hidden danger, such as unsafe practices. McErlain-Burns and Thomson (1999) pointed out that clinical audit should be based on evidence-based protocols or guidelines to monitor the safety and reliability of clinical practices as well as to improve quality of care. Human Error Theory introduced by Armitage (2009) stipulated that voluntary self-reporting of errors resulted in a decrease in repeated medical incidents because the person learns lessons from past experience.

In Beijing, the capital city of China, clinical governance and risk management were introduced through organisational support, policy and governmental funding to reduce risks of cross infection and to improve patients' quality of life (Guo *et al.*, 2007). Xu *et al.* (2012) claimed that because of the particularity of the medical work, the Operating Room

is the key point of each hospital infection prevention and control department, such as environmental disinfection of the Operating Room and air disinfection, patients' preparation as well as intraoperative use of various surgical instruments. Zhang (2009) and Smith (2006) reported that Infection Control Programmes and guidelines had been implemented in many Chinese hospitals. This could contribute to safety at work and improve quality of nursing care. Hospital-based nurses are encouraged to attend lifelong learning programmes to ensure higher quality of nursing care and safety practices.

This paper will discuss the application of the Cross Infection Control in a municipal public hospital in China. Innovative points of this paper is focusing on reflection of the Infection Control rather than solely investigating effective ways of Infection Control. Examples from author's work experience will be used to illustrate monitoring and prevention strategies at the hospital ward and individual level.

China's health reform and development of the situation

Over the past 25 years, healthcare system in China has considerable improvement. In China, more than 95% of the population was covered by the healthcare insurance system including people from rural areas as

well as remote places (Xinhua News Agency, 2012). The Chinese government encourages qualified commercial insurers to bid for the operation of critical illness insurance scheme (Xinhua News Agency, 2012). These newly launched critical illness insurance schemes could ensure population's access to essential treatments beyond the provision under the existing basic healthcare insurance system, thus improving the quality of life and reducing the economic burdens of the patients and their families (Xinhua News Agency, 2012). Although Chinese government makes great contributions to medical system reform, there are still quite a few people complaining regarding the quality of medical services. As a result, in recent years, changes in health policy have promoted the establishment of private hospitals and clinics in China (Xu, 2012). On one hand, the rapid increase in the number of Chinese private hospitals can meet the needs of increasingly more Chinese citizens for health care service. On the other hand, it is generally believed that Chinese private hospitals have perfect Infection Control System to make sure patients' life safety.

According to our China's national conditions, both private and public healthcare institutions in China are regulated by the Ministry of Health through municipal and provincial health bureau (Degeling *et al.*, 2006). In brief, these different levels of the bureau regularly check the healthcare institutions' policies, procedures and practices, and their standard of care. At the local level, the Nursing Council, Medical' Council and the Patient Complaints Committee, work collaboratively on risk management to promote good quality care.

Medical staff's real situation in a general municipal public hospital in China

Ten years ago, I worked in a general municipal public hospital as a R.N (registered nurse). At that time, my previous work place had more than 1200 medical staff with over 600 beds, 22 departments, and 3000 outpatient attendances per day. The hospital which I worked was a typically hierarchical institution with a director-oriented regime. At the ward level, a ward nurse manager and a nursing team leader are responsible for ensuring implementation of the hospital policies and rules. I worked in a medical ward which had 40 beds, staffed by one ward nurse manager, one nursing team leader, ten doctors and 20 nurses.

Like many general public hospitals in China, the

hospital which I worked was facing serious shortage of nursing staff. In my previous ward, there was only one nurse on night duty. Due to the increase in the number of emergency cases, a night duty nurse could easily lead to negligent act, for example, disinfection is not strict, which could result in infusion needle infection. In addition, in order to reduce care burden, a night shift nurse had to depend on relatives to perform basic care for patients, which also could cause the cross infection. This practice is accepted in China because of cultural tradition, economic situation, geographic and social factors. Overall, because of shortage of nursing manpower, communication between nurses and patients and the quality of delivered care may be adversely affected. This poses potential risks for patients' safety.

Infection Control at the provincial level

The local health bureau is responsible for the assessment of the ranking of hospitals in China (Lu 2009). This ranking assessment aims to strengthen the hospitals' capacities to provide healthcare services and ongoing education programmes of healthcare staff to improve patients' satisfaction and the quality of care. Xu *et al.*, (2012) suggested that the Chinese hospitals should further promote the Infection Control Process Optimization by strengthening the communication and cooperation between Chinese hospitals and foreign hospitals.

Infection Control at the hospital level

It is reported by Sun. *et al.* (2007) that the Nursing Department in the people's liberation army air force hospital adopts nursing quality Infection Control of hierarchical management by the chief head nurse, the head nurse and the Infection Control nurse three-level management. In the meanwhile, the implementation of hospital Infection Control can contribute towards the improvement and promotion of nursing quality.

In my previous work place, there were monthly assessments of patients' satisfaction, carried out by Medical Service Management Office and Nursing Department. Furthermore, nurses, doctors and other healthcare staff must be well-prepared for their individual clinical practices, and be familiar with the infection control process, like wearing masks, gloves, protective clothing, protective shoes, and safe disposal of sharp instrument as well as washing their hands in time. For instance, nurses should prepare for nursing procedures, such as Oral care operation, Intravenous

infusion operation and so on. For surgical doctors, they should demonstrate the procedure of surgical treatment. Moreover, the hospital which I worked also organized infection control knowledge training, seminars and so on in order to arouse medical staff's attention, to avoid the occurrence of the Cross Infection. For nursing leaders, this is also a better way to know about hazard awareness of hospital infection among nurses.

In terms of preventing cross infection, from the perspective of nursing, to motivate nurses to update nursing knowledge, nurses are required to participate in nursing knowledge and skills examinations at least twice monthly. Three nurses who performed most well received financial rewards while the three nurses with worst results and not meeting the agreed standard would be required to reflect and make improvement plan. If they continued not to meet the requirement, financial penalty would be imposed. Arguably, this approach might have negative effects on clinical practices as the staff might suffer lowered self-esteem and confidence, and lose their passion and interest to work. It is an important responsibility for nursing leaders in the hospital to explore appropriate strategies to strengthen nurses' knowledge and skills as this can reduce risk to patients.

Audits at the hospital level involve a cycle of checks. An infection control department officer in the hospital oversees cross-infection control, central sterile supply department and medical wastes disposal. The infection control officer and a committee member performed regular audit. Any breach of safety at individual or ward practices would be discussed at hospital level meeting in the presence of ward nurse managers and nursing team leaders, and in some cases, including consultants and nursing directors. Subsequently, the nursing management team would cascade the information to all nursing staff at the ward levels.

Infection Control at the ward level

At the ward level, the ward nurse manager and the nursing team leader play crucial roles in orientation of new staff, supervision of staff, and coordination among staff and patients. Infection Control is the key responsibility of the nursing team leader. Hess (2004) suggested that nursing shared governance is a managerial innovation to promote better patient outcomes. The responsibility for the quality of care should be devolved for nurses, instead of following

past formal hierarchical model referring to the nurses having little power.

It is a common practice in the ward in my previous hospital to display evidence-based guidelines in the clinical areas. This is to promote strict adherence to Infection Control Standards. A Ward Team Leader in my previous work place may also audit nurses' practice according to the guidelines. Moreover, the quality of the nursing handover between shifts is also an important factor towards safe care. The nursing team leader plays an important role in the improvement of the skills of a newly employed nurse at handover. Morning handover is conducted with multidisciplinary team members, while the afternoon and night duty's handover is conducted by nurses at patients' bedsides, allowing closer examination of patients' conditions.

Incident reporting is an important documentation. The contents of incident report may include spoken complaints and disagreements among medical staff, non-medical staff, patients and relatives needle stick injuries, blood and fluid exposures and self-harm report. The nursing directors and ward nursing team leaders are responsible for analysing patients' and relatives' feedback. Meetings are conducted to investigate and review any negative feedback.

Infection Control at an individual level

The key of nursing job is team cooperation. As a team, under the leadership of the head nurse, nurses work hard to reduce medical accidents and improve nursing quality. As one of senior nurses in the ward, my roles included working closely with nursing team leaders on risk management, supervising junior and new nurses' practices, and orientating new nurses to their new roles. I review and observe relevant guidelines, and reflect on my practice. Through role-modelling, good practice and professional values may be imparted to new nurses through ripple effect.

Drug administration was one of my main responsibilities. As part of my daily routine, I needed to collect all the doctors' prescriptions for the ward, then I entered the information into the computer so as to inform the pharmacy department of the required medications in the ward. Then the pharmacy department would dispatch the medications to me and I dispense the drugs to individual patients. In my previous hospital, we dispense the whole bottle of medication to the patient rather than the amount required as per dose for each

prescribed time. Therefore, patients have to learn to self-medicate and monitor therapeutic and adverse effects. Although this may alleviate nurses' workload, this practice might contribute to additional risks and even threaten patients' lives.

There was an incident involving a patient who went home without informing the ward. He soon returned to the ward via ambulance, unconscious, as he had taken double dose of diabetes medication, resulting in hypoglycaemia. As I was in charge of medication administration in the ward at that time, I apologised to the patient and filed an incident report. Although the patient later recovered with treatment, I realised the responsibility and risk that accompanied this practice.

Supervised patients' self-medication while in hospital might be more beneficial to patients than one-time intensive instruction given before discharge. The patients' safeties were not compromised by inhibiting practice of self-medicating and monitoring. I began to conduct assessments on evaluating patients' ability of self-medication, which was through case notes as well as other medical staff prior to giving medication. From this assessment, I would be more certain if the patient was suitable for self-medication. For patients who were unable to do so, I would ask the nurse at the respective shifts, to monitor patients' medication administration at the prescribed time.

DISCUSSION

It is well acknowledged that hand hygiene as a simple and very important in hospital for infection control. This issue has aroused widespread attention around the world. Sun *et al.*, (2014) claimed that 90% of examination, treatment and nursing are completed through the hands of medical staff in clinical activities. Nursing staff is in direct contact with patients as well as the patient are frequently in contact with nurses in hospitals. Therefore, nursing staff's hand hygiene is to prevent the hospital from cross infection, maintaining patient safety, improving the level of medical treatment and to ensure the quality of medical event (Sun *et al.*, 2014). In other words, hand hygiene is the most important factor among those procedures because this can reflect medical staff's awareness of the Cross Infection Control.

In regard to myself, I could make sure that every procedure that I carried out in my work place was in

accordance with the principle of Cross Infection Control. For instance, I could guarantee when I washed my hands, before, during and after the procedure then the process was appropriate. Thus, I call on all medical staff to start from himself so that they comply with the operation process and do a good job of washing tasks.

Fan (2012) said that health education is an important part of the overall care, because it can help people establish a scientific way of life and make everyone have self-care ability. According to her opinion as well as Chinese cultural background, we should strengthen patient relatives' health education. Consequently, medical staff should firstly educate patients' relatives about how to prevent the spread of the Cross Infection in order to guarantee patients' life safety.

In addition, health education also reflects medical staff's training and self-study. However, the question is how to make staff more motivated and active rather than reluctant and passive. With regard to this, my previous hospital adopted an unwise strategy, namely economically punishing those unqualified staff through examination's results. Personally, I insist that this can lead to staff's passive emotions and resistant behaviors. In brief, we believe that active attitudes, regular training as well as perfect collaboration between medical staff and caregivers may reduce the occurrence of infection in a hospital.

CONCLUSION

Due to the recent reform in the healthcare system in China, there was greater operational autonomy at hospitals' level. Upholding safe and quality care has become increasingly more important. The different levels to Infection Control were widely discussed and how an example of risk management was adopted in one hospital was also discussed. In addition, we should not neglect the importance of patient relatives' health education. Fan (2012) says that health education is a continuous and persistent process, which should be provided always through the work of the nurses towards the patients in hospital. Thus, medical staff should spare no effort to control the spread of the infection and simultaneously must carry out a good task of educating the relatives' of the patients regarding the prevention of the Cross Infection.

In conclusion, I claim that the Cross Infection Control

is a long-term and difficult task, which cannot solely rely on all medical staff's efforts. I believe in the future, only when hospital managers, medical staff, patients as well as relatives of sick people make collaboration, can

the cross infection in Chinese hospitals be controlled thoroughly. In this manner the patients will not only have standard services, but they will also be able to avoid the threat of unsafe practices.

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