

was significantly related to age, mechanism of injury, combined spinal injury, associated complications, initial Glasgow Coma Scale (GCS) and TISS. Fall associated with higher percentage of ICH (60.4%) and more complications (57.7%) than traffic accident patients. Fall caused head injury is associated with older age (OR=8.69, 95% CI=3.08-24.57), alcohol consumption (OR=0.44, 95% CI=0.26-0.72) and poorer prognosis (OR=3.77, 95% CI=1.98-7.16) after controlling for clinical confounders. We demonstrate that fall account for almost half of the head injury in a community hospital. Prevention for fall and education to reduce alcohol consumption especially for older residents are crucial to reduce morbidity and mortality for head injury in a community.

SP-080**Influence of Pedestrian Environment Improvement on Fall Prevention Neihu Safe Community, Taipei, Taiwan**

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Walking is the most healthy and energy-saving type of transportation. Residents of Neihu Safe Community walk a lot and put pedestrian's safety as one of their safety promotion goals. According to 2006 Neihu injury surveillance data, fall stood the third cause of injuries. Most of the injuries occurred on sidewalks. Therefore, a project aimed for better pedestrian's environment was come into operation in Neihu District, Taipei. The Neihu Safety and Health Promotion Association (NSHPA) and the Neihu District Office, Taipei City, co-conducted a field investigation to find out threats on sidewalks and skywalks in October 2006. After 3-hour inspection training, volunteers, including Neihu District officers, college students and local enthusiastic inhabitants, recorded every defect that might be dangerous to pedestrians. NSHPA collected the records and made a report to related official departments which were responsible for repair and maintenance. The same inspection was conducted again in April 2007. This study analyzed the data collected by NSHPA, and shows the results of the sidewalks safety inspection as well as the improvement effects. Number of defects found on sidewalks and skywalks before and after repair was compared. Fall injuries occurred in May through September in 2006 and 2007 were also compared to reveal the effect of the project. It was found that sidewalks and skywalks defects revealed 79% reduction at the second inspection. Fall injuries reduced 23.4%, mostly attributable to the improvement of sidewalks and skywalks. This is a good example of injury prevention with bottom-up and top-down. Pedestrians' environment has been improved, and fall injuries also decreased.

SP-081**Determinants of Participation in Fall Prevention Program among Elderly Fallers in Hong Kong**

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Background: Fall injuries are one of the main causes nationally for the loss of independence at the old ages but they are preventable. The acceptance of fall prevention program is therefore the key element to reduce the risk of falling.

Aims: The study aims to estimate the uptake of fall prevention program among elderly fallers and explore the factors related to the participation of the fall prevention program.

Methods: A telephone survey was conducted to the elderly who aged ≥ 65 who were given a referral of fall prevention program after attending at the Department of Accident & emergency (A&E) due to fall at the NT East Cluster in 2007. The inter-relationships between the socio-demographics characteristics and related factors were explored using multivariate analysis. Results: Total 969 elderly (mean age 80 years) were contacted and 70% of them joined the program. The participation rates were lower (65.8%) in the older age group than the younger group aged under 80 (74.9%) and female (68.5% vs. 73.9% for male). The factors associated with the participation of the fall prevention program included higher education level (OR = 1.79; 95% CI [1.00-3.22]), with chronic illness (OR = 12.31; 95% [6.86-22.12]) and without any aid for walking (OR = 1.78, 95% [1.25-2.53]) after adjusted age and sex of the participated elderly. Conclusions: Elderly without the identified characteristics of participation may not receive the benefit from the fall prevention program. It is an important indication for the future development of prevention program in Hong Kong for elderly.

SP-082**Applying Root Cause Analysis to Improve Patient Safety: Decreasing Falls in Postpartum Women**

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Objective: To investigate the effectiveness of interventions to prevent falls designed through root cause analysis.

Methods: Under preceding root cause analysis, root factors were classified into four major categories: environment and facilities, procedure, individual, and communication. Among them, communication, environment and facilities were recognized as the most vital factors to facilitate intervention accordingly. The fall prevention program included first intervention with adding live demonstrations and offering a printed education sheet, and second intervention with adjusting rails at the bedside and in the ward, placing anti-sliding pads on the floors of the bathrooms, and enhancing local

light in the bathrooms. This prospective longitudinal study was conducted in two large hospitals in Taiwan, with 2,460 participants in one hospital (intervention) and 2,451 participants in the other hospital (control). Results: In the intervention group, the incidence of postpartum falls within six months before intervention was 14.24 per 1000 patient-days, and dropped to 6.02 per 1000 patient-days within six months after intervention. The control group showed no marked decline in incidence with a rate of 13.72 and 14.05 per 1000 patient-days within six months, respectively. Using the Mantel-Haenszel test to compare the incident rate, there were significant differences ($p < 0.001$) between the incidence of the intervention group before and after intervention; and between the latter and each incidence of the control group. Conclusions: This study provides direct evidence that root cause analysis can be adopted in analyzing causes, and in formulating interventions to reduce the incidence of postpartum falls and improve patient safety.

SP-083

Low Birth Weight: Is Maternal Nutrition Is Associated with It?

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Low birth weight is one of the main factors for most of the childhood morbidity and mortality as well as for chronic illnesses in latter part of life. Major determinants for low birth weight in developing countries are poor maternal Nutritional status at conception and low gestational weight gain. A descriptive cross sectional study was done to identify the relationship between maternal nutrition, and low birth weight by using interviewer administered questionnaire with 524 mothers who delivered in maternity wards at teaching hospital Jaffna, during the period of 1st September to 30th September 2008. Interviewer administered questionnaire was used to collect data. Recordings were also made from clinic books, registers of labor rooms and bed head tickets. In this study low birth weight rate was 16.5%. Factors such low BMI of mother, number of parity, folic acid use prior to pregnancy, living in cemented house and house without proper chimney were statistically significant at p value 0.05 level. Food supplementation and home visits by PHM did not significant at same significant level. Low birth weight is still a significant problem. Problem needs early interventions before pregnancy rather than after getting pregnancy. ds over 250 will be cut off automatically.

SP-084

Factors Associated with Adolescent Pregnancy among Adolescent Primigravida Attending Antenatal Care Clinic at Samutsakorn Hospital, Samutsakorn Province, Thailand

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Adolescent pregnancy has been a critical public health problem since most adolescent confront various changes and development in term of physical, emotional, social and intelligent aspects. When they reach sexual maturity, sexual hormones will stimulate their sentiment. When adolescent getting pregnant, the effects are child health, adolescent development and family socio-economic development including national human resource development. The study was retrospective and case-control research with the objective of examining factors associated with adolescent pregnancy among adolescent primigravida attending the antenatal care clinic at Samutsakorn Hospital. Totally 203 adolescent primigravidas were selected as a study group and 203 non pregnant adolescents as a control group. Chi-square test and Odds ratio were used for data analysis. Data collection was conducted by self-administered questionnaires from June to August 2006. The factors which were significantly associated with adolescent pregnancy were occupation, educational level, experience of substance abuse, experience of smoking, sexual risk behavior, knowledge about sexuality, attitude towards premarital sex and peer's sexual risk behavior ($p < .05$). The factors which were the risk of getting adolescent pregnancy were not working/studying, low education, ever substance abuse, ever smoking, sexual risk behavior, and low knowledge about sexuality; agree with premarital sex and peer's sexual risk behavior. In conclusion, appropriate sexuality education in all level of school should be promoted. The safety environment for both school and residence could prevent children and adolescent from risk behavior.

SP-085

Risk Factor of Mortality Rate in Bantaeng District Indonesia 2005-2008

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According to Indonesian health demography survey in 2007, Maternal Mortality Rate (MMR) in Indonesia was 248/100.000 of live birth. This Study aimed to know the risk level of maternal age, maternal parity, birth attendants, and K4 Coverage of antenatal care to maternal mortality incident. Method of study was observational with case control design This study compared case groups of all mother undergoing maternal mortality incident in Bantaeng during 2005 to 2008 and control groups which didn't undergo maternal mortality