within two hours of collection. In this study, we will discuss the impact of the delayed inoculation.

Methods: A total of 40 consecutively collected midstream and/or catheter-capture urine samples from patients were cultured in medium. The samples were inoculated immediately, one hour, two hours and 4 hours separately.

Results: The culture result yields that the difference between the immediate cultures and delayed inoculations were influenced by the period of delaying.

Conclusion: Direct sample inoculation into selective growth medium may improve the likelihood of detecting real pathogens.

PS 2-375

USING CHECKLIST TO PROMOTE PSYCHIATRIC HOSPITAL INFECTION CONTROL

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Purpose: Infection Prevention is a main mission for hospital staff in daily complicated care process. Our hospital is a psychiatric hospital. According to investigation, the accuracy of clinical staffs’ infection control procedure is low, compared to what in general hospital. We using evidence to make decision for promoting correct infection control procedure, which may reduce nosocomial infection and give mentally-illied cases a better and safer hospital.

Methods: Our infection control group, a infection man, a family medicine doctor, infection control nurse head, infection control clinical laboratory technologist, infection control pharmacist, and two infection control nurses, use brain storm method to make checklists, according to cause-and-effect chart and Centers for Disease Control regulation, We audit our clinical units every season with this checklist, and report the result at infection control committee. According to construction, process, result, to monitor the effect and review the efficiency.

Results: After checklist auditing procedure, we earned 91.13% of 100(21.4 and 2-B in 23 items) in Centers for Disease Control’s infection control evaluation. There is no missing in our hospital’s infection control.

Conclusions: Psychiatric hospitals must using good methods to prevent infection, such as infection control policy, administration management, environmental control, regular health education, auditing, and staff’s practice. We suggest hospitals make their own checklists, according to hospital characteristic and care model, and put it into effect.

THE INFLUENCE OF SHAVING AND NON-SHAVING ON POSTOPERATIVE WOUND INFECTION IN CRANIOTOMY PATIENT

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Purpose: The aim of the study was to evaluation the effect of non-shaving and shaving on the wound infection rate in craniotomy patients.

Methods: A cross-sectional study with purposive sampling using a structured questionnaire was conducted with craniotomy patients currently receiving treatment at a medical center in northern Taiwan. A demographic data-sheet, wound assessment sheet and body temperature scale were used to collect data for analysis. The study subjects were divided into experimental (non-shaved group) and control groups (shaved group).

Results: Total 58 patients were collected, 29 in the non-shaved group with 29 in shaved group. There is no difference in wound infection rate between these two groups.

Conclusions: For easy wound closure, change wound dressing and prevents postoperative wound infection shaving is a regular procedures in neurosurgery for preoperative preparation, but this study found there is no significant evidence of the benefits for this strategy. The other studies also confirm the result. According the research of Markin in 1986, body image change is one of the major concerns of patient prepared for craniotomy surgery. We also can conclude that preoperative shaving may bring huge psychological impact in craniotomy patients. Thus we suggest non-shaving or trimming of only a few hairs for preoperative preparation. The results of research may become the guideline for future neurosurgery care.

PS 2-376

CLINICAL OUTCOME DIFFERENCE OF THE PATIENT TREATED WITH GENERIC VERSUS INNOVATOR PIPERACILLIN-TAZOBACTAM IN THE MEDICAL INTENSIVE UNITS

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Purpose: Generic drugs have the same active substance, the same pharmaceutical form and the same therapeutic indications as the brand formulation. However, there is less study focus on the efficacy of generic antibiotic especially in the severely ill patients. This study is to clarify the clinical outcome of the patient treated with generic versus innovator piperacillin-tazobactam (Pip/Tazo) in the medical intensive units (ICU).

Methods: We retrospectively collected the clinical data of the patients treated with generic and innovator Pip/Tazo in the Kaohsiung Chang Gung Memorial Hospital medical ICU from January 2010 to March 2014. The primary end point was survival difference between the two groups of patients. Mortality on day 7, 14 and 28 ICU and inhospital mortality were analyzed. The secondary end point was sequential organ failure assessment (SOFA) score differences before and after treatment.

Results: A total of 161 patients who fulfilled the criteria, including 49 patients was treated with generic Pip/Tazo and 112 patients was treated with innovator. Acute Physiology and Chronic Health Evaluation (APACHE) II score was not difference between generic and innovator, 28.29 ± 4.730 and 28.96 ± 4.866, respectively. The 7, 14, 28 days in ICU and inhospital mortality of generic vs. innovator were not difference, 5 (10.2%) vs. 10 (17.9%), 8(16.3%) vs. 11(9.8%), 16 (32.7%) vs. 25 (22.3%), and 18 (36.7%) vs. 36 (32.1%) respectively. The mean antibiotic using day of the two groups were 7.5 ± 4.142 vs. 6.4 ± 3.415, p = 0.101. The SOFA down score between generic and innovator was not significantly difference, -0.90 ± 3.578 vs. -1.83 ± 2.838 (p = 0.079), respectively.

Conclusions: No obvious difference on mortality and SOFA down score between generic and innovator Pip/Tazo therapy group was found in the medical ICU.

PS 2-377

THE BURDEN AND IMPACTS OF ACINETOBACTER BAUMANNII CARRIED BY PATIENTS TRANSFERRED FROM LONG-TERM CARE FACILITIES OR OTHER HOSPITALS TO A MEDICAL CENTRE IN SOUTHERN TAIWAN

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Purpose: A prospective study was designed to understand the burden of A. baumanii and impacts in patients transferred from long-term care facilities or other hospitals to a medical centre in southern Taiwan.

Methods: Specimens from nostrils, hands and wound (if available) of all patients who were transferred from long-term care facilities or other hospitals between October 2008 and May 2009 to our Emergency Services were sampled for bacterial culture; if an A. baumanii was isolated, it was subject to antibiotic susceptibility testing. Once infection by or colonization of A. baumanii was confirmed, each of these patients was admitted to an isolation room, and additional environment specimens were sampled weekly during their stay by swabbing the surfaces of the patient’s bed, bed rails and bedside curtain. All A. baumanii isolates were collected for molecular typing using pulsed-field electrophoresis (PFGE).

Results: Five (3%) of a total of the 165 enrolled patients (94 men and 71 women, all with a variety of underlying disease) were found to be A. baumanii carriers. PFGE analysis revealed that A. baumanii isolates from these 5 patients were genetically different. Of note, A. baumanii were
isolated from bed rails and mattresses of 4 (80%) out of the 5 patients during their hospital stays, and 3 (75%) environmental A. baumannii isolates were genetically identical to the A. baumannii isolates from the admitted patients.

Conclusions: Our findings urge that specific infection control measures should be mapped out to prevent A. baumannii isolates from entering a medical centre that potentially disseminate in the hospital through environmental contamination and cause nosocomial infections in other patients.

**PS 2-380**

INFECTION DENSITY AND PATHOGEN ANALYSIS IN A RESPIRATORY CARE WARD IN TAINAN HOSPITAL

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Purpose: More and more advanced medical instruments and equipment are available in recent years to prolonged patients life. With the increase in the number of long-term ventilator-dependent patients, ventilator-associated infection are increasing recently. The aim of this study was to investigate the density of infection and the most common pathogens in Respiratory Care Ward (RCW) at a district hospital in southern Taiwan.

Methods: In this study, we retrospectively analyzed clinical isolates in a RCW at a district hospital in southern Taiwan from 2009 to 2013. Antibiotic susceptibility was recorded.

Results: Totally 352 pathogens was isolated in RCW, with average of infection density was 3.65 % patient-day. The average of infection density in September was decreased year by year from 10.87 % to 0 %. The most often isolated gram-negative pathogens in RCW were Escherichia coli (18.75 %), Pseudomonas aeruginosa (14.77 %), Klebsiella pneumoniae (14.49 %), Proteus mirabilis (9.94 %), Acinetobacter spp. (6.82 %), Providencia spp. (2.56 %) and Enterobacter cloacae (1.99 %). The most often isolated gram-positive pathogens in RCW were Staphylococcus aureus (13.35 %), Enterococcus spp. (6.53 %) and Staphylococcus epidermidis (2.56 %). The prevalence of Candida albicans in RCW has increased markedly in the past 5 years, from 0 % in year 2009 to 4.8 % in year 2013. Particularly the non-albicans Candida species, such as C. tropicalis, and C. glabrata.

Conclusions: The most often isolated pathogen were E. coli and P. aeruginosa in GNBs and S. aureus in GPCs. However, the number of Candida spp. isolate was increasing.

**PS 2-381**

COMPARISON OF THE EFFECTIVENESS OF HAND HYGIENE INTERVENTION IN STUDENT NURSES

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Purpose: Nosocomial infections are one of the important indicators of the quality of nursing care. Hand hygiene is the most effective prevention of nosocomial infections and economical method. This paper will compare of the effectiveness of hand hygiene intervention in student nurses during the clinical practice.

Methods: There were 60 students nurses who participate in this research. Data was collected from July to August in 2013. Add hand hygiene Intervention before going to clinical practice, and compared with the outcome data after clinical practice. The major statistic tools used included SPSS 12.0, independent t test, and Chi-square.

Results: The results showed that the overall hand hygiene behavior correction rate was elevated from 80.2% to 92.5%. There are significant differences after the interventions in hand hygiene. Student nurses can complete hand hygiene behavior correctly during the period of clinical practice.

Conclusions: Hand hygiene interventions can increase the student nurses correction rate of hand hygiene. In order to reduce nosocomial infection, enhance patient safety and quality of care, establishment the concept of hand hygiene and habits are important issues during clinical care. Student nurses are also the target population of infection control education because of less experience for patient care. The interventions may apply to other schools or hospitals in order to protect individuals and patients.

**PS 2-382**

THE EXPERIENCE OF INFLUENZA VACCINATION IN THE MENTAL HOSPITAL

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Purpose: Long-term psychiatric inpatients had self-care functional degradation due to chronic illness progress, poor personal hygiene than the general people, once influenza occurs it would cause cross-infection, leading unexpected group infection events. The cluster infection if found and intervention earlier, can effectively control and prevent spread of the disease. This article will share the experience of how to prevent influenza A epidemic enlarged processing in chronic psychiatric ward.

Methods: 49 inpatients, average 46.6 years old, length of stay was 258 days in the ward. Although setting an entrance guard, the patient need to participate occupational therapy, physical therapy, shopping and other activities in different area in hospital, also go out to the community or to return home. Two A type influenza patients were report to infection control unit on 28 May and 31 May, 2014. The infection control teams to assess ward prevention necessity of influenza A, and start infection control prevention and intervention: 1. The patient with type influenza received Tamiflu medication and isolation care and restrict activity area. 2. Everyone must wear surgical mask. 3. Whole cold symptom screening. 4. Infection control advocacy in patients living group discussion meeting. 5. Infected patients suspend all treatment activities. 6. Restrict admission. 7. Provide masks for visitors and wash hands before visiting, body temperature measurement, restrict to the ward area while fever. 8. To clean and disinfect the ward environment each shift.

Results: After infection control intervention, no more new cases occurred in a week since May 31, and the two cases have been cured.

Conclusions: The hospital has promoted intensive infection control education and the routine reporting system over the years, these infection control policy encourage nurses had higher sensitive to the infection events, and effectively blocking the expansion of the epidemic of influenza. This experience to share with the attribute of psychiatric hospitals.

**PS 2-383**

AN OUTBREAK OF SCABIES IN A DISTRICT HOSPITAL: LESSONS LEARNED

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Background: Scabies is a global problem and a significant source of morbidity in long term care residents, especially the elderly, the debilitated, and the demented, because of its contagious nature of spread. Scabies can recur in a long term care unit even after all individuals infected with scabies have been properly treated, because the mites can be recovered from bedding, clothing, furniture and floor. The long term care residents may wear contaminated clothing, or sleep on the contaminated beds. On September 24 2013, fourteen elderly residents and five healthcare workers were infected with this parasite at our Respiratory Care Ward, believed to have come from a new resident from another hospital. The failure of staff to diagnose scabies in this patient on admission might be due to a lack of pruritus in this new resident under incomplete treatment by the previous hospital.

Materials and methods: Infection Control Team and the Occupational Health teams were informed. Aggressive infection control precautions