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**Relationship between *Opisthorchis viverrini* Infestation and Diabetes Incidence:
 An 8-year Retrospective Cohort Study**

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Background: Type 2 diabetes mellitus is an important health burden worldwide. A study in mice reported that *Opisthorchis felinus* infestation resulted in insulin resistance leading to diabetes mellitus. Therefore, this study aimed to find an association among humans. The study was conducted in Nayao community, a rural area in Thailand with a high prevalence of both diabetes mellitus and *Opisthorchis viverrini* infection.

Methods: An analytical study employed a retrospective cohort design among 336 people from Nayao community, Sanamchaiket District, Chachoengsao Province, Thailand. The previously nondiabetic (FBS < 126 mg/dL) participants provided stool samples tested for the presence of *Opisthorchis viverrini* and were followed up for FBS in 2016. The aim was to study the association between *Opisthorchis viverrini* infestation and diabetes mellitus.

Results: *Opisthorchis viverrini* infection has no significant association with the development of diabetes mellitus (adjusted IRR = 0.917, 95%CI: 0.408-2.061, p = 0.834). The incidence rate of diabetes mellitus among people infected with *Opisthorchis viverrini* is 12.08/1,000 person-year and the adjusted incidence rate ratio is 0.917. Factors known to be associated with diabetes mellitus significantly related to this study population included BMI group (adjusted IRR = 2.486, 95%CI: 1.189-5.197, p = 0.016), age group (adjusted IRR = 2.443, 95%CI: 1.137-5.251, p = 0.022), sex (adjusted IRR = 2.202, 95%CI: 1.045-4.642, p = 0.038), dyslipidemia (adjusted IRR = 2.630, 95%CI: 1.181-5.859, p = 0.018) and statins use (IRR = 3.520, 95%CI: 1.294-8.286, p = 0.009).

Conclusions: The analysis showed that *Opisthorchis viverrini* infection had no significant association with the development of diabetes mellitus (OR = 0.658, 95%CI: 0.259-1.667). Nevertheless, it indicated that *Opisthorchis viverrini* tended to be a protective factor which may be significant in a future study with a greater number of participants and longer follow-up time.

Keywords: ● Type 2 diabetes ● Incidence ● *Opisthorchis viverrini* ● Rural community ● Thailand

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Facilitators and Barriers to Hypertension Management and Follow-up among Patients and Healthcare Providers in Tha Wung Hospital, Lopburi Province

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Background: Hypertension is an untreatable progressive disease leading to serious complications. In Thailand, only 20% of patients with hypertension can control their blood pressure.

Objectives: To explore facilitators and barriers in hypertension management and follow-up among patients and healthcare providers to optimize follow-up rate of patients with hypertension in Tha Wung Hospital, Lopburi Province.

Methods: The study employed qualitative methods using in-depth interviews

Results: Twenty-six patients (53.85% female), aged 64.58 ± 10.35 years (range 42-82), and 7 providers (71.43%, female), aged 27 ± 2.89 years (range 23-31), were included in the analysis. Baseline characteristics of patients and providers were performed. From qualitative interviews four themes emerged: 1) patients' and healthcare providers' behaviors in terms of capability influences, 2) intention and determinants, 3) social influences and 4) healthcare system influences impacted hypertension management and follow-up.

Conclusions: Several patient and provider issues relevant to HT control were identified. Both patients and providers proved to be well-informed of HT knowledge and management, but this had no impact on HT control. From this study, a medical facility should be: 1) at close proximity to patients, 2) well-staffed, 3) specialized, 4) well-equipped and 5) decentralized to facilitate HT control.

Keywords: ● Hypertension ● Facilitator ● Barriers ● Healthcare system

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Associated Factors Delaying Progression of CKD among Patients with CKD in Thaluang Hospital

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Background: Chronic kidney disease (CKD) is a condition characterized by a gradual loss of kidney function over time. CKD is defined as abnormalities of kidney structure or function, present for > 3 months, with implications for health. CKD is classified based on cause, GFR category and albuminuria category (CGA). CKD usually caused by NCDs (diabetes, high blood pressure, cardiovascular disease) and nephrotoxic drugs such as NSAIDs. Primary prevention, early detection and treatment delay the progression. Likewise, Thaluang Hospital has recognized the importance of CKD and established a specialty clinic, "RAKTAI", providing care for patients with CKD from stage III, and closely monitoring the treatment as well as eradicating the associated factors of CKD progression in each patient.

Objectives: To study the associated factors in delaying CKD progression among patients at stage III - V stage CKD visiting the CKD clinic in Thaluang Hospital.

Study Design: A retrospective cohort study was conducted using secondary data from HosxP system in Thaluang Hospital. Data was collected from December 2017 to May 2017 and analyzed using SPSS, version 16.

Material and Methods: The inclusion criteria comprised all patients with a diagnosis of CKD from stage III up to V and visiting the CKD clinic for > 1 year (n = 58). The collected data consisted of demographic data, history of smoking, underlying disease, blood pressure, glomerular filtration rates (GFR), creatinine level and other related laboratory results from every visit during the past two years. Data was analyzed using SPSS, version 16 to find significant protective and risk factors concerning CKD progression.

Results: Secondary data using multivariate logistic regression analysis (Wald) revealed factors associated with delaying CKD progression among CKD clinic patients in Thaluang Hospital were BMI < 23 kg/m² [AHR 0.13 (95%CI: 0.03-0.68 , p-value 0.016)], ACEIs/ARBs used [AHR of 0.17 (95%CI: 0.03-0.87, p-value 0.034)] and fasting blood sugar level less than 130 mg/dL [AHR 0.12 (95%CI: 1.25 - 23.60, p-value 0.024)].

Conclusions: According to related research, NCDs, especially diabetes, are the main cause of CKD progression. Therefore, treatment of diabetes, along with lifestyle modifications such as glycemic control, body weight control and using ACEIs (reno-protective agents), can significantly delay CKD progression. Also, qualitative studies such as focus group interviews of patients with CKD should be conducted to investigate other additional protective factors in delaying CKD progression; such as drug compliance and recognition of CKD severity. Furthermore, community-level policies should be initiated for both primary and secondary prevention of CKD.

Keywords: ● Chronic kidney disease stage III ● CKD progression ● Analytic study ● Retrospective cohort study ● Secondary data ● Protective factors ● Thailand

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Success Rates of Suicide among Individuals with Suicidal Ideas from 2015-2017 in Phatthana Nikhom District, Lopburi Province, Thailand

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Background: The World Health Organization (WHO) defines suicide as the act of killing oneself. The act must be deliberately initiated and performed by the person concerned in the full knowledge, or expectation, of its fatal outcome. It constitutes a serious public health problem difficult to prevent. Around 800,000 people die from suicide every year with an estimated global mortality rate at 1.4%. It ranked as the 17th most common cause of death in 2015. A report of the Department of Mental Health, Ministry of Public Health, Thailand revealed that in 2015, overall mortality rate of suicide in Thailand was 6.4 per 100,000 population. The top eight provinces with the highest mortality rates were Lamphun, Mae Hong Son, Chiang Rai, Nan, Chiang Mai, Phra Tak, Trat and Lopburi. The mortality rate of each province per 100,000 population were 19.76, 15.46, 15.12, 13.18, 12.57, 11.04, 10.91, 10.82, 10.08 and 10.03, respectively. Due to the high suicide rate in Lopburi Province, investigation of the local success rate of suicide should be investigated.

Objectives: To determine the success rate of suicide, prevalence of suicidal attempts and associated factors of suicide in a population with suicidal ideas in Phatthana Nikhom District, Lopburi Province, Thailand

Methods: This study employed a cross-sectional design using secondary data collected from questionnaires created by the Department of Mental Health, Ministry of Public Health, Thailand to surveil depression and suicide. The questionnaires surveyed people in Phatthana Nikom District, who had committed or attempted suicide from January 2015 to May 2017. The questionnaire was conducted by close relatives of the suicide committer within 24 hours. However, for the suicide attempter, it was completed by health care workers when the one reached the emergency room. Annual prevalence of committed and attempted suicide was calculated using the number of suicidal committers or attempters divided by midyear population. SPSS was used to perform statistical analysis. Descriptive statistics were analyzed using frequency for categorical variables. Analytical analysis included Chi-square test for univariate analysis and multiple logistic regression for multivariate analysis to identify associated factors of suicide.

Results: The success rate of suicide among people with suicidal ideas was 29.8%. The highest prevalence for both suicidal committer and attempter occurred in 2015 i.e., 25 and 56 per 100,000 population, respectively. For the suicidal committer, the common age group was 31-50 years old or 51.6%. People who were married tended to committed suicide more than others status at 58.1%. Suicide was committed usually in the cool season at 45.2%. Hanging was the most common method used at 83.9%. Multivariate analysis revealed being 51 years or more (OR = 42.68, 95%CI: 3.34-544.72) and 31-50 (OR = 14.5, 95%CI: 1.34-156.49) years old and using hanging (OR = 62.31, 95%CI: 1.34-156.49) were significantly associated with suicide.

Conclusion: The success rate of suicide in a population with suicidal ideas was 28.9%. Prevalence of suicide committed and attempted in 2015 were 25 and 56 per 100,000 population, respectively. In 2016, the prevalence was 21 and 52 per 100,000 population for suicidal committer and attempter, respectively. Prevalence of suicide committed and attempted in 201 were 9 and 19 per 100,000 population, respectively. Age over 30 years and hanging were significant risk factors of success in suicide.

Keywords: ● Suicide ● Committed suicide ● Success rate

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Qualitative Study of Perceptions and Understandings Toward the ED among Healthcare Providers of ED, Patients and Relatives Visiting ED in Sanam Chai Khet Hospital, Chachoengsao Province, Thailand

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Background: Currently, a large number of patients visit emergency clinics leading to increased effectiveness of healthcare providers and satisfaction from patients and their relatives. In 2014, the number of actual cases of emergency was approximately 4.9%.

Objectives: To evaluate perceptions and understandings from each side of the emergency department (ED) system including patients, relatives and healthcare providers and established general information of ED visits

Study Design: The study employed qualitative methods (focus group interview).

Materials and Methods: Focus group discussions were used to interview each group separately comprising healthcare providers of the ED and patients and relatives visiting the ED. The contents of interviews comprised 3 main parts. The perspectives consisted of knowledge and importance of the ED, satisfaction level and expectations from ED care and challenges involving problem solving according to different viewpoints of views.

Results: In 2016, Sanam Chai Khet Hospital experienced resuscitation and emergency cases at 4.54%. Factors that influenced ED visits included sex, age group and arrival time. All patients and relatives were unaware of the real emergency conditions and levels of severity. For healthcare providers, emergency conditions meant conditions where patients needed immediate care and were classified using a triage system with 5 colors. All patients and relatives appreciated all treatment outcomes. Problems emphasized during discussion included long waiting time causing emotional dissatisfaction. Moreover, they received no explanation regarding the time situation in the ED. They emphasized more explanations of levels of severity and waiting time. Miscommunication between patients and healthcare providers was discussed especially use of impolite words. For healthcare providers, one major problem was overcrowding caused by numerous nonemergency cases. Another problem involved incongruity between departments resulting in over-referral of patients. In addition, the screening system needs to be improved because inappropriate triage created increased workload. Conferences between departments were necessary to clearly distinguish specific duties of each department.

Conclusion: The majority of patients did not perceive or understand about emergency conditions resulting in increased demand of the ED including nonemergency cases. In addition, internal problems remain in the ED system. Not only do healthcare providers play an important role but also patients themselves need to be further educated. This study reflects problems of EDs occurring nationwide. It could be used as baseline information for other Thai hospitals in the future.

Keywords: ● Emergency services ● Emergency department ● Emergency conditions
● Perception and understanding toward emergencies

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Qualitative Study About Perspectives of Uncontrolled Glycemic Level among Patients with Diabetes in Bangkla Community Hospital, Bangkla District, Chachoengsao Province, Thailand

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Background: Diabetes mellitus (DM) is one of the most common chronic diseases in the world. Its increasing prevalence causes many problems in the healthcare system. As a result of more sophisticated technology, newly developed medicines and foods could prolong people's life. In contrast, diseases, stemming from our modern lifestyle behaviors, tend to increase.

Objectives: To assess the lifestyle factors, that affected blood glucose control among patients with type 2 DM. Appropriate prevention and reinforcement was initiated to help patients better control glucose levels.

Methods: This study was conducted among 20 volunteers with uncontrolled T2DM in Bangkla Hospital, Bangkla District, Chachoengsao Province, Thailand from 11-13 July 2017. In depth interviews were used to collect data about knowledge, self-management and psycho-socio-economic aspects. This qualitative study collected information to correlate with standard medical knowledge from textbooks.

Results: According to the interviews, patients tended to know about the disease, complications, goals of treatment and prevention. However, they could not follow the recommendations, especially lifestyle modifications, such as ignorance of diabetic diet and proper exercise (both pattern and duration). Regarding psychosocial aspects, patients with a diagnosis of T2DM tended to spend some amount of time to adjust their lifestyles depending on hospital appointment. Family members played an important role in encouraging patients. Many patients mentioned the low prioritization of their social needs which could not influence them to reach their goals.

Conclusions: In addition to providing correct knowledge to patients, forming good relationships between patients and healthcare providers was necessary. Having a diagnosis of T2DM alarmed the patients regarding the aspects of the disease itself, complications and also lowered quality of life. Practical ways leading to lifestyle modifications were more important than theoretical methods. Encouraging chronic patients to continually endeavor to reach their goals of treatments is not only the hospital personnel's duty but also family members' using social motivation and prioritization.

Keywords: ● Uncontrolled T2DM ● Low prioritization ● In depth interviews

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Ya-chud Use among Patients with Non-communicable Diseases in Tha Luang District, Lopburi Province, Thailand

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Background: Ya-chud refers to several drugs included in the same envelope for simultaneous consumption of two or more tablets. Most chronic non-communicable disease patients are often elderly and have to take large amounts of medication over a long time. Patients often seek alternative therapies, such as the use of ya-chud. Those who take these drugs could overdose because so many drugs are contained in one package. Moreover, these drugs do not respond to the symptoms appropriately, and may also contain a mixture of dangerous drugs. Therefore, many patients present side effects. As described above, ya-chud is an important public health problem.

Objectives: The aim of this study was to explore knowledge, attitudes and behaviors of ya-chud use among patients with chronic non-communicable diseases in Tha Luang District, Lopburi.

Methods: The data were collected from patients attending the non-communicable disease outpatient clinic of Tha Luang Hospital from 11 - 21 July 2017. We excluded participants under 18 years old, who couldn't communicate and were not insane. This primary data was collected using questionnaires. Question items asked about demographic data, attitudes and knowledge about ya-chud and drug use behaviors. Data was saved and analyzed using the SPSS program.

Results: In all, 160 participants enrolled in the study. A total of 85 patients had used ya-chud. This group was further divided into those who used to use the drug (71 patients), and 14 who still used it, so the prevalence of ya-chud usage was 8.8%. Believing that ya-chud held advantages increased the risk of ya-chud exposure 2.32 times and belief that ya-chud could cure many diseases increased the risk of ya-chud use at present by 5.26 times. In addition, belief that using ya-chud as a protective factor could reduce ya-chud use in the present 0.1 times

Keywords: ● Ya-chud ● Non-communicable diseases

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Knowledge and Understanding of Myofascial Pain Syndrome among Patients in Sanam Chai Khet Hospital, Chachoengsao Province, Thailand: A Qualitative Study

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Background: Due to work behaviors, the prevalence of myofascial pain syndrome (MPS) is increasing. Regarding both temporary and chronic symptoms, Broekmans and colleagues reported that among patients with chronic nonmalignant pain, nonadherence is common: 29.9% (range 2 to 53%) of patients used less medication and 13.7% (range 3 to 21%) used more medication than prescribed. Therefore, this group requires special attention as MPS causes physical, mental and social problems for both physical and mental and also society. Therefore, patients should have basic knowledge and understanding for themselves and to advise others. Providing patients with a good understanding could help to prevent MPS.

Aims: To study the knowledge and understanding of causes, risk factors, signs, symptoms and management of myofascial pain syndrome of health volunteers in Sanam Chai Khet Hospital, Chachoengsao Province.

Methods: Focus group interviews were conducted in 2 groups of 16 volunteers in Sanam Chai Khet Hospital, Chachoengsao Province, Thailand during July 2017. In this study the understanding about causes, risk factors, symptoms and self-care regarding myofascial pain syndrome was assessed. This qualitative study collected information to correlate with standard medical knowledge from textbooks.

Results: Based on interviews among patients with MPS, most interviewees were laborers and farmers. Others spent much time sitting such as food vendors and students. Most interviewees claimed to recognize MPS. Some used to have or knew from patients close to them. Most commented claimed that MPS was a mild syndrome. These symptoms are called muscle pain (some call other unrelated pain, such as pain in the intervertebral disc) and are often experience as pain in the neck and back. Some patients could not work because of these symptoms. They talk about referred pain, such as pain through the back and arms. Risk factors such as lifting heavy loads and experiencing long periods of work or stress, will cause muscle pain. After reporting muscle pain, interviewers made two suggestions: 1) to stop immediately and avoid using the muscle and 2) to exercise. When symptoms did not improve, interviewees searched for other treatments. Frequently reported remedies included massage or medication. The interviewees were aware of basic self-care. Treating by medication and understanding the process of medical treatment was suggested because the condition is highly prevalent and involves the process of self-learning from direct experience. Interviewees aged 40 and above often commented that teenagers are different from them when they were at that age because of exercising and working less. Each interviewee gave a different opinion regarding the age factor of muscle pain.

Conclusions: This research focuses on MPS. The research concluded that most of the participants lacked knowledge and understanding of MPS symptoms, particularly its differences from other diseases and treatments. Caused by ambiguity in diagnosis, MPS could cause patients not to understand its diagnosis. This point reflected that the Thai public health system should better educate patients. The study participants were

Self-knowledge among Patients with Type 2 Diabetes Mellitus and Their Glycemic Control in Thawung Hospital, Lopburi Province, Thailand

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Background: Currently, Type 2 diabetes mellitus (T2DM) is one of the most common chronic diseases worldwide leading to mortality and long term morbidities with increasing trend. Meanwhile, in Thailand, the prevalence also has increased. In terms of mortality, more than 20,000 deaths were directly caused by diabetes, and more than 35,000 were attributed to high blood glucose. Diabetes morbidities can be divided in two main categories: major and minor cardiovascular disease (CVD). The major CVDs include heart disease and cerebrovascular disease, while diabetic nephropathy, diabetic retinopathy and peripheral vascular disease are considered minor CVDs.

Objectives: 1. To investigate the prevalence of patients with T2DM presenting poor-controlled glycemic levels.
2. To investigate the association between glycemic level and self-knowledge of T2DM.

Methods: A cross sectional study was conducted among 152 patients who followed up in the diabetes clinic in Thawung Hospital, Lopburi Province from 7 - 25 July 2017. We collected data using the fasting blood sugar level (FBS) and Diabetes Self-Management Questionnaire (DSMQ). The prevalence and associations between glycemic level and self-knowledge of T2DM were determined using the Chi square test and binary logistic regression analysis with 95% confidence interval (CI).

Results: Of patients enrolled in this study, those with T2DM comprised 83.97%. The prevalence among patients with T2DM with poor-controlled glycemic level totaled 55%, followed by HbA1c at 34%. Using univariate and multivariate analysis, significant association between glycemic level and self-knowledge of T2DM included knowing the target glycemic level, strict control, and hyperglycemic event prevention with p-values of 0.03, < 0.01, and 0.01, respectively, while the odds ratio values included 2.6, 3.78 and 6.66, respectively.

Conclusions: From this study, knowing the target glycemic level, strict control and hyperglycemic event prevention were significantly associated regarding glycemic level and self-knowledge of patients with T2DM. These results should motivate patients to know their target glycemic level and encourage patients to greater understand T2DM and demonstrate greater awareness of glycemic control.

Keywords: ● Self-knowledge in type 2 DM ● Target glycemic level and strict control

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Incidence and risk factors of metabolic syndrome in a 4-year follow-up population attending the outpatient department of Bang Khla Hospital, Bang Khla District, Chacheongsao Province, Thailand

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Background: Metabolic syndrome is an important risk factor for cardiovascular diseases and type 2 diabetes. In Thailand, the prevalence of metabolic syndrome has increased depending on population differences and timing of each study. Therefore, due to limited data related to incidence and risk factors of metabolic syndrome in Thailand, this study was conducted.

Objectives: To estimate the incidence and risk factors of metabolic syndrome in the outpatient department of Bang Khla Hospital, Bang Khla District, Chacheongsao Province, Thailand

Methods: Data were collected from the HOSXP database of Bang Khla Hospital, Pak Nam Subdistrict, Bang Khla District, Chacheongsao Province using data from patients who attended the outpatient department by sorting outpatients with metabolic syndrome at first and those with a single laboratory result. Diagnosis was based on NCEP-ATP III guidelines for diagnosing metabolic syndrome. Then follow-up of non-metabolic syndrome patients was conducted to identify incidence and risk factors.

Result: The incidence of metabolic syndrome involved 127 patients accounting for an incidence rate of 30.89 per 100 person-years. BMI was a significantly associated factor affecting the incidence of metabolic syndrome. For BMI, the incidence density increased in overweight patients (BMI 23 - 30 kg/m²) with a relative risk of 1.642 (95%CI: 1.10-2.45, $p = 0.015$) and obese patients (BMI > 30 kg/m²) revealed a relative risk of 1.887, (95%CI: 1.06-3.36, $p = 0.031$)

Conclusion: The incidence of metabolic syndrome in Bang Khla Hospital was high, and obesity was an important risk factor.

Keywords: ● Obesity ● Metabolic syndrome ● Risk factors

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Factors Associated with Severity of Trauma among Patients Experiencing Traffic Accidents Attending the Emergency Department of Phatthana Nikom Hospital, Lopburi Province

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Background: According to the Road Safety Situation Report 2558, road traffic injuries were one of the leading causes of death worldwide and the main cause of death in the population aged 15-29 years. Road accidents also create economic burden in a country. According to the National Bureau of Statistics, Thailand has 67,977 traffic accidents a year, an average of 186 times daily. It ranks 5th in the causes of death following cancer, stroke, pneumonia, and ischemic heart disease. Each year, around 200,000 people are injured in traffic accidents. The mortality rate is 22.3 : 100,000 population, despite ongoing campaigns to prevent and reduce accidents. Traffic accidents continue to be the main cause of injury and loss to Thais. Lopburi Province is not a major tourism center or a main route to other regions. However, the high prevalence of traffic accidents continues. As the researchers observed at the emergency room at Phatthana Nikom Hospital, about 5-10 patients, involved in traffic accidents, visited the emergency room daily, with the severity of the injury varying from abrasions to death.

Objective: To study the risk factors of traffic accidents affecting the severity of physical injury among traffic accident victims

Methods: This cross-sectional, descriptive and analytic study used a database of traffic accident victims who attended the emergency room from June 2016 to May 2017 provided by the emergency department of Phatthana Nikom Hospital

Results: The traffic accident database available from June 2016 to May 2017, revealed 1,537 patients were affected, 942 males and 595 females resulting in 34 deaths, representing a mortality rate of 2.21%. The age group 10-19 years had the highest proportion of accidents (26.48%). Most accidents occurred in March (12.2%), Songkran Festival witnessed 44 incidents (2.9%) while New Year's accidents totaled 54 (3.5%). The most common type of vehicle involved was a motorcycle (81.06%). For severity, 1,370 cases (89.13%) had minor injury defined as a bruise or laceration up to 5 cm and not more than 5 lesions without need of life saving intervention. In all, 72.8% had not consumed alcohol. Most motorists did not have a driver's license (58%), most motorcycle riders did not wear helmets (70.1%) and most drivers did not wear seat belts (66.2%). The accidents took place mostly in Khok-Sa-Lung District (5.1%). Most patients received only supportive care and were discharged home, A total of 1,266 patients accounted for 82.5% of accident. Univariate analysis revealed significant relationships between injury severity and 1) age group 45-59 (OR 2.58, 1.38-4.84, p-value 0.002), 2) trucks and trailer trucks and buses (OR 3.73, 2.05-6.08, p-value < 0.001), OR 0.54, 0.32-0.91, p-value 0.02), arrived at the hospital within 30-90 minutes (OR 2.14, 1.08-4.21, p-value 0.03) and alcohol consumption (OR 1.61, 1.08-2.42, p-value 0.02). Multivariate analysis

revealed that significant factors included vehicle, i.e., truck, trailer truck and bus (OR 2.72, 1.22-6.04, p-value 0.01), car lost (OR 0.41, 0.22-0.78, p-value 0.006) and alcohol consumption (OR 1.66, 1.01-2.73, p-value 0.046).

Conclusion: A previous comparison showed that most severe injuries stemmed from not wearing a helmet, not using seat belts, not having a driving license, using a small vehicle such as a motorcycle, accident occurrence without parties and occurrence on a direct route. The main cause of accidents involved a collision, external factors and losing balance.

Keywords: ● Traffic accident ● Helmet ● Severity of injury

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Nutritional Status and Quality of Life of ESRD on Hemodialysis in Bang Khla Hospital, Chachoengsao Province

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Background: Research from the Subjective Global Assessment of Nutritional Status of patients with chronic renal insufficiency and end stage renal disease on dialysis includes data on medical nutrition therapy for patients on hemodialysis. Patients with chronic kidney disease were treated with dialysis. Malnutrition was observed among patients with chronic kidney disease (CKD) receiving hemodialysis. As a result, patients were unable to adjust to predialysis or nausea and vomiting, resulting in inadequate nutrition. High protein foods are needed due to protein loss during dialysis. Patients may eat less because of limited diet, limited saliva, anorexia or psychological problems such as depression and lack of care, factors that increased morbidity and mortality. In Thailand, data from the USRDS Kidney Disease Association in 2014 found that Thailand had a large number of patients on hemodialysis patients, the 4th largest in the world. Nutritional problems among patients with prolonged hemodialysis in Thailand are a common problem. For example, Siriraj Hospital reported a prevalence of malnutrition of 52.4%. In 2016, Rajavithi Hospital reported a prevalence of 81.5%. In addition, military medical students in 2012 reported a prevalence of malnutrition of 33.3% among patients with CKD receiving hemodialysis at Bangcha Kidney Hospital. This study aimed to address malnutrition among patients on hemodialysis, factors related to this condition and to make nutrition problems easy to understand to correct and create sustainable practices.

Methods: A study was conducted among 24 patients using both quantitative and qualitative methods in a cross-sectional design. Prevalence and associated factors of malnutrition among patients on hemodialysis was investigated employing indepth interviews to assess their quality of life. Primary and secondary data were analyzed using link building and data summary.

Results: Participants in the study totaled 24 patients. Most were male (54.2%) with an age range between 32 and 79 years, and most were 61-80 years (45.8%). About 54.2% of patients on hemodialysis were malnourished. The prevalence increased with monthly income (< 10,000 THB), having health concerns and body mass index less than 23 kg/m².

Conclusion: The prevalence of patients receiving hemodialysis at Bang Khla Hospital, Chachoengsao Province was 54.2%, higher than other studies. The factors related to malnutrition were monthly income < 10,000 THB, having health concerns and body mass index less than 23 kg/m². Many factors affected patient's disease control such as knowledge of eating, monthly income and anxiety. Hospital personnel and village health volunteers played important roles in the health care of patients in the community helping them understand and recognize the disease symptoms themselves to ensure proper nutrition and high quality of life.

Keywords: ● End stage renal disease ● Hemodialysis ● Nutritional status ● Quality of life

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Patient's Perspectives About Dyslipidemia in a Primary Care Center in Thailand

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Background: Dyslipidemia is a progressive disease leading to serious complications. In Thailand, prevalence of dyslipidemia shows increasing incidence yearly. Dyslipidemia should be treated continuously to prevent further complications. Patients and their family members may have complications because of issues involving admission, treatment time and financial problems.

Objectives: To explore patients' with dyslipidemia views regarding their disease state, issues related to optimizing cholesterol level and perspectives regarding cholesterol and lipid lowering treatment in Thawung Hospital, Lopburi Province, Thailand

Methods: The study employed the qualitative method using indepth interviews.

Results: Twenty patients (70% female) aged 62.83 ± 5.48 years (range 53-81), were included in the analysis. Four themes emerged from the interviews: knowledge of dyslipidemia, patients' daily routines, medication and patients' feelings and beliefs concerning wellness that affected dyslipidemia control. Patients having knowledge about hyperlipidemia comprised 6 individuals, accounting for 30.00%. Two patients (28.57%) were unable to take their daily medication due to their daily regimen and their forgetfulness, the same factors that inhibited blood lipid level control.

Conclusion: Most patients lacked knowledge regarding dyslipidemia. The goals in treatment can be achieved when patients possess knowledge, and have effective communication with physicians. The physicians' duty is to create greater awareness and motivate patients to better control dyslipidemia.

Keywords: ● Dyslipidemia ● Perspectives on lipid level control ● Qualitative study ● Primary care center

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Prevalence and Factors Associated with the Risk of ADHD among Children 6-12 Years Old in Tha Luang Community: A Cross-sectional Study

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Background: Currently, surveys have found that Thai children have a relatively low intelligence compared with other ASEAN countries because of learning disorders, e.g., ADHD, intellectual disability and autism. In Thailand, the prevalence of ADHD is 5%. The purpose of this study was to investigate the prevalence of ADHD in Baan Tha Luang, Tha Luang District, Lopburi Province, early detect diseases, treat them appropriately, improve learning outcomes and prevent complications that could create a burden to family members or cause social harm.

Methods: This analytical research employed a cross-sectional design involving 694 members from Baan Tha Luang community, Tha Luang District, Lopburi Province, Thailand, studying in grades 1-6 in primary school. The aim was to screen for ADHD using a behavioral screening test and the SNAP-IV test.

Results: In all, 694 community members completed the behavioral screening test. The results indicated 66 were at high risk to develop ADHD and 628 were not at risk. The prevalence of high risk ADHD was 9.5%. Community members were more likely to be male (87.9%) than female (12.1%), age at 11 and 12 years old (22.7% both), studying in grade 5 (27.3%) more than any other grade, be living with mother (40.9%), and have a history of repeater (3.0%) and receiving punishment by a teacher (7.6%). Associated factors considered significant included sex, grade and history of punishment.

Conclusion: The analysis showed the prevalence of high risk ADHD was 9.5%. Significantly associated factors included sex, school grade and history of punishment.

Keywords: ● Attention deficit hyperactivity disorder ● Prevalence ● Factors associated with ADHD
● Tha Luang ● Thailand

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Knowledge, Perceptions and Attitudes Regarding Teenage Pregnancy in Pattana Nikhom District, Lopburi, Thailand: A Qualitative Study

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Background: Teenage pregnancy is escalating as a global problem. Teenage pregnancy contributes to health, social and economic problems. Although the government has created many plans to decrease its prevalence, the teenage pregnancy rate is still high. Despite this trend, little is known about knowledge, perceptions and attitudes towards teenage pregnancy in Pattana Nikhom District, Lopburi Province, Thailand.

Objectives: To determine the knowledge, perceptions and attitudes towards teenage pregnancy in Pattana Nikhom District, Lopburi, Thailand.

Methods: The study was conducted using indepth interviews. The questionnaires covered general information and associated risk factors of teenage pregnancy such as relationships, sex experience, attitudes toward safe sex and contraceptive use and knowledge of teenage pregnancy.

Results: Data collected by a total of 7 qualitative indepth interviews revealed that participants had incorrect knowledge, and insufficient current sex education courses leading to a lack of knowledge and awareness. The major cause of pregnancy was unprotected sexual intercourse and lack of compliance in contraceptive pill use. However, sex education in school or other organizations that publish information did not provide teenagers the correct perception and they still lacked awareness about using contraception. Moreover, some reported negative attitudes toward teenage pregnancy and believed it was part of the normal life in their hometown. In addition, they were unconcerned about family planning in the future causing the rate of the teenage pregnancy to remain high.

Conclusion: The study showed part of the study population still lacked knowledge and/or correct perceptions about teenage pregnancy and contraception methods. Due to this the high rate of teenage pregnancy remains. In addition to knowledge and perceptions, attitudes are the very important issues; some teenagers still expressed ambivalent attitudes about teenage pregnancy; they considered it a normal part of life and were unconcerned about it. The government and related health organizations must create strategies to manage this problem effectively.

Keywords: ● Adolescents ● Teenage pregnancy ● Contraception ● Condom use ● Determinants
● Thailand

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Evaluation of Knowledge among Patient with Diabetes Mellitus at Sanam Chai Khet Hospital, Sanam Chai Khet District, Chachoengsao Province

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Background: Diabetes is a major public health problem in Thailand and is on the rise in developing countries. In addition, hospitals offer programs to help patients with diabetes control blood sugar levels close to normal to reduce the incidence of complications. However, diabetes remains a major problem and many patients exhibit poor glycaemic control due to a lack of knowledge.

Methods: This research employed a cross-sectional descriptive design of patients diagnosed with diabetes mellitus receiving treatment from 4 September to 1 October 2017 at Sanam Chai Hospital, Amphur Sanam Chai Khet, Chachoengsao Province. The study aimed to assess the extent of understanding regarding the effectiveness of glycaemic control in the study population. The questionnaire was divided in 2 parts, namely, a knowledge test on diabetes and drug use among patients (Part 1) and a test portion. Self-care among patients with diabetes (Part 2) divided the knowledge level of patients in 4 levels: low, moderate, good and very good, according to the score of patients. The result of the questionnaire was then analyzed.

Results: The study population consisted of 123 patients with diabetes mellitus, 53 males (43.1%) and 70 females (56.9%) with an average age of 58.38 ± 12.24 years. Most of the patients, 39 (31.7%), were from 60-69 years old, with an average body mass index of 26.496 ± 5.76 kg/m². Factors affecting patients' blood glucose control were significantly related to the level of knowledge about diabetes. Patients at moderate and good knowledge levels presented a risk of glycaemic control of 0.197 and 0.267 times, respectively, compared with those at low knowledge level. For patients who were older, blood glucose control improved. Patients with diabetes for 1-5 years and > 5 years had a risk of low glycaemic control of 6 and 23 times compared with those with diabetes < 1 year. Nonfarmers, homemakers or religious personnel had better opportunities to control blood sugar levels.

Conclusion: Knowledge level among patients with diabetes was at moderate level, while no significance association was found in the knowledgeable group.

Keywords: ● HbA1C ● Diabetic mellitus ● Knowledge

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Factors Affecting Re-hospitalization of Acute Exacerbation in COPD within 28 Days in Tha-Loung Hospital, Lopburi Province, Thailand

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Background: Chronic Obstructive Pulmonary Disease (COPD) is the third cause of death worldwide and 5% of Thai citizens or more than 4 million people present COPD, the fifth in causes of death in Thailand. Acute COPD is a significant factor in reducing the quality of life among patients who face shortness of breath. Moreover, the accompanying dyspnea increases continuously disturbing patients' daily routines.

Methods: This research employed qualitative methods by interviewing 9 patients presenting COPD exacerbation in Tha-Luang Hospital, Lopburi Province. The indepth interviews comprised personal information, congenital disorders, aerosol used and evaluated the patients' quality of life.

Results: The qualitative research within 28 days indicated that patients were concerned about pollution in Tha-Luang District primarily from the burning of sugarcane husks and grass, stemming from the major occupations of people in Tha-Luang District. The secondary reasons were aerosol use and incorrect chest rehabilitation.

Conclusion: To reduce acute exacerbation in COPD requires accurate drug compliance, chest rehabilitation and recommended injected medicine. Additionally, the treatment of patients presenting acute exacerbation in COPD should involve interdisciplinary treatment to control the symptoms.

Keywords: ● Aerosol use ● Quality of life patient ● Exacerbation of disease

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Quality of Life among Elderly Thai Patients in a Chronic Disease Group and Others in Bang Khla Hospital , Pak Nam, Bang Khla, Chacheongsao Province, Thailand

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Background: Noncommunicable diseases constitute noninfectious chronic diseases, for example, diabetes mellitus, obesity, hypertension, chronic kidney disease and osteoarthritis etc. These diseases affect life style and economic status of patients and family members. This research aimed to determine the true prevalence of noncommunicable diseases among elderly patients and others in Bang Khla Hospital by evaluating quality of life and severity of associated problems in the community, including the relation between patients with noncommunicable disease and poor quality of life.

Objectives: To determine the quality of life among elderly patients with noncommunicable diseases compared with other diseases in Bang-Khla Hospital, Pak Nam Subdistrict, Bang Khla District, Chacheongsao Province, Thailand

Study design: The study employed a cross-sectional design.

Materials and Methods: Data was obtained from elderly patients in in Bang-Khla Hospital, Chacheongsao Province, Thailand. Prevalence of chronic diseases and associated factors were collected using standardized questionnaires and risk factors were assessed using multivariate logistic regression with backward (Wald test) model.

Results: The study of 151 elderly patients revealed those with chronic diseases had a lower quality of life than those who had not. Other factors may include family income and household members.

Conclusion: This study revealed the quality of life among elderly patients with chronic kidney disease, in Bang-Khla Hospital, Chacheongsao Province Chacheongsao was lower compared with other groups. However, the quality of life was relatively higher compared with those in related studies.

Keywords: ● Elderly patients ● Quality of life ● Risk factor ● Rural area ● Treatment ● Thailand
● Follow-up

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Relationship between Diabetes Self-management Support and Glycemic Control among Patients with Type 2 Diabetes Mellitus in Phatthana Nikom Hospital, Pattana Nikom District, Lopburi Province, Thailand

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Background: Type two diabetes mellitus (T2DM) is one of the chronic diseases prevalent among many Thais. The health system and organizations should be proactive in accessing patients with diabetes. The chronic care model is one of the prototypes and standard models applicable to chronic diseases. One of the important and effective components of the chronic care model is self-management support.

Objectives: To study the degree and association of diabetes self-management support and glycemic control among patients with T2DM, Phatthana Nikom District, Lopburi Province, Thailand.

Methods: This quantitative study employed a cross-sectional design. Quantitative information was provided from medical records of Phatthana Nikom Hospital and questionnaires. Hemoglobin A1C (HbA1c) level of patients was used to classify patients as having good or bad quality of glycemic control. They were then categorized and associated factors affecting glycemic control of patients with T2DM were identified. The data from questionnaires compared between two groups to identify what diabetes self-management support held an association with the good glycemic control group.

Results: Patients who participated in this study totaled 75. Most were women. The largest group was older than 60 years old, BMI 25-29.9 and 23-24.9 and unemployed. The average diabetes duration was 9 years. Most were treated by oral diabetes drugs and had hypertension and dyslipidemia as underlying diseases. The largest long term complication group comprised cardiovascular disease. The average HbA1c level was 7.9. Only 33.3% had HbA1c levels less than 7. The level of diabetes self-management education was moderate and that of managing psychosocial aspects of diabetes and setting and achieving diabetes goals was moderate. The level of assessing dissatisfaction and readiness to change was high while that of psychosocial support was low. The level of diabetes self-management education was not significantly associated with glycemic level among patients with T2DM in Phatthana Nikom Hospital (p-value = 0.31). Behavioral support was significantly associated with glycemic level among patients with T2DM (p-value = 0.027), while psychosocial support was significantly associated with glycemic level among patients with T2DM (p-value = 0.048). Behavioral support: setting and achieving diabetes goals were significantly associated with glycemic level among patients with T2DM in Phatthana Nikom Hospital (OR 3.5, 95%CI: 0.97-12.67, p-value = 0.049).

Conclusion: Diabetes self-management support including diabetes self-management education, behavioral and psychosocial support was important and helped achieve glycemic control. However, in Phatthana Nikom Hospital, behavioral support, i.e., setting and achieving diabetes goals and psychosocial support was significantly associated with glycemic level.

Keywords: ● Type 2 diabetes mellitus ● Diabetes self-management support ● Quantitative
● Lopburi province ● Thailand

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Knowledge, Attitudes and Behaviors on Drugs Used (Ya Chud) at the Outpatient Clinic, Sanam Chai Khet Hospital, Chachoengsao Province, Thailand

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Background: “Drug sets” causes drug use behavioral problems because they work fast, are affordable, and buyers can access quickly. They are also available in rural and urban areas such as grocery stores, coffee shops and pharmacies and widely used. However, the public is often unaware of the associated dangers, such as reaction, drug abuse, drug deterioration and side effects from combining various kinds of drug.

Methods: This study employed a cross-sectional design to determine the knowledge, attitudes, and behaviors regarding the use of drug sets of 100 patients receiving outpatient services from Sanam Chai Khet Hospital. Data was collected using questionnaires on knowledge and behaviors regarding drug set use. The data was calculated and statistically analyzed to conclude and establish campaign guidelines on using drug sets.

Results: From the study, among the 100 participants, 42% were found to have used drug sets; 66.7% used to and 33.3% were still using. Females used more than males, most were in the 30-44 years age group, most had obtained primary level education and most had lower than 10,000 THB monthly income. From the survey on knowledge and attitudes toward drug set use of patients receiving g services at the outpatient ward, Sanam Chai Khet Hospital, 58 patients (58%) had never used drug sets at all, 42 % used to and 14% were still using. The highest age group was 30-44 years old, most had obtained primary level education and most were employed. Most of the subjects went to hospitals, followed by purchasing their own drug set. Some reported not knowing whether the drug sets were good or not. However, most knew that they were dangerous and could cause adverse effects to the body for many reasons. Most knew that the drug sets affected the body negatively when used for a long time leading to osteoporosis, dyspepsia etc.; however, some had no idea concerning negative effects. The final reason for terminating drug set use was the awareness that drug sets were bad for health and doctor recommendations.

Conclusion: Many patients receiving -outpatient ward services from Sanam Chai Khet Hospital had little knowledge about drug sets. Notably, drug sets were still commonly bought.

Keywords: ● Knowledge ● Attitudes ● Behaviors ● Ya chud ● Drug set

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Factors Influencing Self-management in Acute Exacerbation among Patients with COPD in Thawung Hospital, Lopburi Province

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Background: Chronic obstructive pulmonary disease (COPD) is an important factor inducing dyspnea and in late stages the symptom can be worse until affecting daily life activities. This reduces the quality of life. Therefore, disease severity relates to the hospital admission rate, i.e., the rate of exacerbation and complications of the disease, e.g., pneumonia and heart failure ending in death. Patient self-management is an important factor that could reduce the mortality rate. However, perceptions, knowledge and response when exacerbations occur remain insufficient among patients. Therefore, we investigated factors influencing self-management among these patients

Objectives: To study factors influencing self-management in acute exacerbation among patients with COPD

Methods: This study was conducted using indepth interviews from 19-29 December 2016 focusing on people in Thawung Community District, Lopburi Province under their agreement to do so.

Results: From interviews we found that factors influencing self-management in acute exacerbation of patients with COPD in Thawung Hospital, Lopburi Province comprised acceptance of COPD, perceived severity of symptoms, knowledge of exacerbations, experience with exacerbations and perceived social support. Therefore, each factor produced different influences but overall impacted recognizing the important of self-management

Conclusion: This study explained different patterns and factors influencing self-management in many ways. The conceptual framework helped us understand how each factor influenced patient. From interview we learned that knowledge and understanding of patients toward COPD was the main factor influencing good recognition and self-management.

Keywords: ● COPD ● Factors influencing self-management ● Qualitative study

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Prevalence and Risk Factors Associated with Cataract among Elderly Patients at Bang Khla Hospital, Chachoengsao Province, Thailand

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Background: Cataracts are the leading cause of blindness and visual impairment worldwide. The prevalence of cataracts is higher among the elderly. The prevalence of cataracts in Thailand among those aged 60 year and above was 50% in 2007. Few studies have been conducted about cataract risk factors in Thailand. This study evaluated potential risk factors associated with cataracts among elderly patients in a Thai rural population which may further our understanding their role in development of cataract. This may prevent the risk factor of cataract and may help reduce the surgical burden on the eye care system in Thailand.

Objectives: To investigate prevalence and potential risk factors associated with cataracts among elderly patients at Bang Khla Hospital, Chachoengsao Province, Thailand

Methods: A cross-sectional study of 121 cases of cataracts and 111 cases of controls aged 60 years and above were invited to join this study. The study employed a hospital-based design. A total of 11 risk factors were investigated: age, gender, comorbidities (DM, osteoporosis/arthritis, hepatitis B infection, atopic dermatitis, allergic rhinitis, heart disease, dyslipidemia, asthma/COPD, and hypertension), alcoholism, smoking, body mass index, drug use, sunlight exposure, family history of cataracts, exercise and duration of sleep. The outcome measures used adjusted odds ratio to identify risk factors associated with cataract and were analyzed using logistic regression analysis.

Results: Definite cataracts were found among 121 (52.2%) of 232 patients and prevalence of cataracts increased with age. In total cases of cataract, blindness caused by cataract cases totaled 111 (91.7%); blindness in both eyes totaled 83 (68.6%) and blindness in one eye totaled 28 (23.1%). The average age of cataract patients was 72.0 ± 8.0 (60, 96) years old. The risk factors associated with cataract included excessive sun exposure (more than 9 hours daily) (OR, 4.75; 95%CI: 1.20-18.85) and use of calcium channel blocker (OR, 4.79; 95%CI: 2.01-11.42).

Conclusion: The prevalence of cataracts among elderly inpatients in Bang Khla Hospital, Chachoengsao Province equaled the general population in Thailand. However, the trend of increasing prevalence of blindness caused by cataracts is a major public health concern in the aging population in Thailand. Risk of cataracts was significant among those with excessive sun exposure (more than 9 hours daily) and using calcium channel blocker. Wearing sunglasses to block ultraviolet sunlight may help to delay cataract formation.

Keywords: ● Cataract ● Risk factor ● Prevalence ● Thailand

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The Expected Outcome and Satisfaction in Physical Therapy among Patients with Low Back Pain in Tha Wung Hospital, Lopburi Province

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Background: Physical therapy is involved with rehabilitation associated with preventing, treating and managing abnormal movements of the body that occur in every age group. Physical therapy is popular globally because it helps patients to have relief, rehabilitation and the return of normal movement after injuries caused by accident, stroke or aging.

Objectives: To study aimed to investigate expectations and satisfaction levels among patients with low back pain undergoing physical therapy in Tha Wung Hospital. The results may serve to develop and adjust physical therapy department guidelines in Tha Wung Hospital for the patients' best outcome and benefit.

Methods: This study was conducted using semi-formal indepth interviews among patients with low back pain patients receiving physical therapy in Tha Wung Hospital from 26 January to 3 February 2017.

Results: The results revealed most patients' expectations and satisfaction levels were in a good range. Most patients expected that after completing physical therapy the pain would be relieve or cease so they could perform daily life activities with ease. In addition, the highest satisfaction levels stemmed from the carefulness of the physical therapist (average 4.67), responsiveness (average 4.31).

Conclusion: Patients with low back pain receiving physical therapy in Thawung Hospital expected that after undergoing physical therapy continuously the pain would cease, so they could perform their daily activities with ease. The highest satisfaction level concerned carefulness of the physical therapist while other factors were also in a good range.

Keywords: ● Physical therapy ● Expectations ● Satisfaction ● Low back pain

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Prevalence and Associated Factors on CKD Stages 3-5 in a Primary Care Hospital, Phatthana Nikom District, Lopburi Province

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Background: Chronic kidney disease (CKD) is a worldwide public health problem, with adverse outcomes of kidney failure, cardiovascular disease (CVD), and premature death. The findings from the US indicated 5.63% had a diagnosis of CKD stages 3-5 from 1988-1994, and from 1999-2004, the prevalence increased to 8.04%. Factors associated with CKD stages 3-5 included ages, diabetes, hypertension, CVD, stones, history of CKD in family, history of AKI and certain drugs used. However, data on prevalence and risk factors associated with CKD in Thailand remain limited.

Methods: A cross-sectional study was designed. Electronic data were collected to conduct quantitative research consisting of a target population totaling 733 to determine the prevalence and associated factors related to CKD stages 3-5.

Results: The quantitative study of 733 participants revealed that prevalence of CKD stages 3-5 was 7.6%. Factors associated with CKD stages 3-5 included age, hypertension and diabetes.

Conclusion: Prevalence of CKD stages 3-5 in the studied population did not differ from related studies. Factors associated with CKD stages 3-5 included age, hypertension and diabetes.

Keywords: ● Prevalence ● Associated factors ● Chronic kidney disease

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Prevalence and Associated Factors of Metabolic Syndrome among Healthcare Providers in Tha Luang Hospital, Tha Luang District, Lopburi Province, Thailand

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Background: Metabolic syndrome is a group of symptoms that lead to the risk of cardiovascular disease (CVD). Those symptoms include abnormal cholesterol level, abnormal blood pressure, high level blood glucose along with thromboembolism and cytokine. CVD and these symptoms are often associated. Patients with these symptoms have higher risk of stroke, myocardial infarction and mortality than the normal population. As healthcare providers are a group of people with the easier access to medical knowledge and are considered health models for people in the community, we were interested in conducting this study on the prevalence of metabolic syndrome among healthcare providers of the hospital and their associated risk factors. The result of the study will provide a model for guiding health policy and create beneficial health regulations in many hospitals in Thailand.

Objectives: The purpose was to identify the factors of metabolic syndrome and the prevalence of noncommunicable diseases, such as diabetes mellitus, hypertension, and dyslipidemia among healthcare providers of Tha Luang Hospital, Tha Luang District, Lopburi Province.

Study Design: This study employed quantitative methods using a cross-sectional design. The target group consisted of 101 healthcare providers.

Material and Methods: The researcher collected patients' data from medical records in Tha Luang Hospital then reviewed each data set to divide in 2 groups, i.e., metabolic syndrome and nonmetabolic syndrome to determine the associated factors of metabolic syndrome.

Results: From the quantitative study, the prevalence of metabolic syndromes among 101 healthcare providers of Tha Luang Hospital was 10.9%: 11.9% for hypertension, 3% for diabetes mellitus and 21.8% for dyslipidemia. The obvious risk factors of metabolic syndrome included being male (OR = 13.0, 95%CI: 1.90-89.09), advanced age (OR = 1.1, 95%CI: 1.01-1.31), office work (OR = 10.29, 95%CI: 1.23-86.30) and hypertension as an underlying disease (OR = 30.0, 95%CI: 2.19-409.36).

Conclusion: The study of the prevalence of metabolic syndrome revealed low risk factors because the study targets were working age groups. One risk factor that can be solved is office work, which amounts to physical inactivity. One solution is to promote exercise in the hospital and community to reduce the risk factors of the disease and to support the healthcare providers to serve as better health models for the community.

Keywords: ● Metabolic syndrome ● Prevalence ● Quantitative study ● Healthcare providers ● Exercise
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A Qualitative Study: Perspectives of Disclosure and Antiretroviral Drug Adherence among Patients Living with HIV in Thawung Hospital, Lopburi Province, Thailand

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Background: Human immunodeficiency virus (HIV) or acquired Because no cure exists, the mortality rate among patients living with HIV (PLWHs) is high and the disease can progress to severe conditions such as AIDs and other comorbidities and rapid death. Current treatment options include antiretroviral (ARV) drugs, which can increase survival rates and reduce morbidity of PLWHs. As these patients continue to live longer, psychosocial aspects of the illness become important issues that need to be considered when caring for PLWHs.

Objectives: The study aimed to explore the perspectives of disclosure and ARV drug adherence among PLWHs in Thawung Hospital, Thawung District, Lopburi Province.

Research Design: This research employed a qualitative approach using indepth interviews among PLWHs who followed up and received ARV drugs from 6-23 March 2017.

Materials and Methods: Researchers conducted indepth interviews among PLWHs about 30 minutes each, allowing field notes and taped recordings. The material was analyzed using qualitative methods. Case report forms were used in the quantitative study to collect demographic data. Secondary data were processed using statistical analysis.

Results: The study population comprised 25 PLWHs divided in 2 subgroups: nondisclosure and disclosure. The first group consisted of 2 men (100.0%) and the second comprised 23 PLWHs consisting of 12 women (52.2%) and 11 men (47.8%). Most PLWHs disclosed to only family members and medical personnel. After the disclosure, they were encouraged and supported in ARV drug use to mitigate feelings of disgust or discrimination. The main reasons for ARV drug adherence included self-esteem, family support and prospect of living longer. Most followed the suggestions in the doctor's prescription because of their confidence in ARV efficacy and tolerable side effects.

Conclusion: HIV in Thailand has not yet been accepted. Therefore, most PLWHs do not disclose their HIV status to people outside of the family. However, the PLWHs in both nondisclosure and disclosure groups cooperated well in using ARV drugs resulting from an effective public health system. Thais and other social sectors should assist and not condescend PLWHs. Better understanding of HIV and its prevention should be promoted.

Keywords: ● Patients living with HIV (PLWH) ● Antiretroviral drug adherence ● Disclosure

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Quality of Life and Associated Factors among Personnel Working in Tha Luang Hospital, Lopburi Province

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Background: Many studies have been conducted to increase the quality of life. Thailand's 11th National Economic and Social Development Plan (2012-2016) also focused on Thai workers quality of life and happiness. Quality of life and associated factors assessment should be provided to determine how to support a higher quality of life. This is important because individuals vary and are at the heart of work optimization.

Objectives: The purpose of this study was to study the quality of life and associated factors of quality of life among personnel working in Tha Luang Hospital, Lopburi Province.

Methods: This quantitative research employed a cross-sectional design. The population comprised personnel working in Tha Luang Hospital, Lopburi Province, a total of 97 people. The instrument used was, "Quality of life of Thai workers in industrial and service sectors" including general information regarding personnel and six elements regarding quality of life: family, environment and housing, moral ethics and culture, society, work and health.

Results: The results of these analyses showed that most personnel working in Tha Luang Hospital reported having a good quality of life, 65% of the total population. The highest average satisfaction score derived from the family domain of 7.6 points and the lowest was the work domain of 6.18 points. The positive associated factors include going to work by personal car, participating in elections and having hospital cooperation. Negative associated factors included overtime work, shift work, surety ship and guaranty, workplace problems (heat, cold and odor) and ideas on changing work.

Conclusion: Quality of life among personnel working in Tha Luang Hospital was mainly at a good quality of life level. The highest and lowest average satisfaction scores in each domain were family domain and work domain, respectively. Factors associated with quality of life from 3 domains included work domain, environment and housing and society domain.

Keywords: ● Quality of life ● Personnel working in hospital ● Lopburi province

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Level of Satisfaction with Health Services Provided by Bangkla Hospital, Chachoengsao Province

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Background: The satisfaction of patients who visit a hospital is an indicator of the quality of treatment and health services provided by the hospital along with HA standards and health services of the Healthcare Accreditation Institute (public organization) of Thailand which requires that hospitals must provide information on the level of satisfaction among patients in the current situation and trends. Studies have found that factors that affect the level of satisfaction and can improve the hospital performance had 5 main factors, i.e., human resources, that is, people who take care of patient, attitudes, attention paid, ability of healthcare providers and quality of care. Others factors were time waiting to see doctors, recognition for waiting etc., management system, sorting patients, factors of individual patients such as age group, sex, patients who could talk and environment such as facilities and sanitation. From such research information, the level of satisfaction among health services could differ in each hospital. When we can identify the strong and weak points of each hospital, it can be used to improve health services and develop policies and systems that lead to a higher quality of health services for patients.

Objectives: 1) To study satisfaction levels and determine the level of satisfaction rating
2) To improve public health services to meet the needs of patients
3) To collect and record the problems that patients perceive should be solved
4) To improve human resources to maximize benefits

Study Design: A descriptive and cross-sectional analytic design was used in the quantitative study.

Materials and methods: Standardized questionnaires were used to collect demographic data and assess satisfaction levels regarding health services.

Results: The level of client satisfaction toward services of Bangkla Hospital was mostly at a good level ($\bar{X} = 4.3$, $SD = 0.484$). The client satisfaction comprised service time, information services, health providers and hospital facilities, ($\bar{X} = 4.13$, $SD = 0.599$, $\bar{X} = 4.37$, $SD = 0.519$, $\bar{X} = 4.51$, $SD = 0.506$, $\bar{X} = 4.33$, $SD = 0.606$, respectively). Differences among subjects including age, education, and occupation were significantly different regarding client satisfaction regarding services of Bangkla Hospital. Subjects with different factors; sex and right for treatment were not associated difference in client satisfaction for services of Bangkla Hospital.

Conclusion: The result of this study indicated that level of client satisfaction toward services of Bangkla Hospital were most satisfied with 3 parts: information services, health providers and hospital facility and were high satisfied with service time. Moreover, significant differences in client satisfaction towards services of Bangkla Hospital involved age, education level and occupation sex and right for treatment were not associated.

Keywords: ● Client satisfaction ● Health providers ● Hospital facility

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Evaluating Inhaler use Techniques in Patients with COPD in

Sanam Chai Khet Hospital, Chachoengsao Province

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Background: Poor inhalation techniques are associated with decreased medication delivery and poor disease control in chronic obstructive pulmonary disease (COPD). The purpose of this study was to evaluate techniques for using inhaler devices among patients with COPD.

Methods: A prospective cross-sectional study was conducted to assess patient compliance with correct techniques for using inhaler devices. The percentage of compliance with essential steps of correct device use for each regimen was recorded without prior notification when patients with COPD came for routine visits. We evaluated risk factors related to incorrect techniques using logistic regression analysis.

Results: A total of 65 patients with COPD were evaluated and 52 patients (80%) performed at least one step incorrectly. The most frequently performed incorrect steps were "Hold breath for at least 10 seconds" and "Breathe out gently to residual volume". Older age, female sex, severity of dyspnea and lung function impairment, low CAT score and history of frequent exacerbation were not associated with incorrect technique.

Conclusion: A large proportion of patients with COPD patients performed at least one essential step for drug delivery incorrectly. No factor related to incorrect technique in this study.

Keywords: ● Chronic obstructive pulmonary disease ● Inhaler devices ● CAT score ● Frequent exacerbation

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Stress Level and Associated Factors of Hospital Personnel in Phatthana Nikom Hospital, Lopburi Province, Thailand

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Background: Stress affects many people worldwide caused by mental health problems, shift work or lack of team building and physical illnesses. The World Health Organization (WHO) international survey found that at least 450 million people had at least 1 mental health problem in their life span and 873,000 people globally commit suicide annually stress is one of the factors that brings about suicide problem, undeniably. Moreover, healthcare providers are currently faced with the health problems of patients at all levels; consequently, the research team is aware of the importance of understanding mental health problems, stress among medical staff and factors affecting stress.

Objectives: To study the stress level and associated factors of medical personnel and workers in Phatthana Nikom Hospital, Lopburi Province, Thailand.

Methods: A quantitative analytic cross-sectional study was conducted on stress levels and associated factors of personnel at Phatthana Nikom Hospital, Lopburi Province using general information questionnaires and the Suanprung Stress Test Questionnaire consisting of 60 sets of stress relievers (SPST60).

Results: Most subjects were female, 84.4%; and professional nurses comprised 35.8%. In all, 28% were severely stressed. The obviously stress-associated factors comprised being an undergraduate; income less than 20,000 THB; financial status with debt and being an employee. In all, 17.3% of total stress problems were reported with a level of family stress as high as 30.7%, as well as environmental and financial stress. In addition, most symptoms in people developing high stress levels concerned the immune system, 58.9%.

Conclusion: Based on data and results obtained, it could be estimated that most patients in Phatthana Nikom Hospital developed low to moderate stress levels in terms of both stress sensitivity and stress levels from all sides. However, few high-stress level personnel required assistance to work out a solution to work effectively and happily in the hospital. The benefits of this research showed a stress problem could be solved and to be personnel could be proactive in dealing with stress such as health promotion activities, stress management etc.

Keywords: ● Suanprung stress test ● Stress level ● Associated factors

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Quality of Life among Homebound and Bedridden Patients With and Without Trained Caregivers in Long Term Care, Tha Luang District, Lopburi Province

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Background: Increasing numbers of Thai elderly together with changes in trends of illness from acute infectious to noninfectious but chronic disease have brought about disabilities and incurable problems to communities needing access to long term care program. This has led to government attention to improve elderly health, aiming to treat, prevent and protect overall health of the people. Mainly the program consists of trained caregiver responsible for helping homebound and bedridden elderly not only concerning physical health but also psychological, social and environment health.

Objectives: To explore quality of life and factors associated with quality of life among homebound and bedridden patients with and without trained caregivers in long term care, in Tha Luang District, Lopburi Province.

Methods: This study employed a cross-sectional design and was conducted as a complete survey in Tha Luang District, Lopburi Province using the WHOQOL-BREF-THAI questionnaire to explore quality of life and associated factors of 44 homebound and bedridden patients with and without a trained caregiver based on hospital data. The selected patients had activity of daily living (ADL) scores less than 12 points. The questions included patient's demographic data, disease, ADL score, caregiver and quality of life.

Results: From 44 homebound and bedridden patients participating in the research, 59.1% had regular quality of life. The patients with trained caregivers had lower quality of life than those with family member caregivers according to the significant results as revealed by 63.79 and 77.72 points, respectively. A positive association related to the quality of life was indicated by no disease complications. Negative associations included trained caregiver and previous occupation as an employee or merchant. Disease causing homebound and bedridden status, underlying disease and ability to perform ADL showed no association with quality of life.

Conclusion: In this research, homebound and bedridden patients with trained caregivers exhibited lower quality of life than those with family member caregivers. Having a trained caregiver also showed a negative association with quality of life. Long term care programs should be standardized and long term savings programs in the community should be started.

Keywords: ● Quality of life ● Long term care ● Caregiver

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Factors Influencing Stroke Recovery among Patients with Subacute Stroke Patients in Tha Wung Hospital, Tha Wung, Lopburi Province, Thailand

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Background: Cerebrovascular disease is one of the noncommunicable chronic diseases affecting public health systems in Thailand and worldwide. The number of cases has tended to rise and will cause more burden at both household level and in the public sector. These deaths and disabilities result in lower quality of life not only to patients but also contribute to health, social and economic problems. Hence, identifying factors contributing to better outcomes among patients with subacute stroke is vital. This could lead to better outcomes of patients with stroke and help develop better health policies in public hospitals throughout Thailand.

Objectives: To determine prevalence and influencing factors affecting good outcomes of patients with subacute stroke in Thawung Hospital, Thawung, Lopburi Province, Thailand

Study Design: This study employed an observational quantitative design. Descriptive and retrospective cohort analytic studies were used.

Materials and Methods: Case report forms were used to collect demographic data and factors affecting outcomes of patients with stroke. A letter was written to seek approval from the hospital to access to patient medical records before data was collected. The factors included patient risk causes, acute and subacute treatment and rehabilitation. Secondary data were processed using statistical analysis.

Results: The population of patients with stroke admitted to Thawung hospital to receive subacute stroke treatment totaled 64 patients, 56 from ischemic stroke and 8 from hemorrhagic stroke. In terms of sex, more female patients (54.7%) were enrolled compared with male patients (45.3%). When we divided patients in groups, most patients were 51-70 years old, 45.3% followed by more than 70 and less than 50 in ranked orders. The prevalence of poor outcome (64.1%) was twice as high as those with good outcomes (35.9%). From this data young age and passive exercise were associated with good outcomes.

Conclusion: The prevalence of poor outcomes among patients with stroke was 64.1%, which was relatively high compared with those with good outcomes at 35.9%. Influencing factors for good outcomes included younger age and passive exercise. Therefore, the primary care unit (PCU) and village health volunteers serve an important role to educate people in the community to understand and have greater awareness of this disease to decrease urgent care cases in the emergency room. On the other hand, health personnel have to realize the importance of rehabilitation to improve patient outcomes to regain their independence. This could reduce burdens to both community and family members.

Keywords: ● Stroke's recovery ● Subacute stroke ● Primary care unit

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Risk Behaviors of Metabolic Syndrome among Health Care Worker in Sanam Chai Khet Hospital, Chachoengsao Province, Thailand

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Background: Metabolic syndrome (MetS) represents a group of risk factors of noncommunicable disease such as coronary heart disease, cerebrovascular accident and others. This disease has a relation with sedentary lifestyle and inappropriate health behaviors, for example, inadequate sleep, poor nutrition, alcohol consumption etc. Medical professionals and health care workers are one of the risk groups of having MetS. Therefore, this research project was conducted to identify the prevalence of MetS condition and associated risk factors among health care workers, currently working in a hospital.

Materials and Methods: This project employed quantitative methods using a cross-sectional study design. In all, 186 individuals enrolled in this study. Associated risk behaviors were collected using questionnaires. Then MetS condition was identified by review of medical record. Statistical analysis, Chi-square test and logistic regression were used to identify associations between risks and MetS conditions.

Results: Of 186 cases, the most common MetS condition was obesity with 29.6% prevalence. Prevalence of other conditions included insulin resistance, 9.7%, increased blood pressure, 8.1%, hypertriglyceridemia, 4.2% and hypercholesterolemia, 25.8%. Sex, age and weekly workdays showed an association with obesity. Additionally, obesity was a risk factor of other MetS conditions.

Conclusion: Obesity was the most common MetS condition among the studied population. Age and weekly workdays showed a positive association with obesity and obesity showed an association with other MetS conditions.

Keywords: ● Risk behavior ● Metabolic syndrome ● Health care worker

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Incidence and Risk Factors Associated with Recurrent Stroke in Phatthana Nikom Hospital, Lopburi Province, Thailand

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Background: Stroke is one of the important health, social and economic problems of Thailand. Few studies have been conducted on stroke recurrence among patients with stroke in Thailand along with the disease being common in Phatthana Nikom Hospital. Researchers need to conduct this research to study the incidence and risk factors associated with stroke recurrence to show the magnitude of this problem in a rural community, which may be used to lay out new policies, campaigns and guidelines to mitigate this problem and improve treatment of patients with stroke.

Objectives: To study and assess the incidence of stroke recurrence and risk factors associated with stroke recurrence for the possibility of assessing and finding prevention methods in patients with such risk factors.

Material and Methods: This study used a mixed method design to investigate the incidence and risk factors associated with stroke recurrence in Phatthana Nikom Hospital, Lopburi Province, Thailand employing a retrospective study design using the patients' data from 2014 - 2015 along with indepth interviews to identify factors associated with stroke recurrence.

Results: In this population, patients with a first diagnosis of stroke in Phatthana Nikom Hospital from 2014-2015 totaled 161 comprising 93 males and 68 females, 57.8% and 42.2%, respectively. The population classified in ages beyond 60 years and below 60 years totaled 56.5% and 43.5%, respectively. Those with BMI below 25 kg/m² totaled 72%. Classified by occupation, 49.7% were contractors and 22.4% were unemployed. In all, 74.5% of patients did not smoke and 77.6% did not consume alcohol. A total of 58.4% of patients had hypertension while most patients did not have diabetes, dyslipidemia, or heart disease accounting for 74.5%, 73.9% and 88.2%, respectively. Incidence of stroke recurrence after being discharged from the hospital from 2014-2015 totaled 11 patients accounting for 6.83%.

Conclusion: From this study, incidence for stroke recurrence in Phatthana Nikom Hospital, Lopburi Province from 2014-2015 were at 6.83% less than the numbers from reviewed literature (12.18% to 16.19% annually) probably because this study was conducted in a secondary level hospital making the incidence lower than other studies conducted in a tertiary level hospital. Furthermore, these results do not represent a general population due to the small time window of data collection, and that secondary data were not routinely collected such as duration of hospitalization, patient's status before and after admission, patient's status before and after rehabilitation, drug compliance of the patient and family support and care making it impossible to study these factors Regarding risk factors associated with stroke recurrence, statistically, more patients smoked or consumed alcohol that had more stroke recurrence than those who smoked or consumed alcohol. This could be due to the lack of registration history or because patients who had a stroke usually quit smoking or drinking only recently

before diagnosis making the information different before the actual diagnosis. For comorbidity, patients without diabetes or hypertension were more prone to recurrent strokes. This may have been because some patients with stroke had no known comorbidity.

From the qualitative study, factors associated with recurrent strokes included drug compliance, rehabilitation, daily activity, knowledge and understanding of the disease, comorbidity, expectation of recovery, mood status, family support and access to healthcare services. All of which should be improved.

Keywords: ● Recurrent strokes ● Drug compliance ● Rehabilitation

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Prevalence and Associated Factors of Nonuse of ACEI/ARB Agents among Patients with CKD in the OPD CKD Clinic at Bangkla Hospital, Chacheongsao Province

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Background: Chronic Kidney Disease (CKD) is a global health condition with a prevalence 10% in the world's population and is increasing. In Thailand 17.5% of Thai citizens are patients with CKD. According to KDIGO Guidelines 2012, ACE inhibitor and ARB can be used to reduce kidney damage but some of the patient don't receive ACE inhibitor, so that has inspired the researcher to study the prevalence of patients with CKD not receiving ACE inhibitor in the OPD CKD Clinic of Bangkla Hospital.

Methods: This research study employed a retrospective observational cohort design. The researcher collected patient's data from medical records in Bangkla Hospital and reviewed all profiles about use or nonuse of ACE inhibitor. The data were divided in 2 sets to identify the associated factors in nonuse of ACE inhibitor. In addition, reasons for not receiving the agents or why patients ceased using the agents were investigated as well as symptoms such as heavy cough and hyperkalemia.

Results: Among a total of 459 participants, prevalence of current nonprescription use of ACE inhibitor or ARB (No ACEI/ARB) among patients with CKD chronic kidney disease after attending the OPD CKD clinic was 35.29%. Causes of nonprescription ACEI/ARB included no albuminuria, 37.89%, unknown cause, 22.36% and blood pressure baseline < 140/90 mmHg 14.29%.

Conclusion: For current nonprescription use of ACE inhibitor or ARB (No ACEI/ARB) among patients with CKD, unknown cause resulted in inappropriate treatment. Physicians need to explain the reason on the OPD card to help other physicians prescribe proper medication. This could mitigate the progression of CKD and decrease medical costs for patients with CKD.

Keywords: ● Chronic kidney disease ● ACE inhibitor ● Qualitative study ● Chacheongsao province
● Thailand

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Factors Impacting Health Expenditure in the IPD Under UC in Thawung Hospital Compared with that of the Thai National Health Security Office in Fiscal Year 2016

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Background: The Thai National Health Security Act, BE 2545, Section 38 funds secured national health aims to fund the cost of supporting and promoting public health. It promotes services and encourages Thai citizens to access health services thoroughly and efficiently including areas where health services are inadequately distributed. It covers the costs of service agencies, organizations or individuals that support or promote public health as well. In fiscal year 2016, the government provided funding for universal coverage (UC) at about 3,028.94 THB per person. That increased from fiscal year 2015, which was about 2,895.09 THB per person but still insufficient. Thus, a policy has been established to increase fund management efficiency. In addition, the organization aims to increase quality of service operation and control costs during over service demand situations. Even though the UC has increased funding paid per head since 2002, of medical services under the UC continues to sustain loss while nonUC coverage makes a profit.

Objective: The study aimed to determine the factors creating loss in healthcare expenditure in the inpatient department (IPD) under UC, and clarify details of expenditures for different diseases among inpatients of Thawung Hospital.

Study Designs: The study employed an analytic cross-sectional design.

Material and Methods: The data of inpatients in Thawung Hospital covering fiscal year 2016 was collected from the hospital computer system called HOSXP and was used to study the factors creating loss in health expenditures in the IPD under UC. The data was analyzed using SPSS Program, version 15.0.

Results: The average total expense for treating inpatients with UC in Thawung Hospital (5,823.33 THB) exceeded the lump sum appropriation per head (1,060.14 THB) which had been received from the National Health Security Office in 2015. The average total loss was more than the average total outcome of nonloss and the average total income of loss was less than the average total income of nonloss. The greatest expense was for room and meals regarding loss and nonloss. The main factors impacting loss for each admission was using drug outside of the National Essential Drug List, using more drug than necessary and inappropriate length of stay

Conclusion: Many factors impacted loss from inpatients and these should be addressed. In this study some inpatients represented nonloss. Further studies should investigate the causes of using drugs outside of the National Essential Drug List, using more drugs necessary and inappropriate length of stay. Then all hospital staff including physicians, nurses, pharmacists, physiotherapists and public health officials should collaborate to better manage this problem.

Keywords: ● Health service expenditure ● Universal health coverage ● Inpatient department ● Loss
● Nonloss

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Factors Associated with Glycemic Control among People with T2DM in Bang Khla District, Chachoengsao Province, Thailand

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Background: Data in 2009 have shown that approximately 108 million people have diabetes mellitus worldwide, and that this number increased in 2014 up to 422 million people with an estimated 1.5 million deaths caused by diabetes. In Thailand, 1 in 11 of the general population has diabetes. In Bang Khla District over 30,000 people have received a diagnosis of type 2 DM (T2DM). The DM clinic in Bang Khla Hospital was the setting closely monitored care and specific management among patients with T2DM.

Methods: This quantitative study was conducted using a cross-sectional design. Quantitative information was provided from medical records of Bang Khla Hospital and questionnaires. Hemoglobin A1C of the patients was used to classify those as having a good or poor quality of glycemic control, which was then used to categorize and search for associated factors affecting glycemic control of patients with T2DM. The data from medical records included patients' information and their laboratory results such as Hb, HbA1C, FBS, cholesterol, LDL and UA levels and was used to compare between the two groups to identify risk factors associated with the good glycemic control group.

Results: Among a total of 53 participants, prevalence of good glycemic control among patients with T2DM in Bang Khla Hospital was 27.6% and significant factors associated with good glycemic control (HbA1c < 7%) included having every meal punctually (p-value = 0.003) and duration of follow-up less than 3 months (p-value = 0.016). Knowledge and attitudes were not significantly associated with good glycemic control (HbA1c < 7%).

Conclusions: The study found that good dietary lifestyle and having a proper duration of follow-up were significant factors associated with good glycemic control, while knowledge and attitudes of patients with T2DM were not significantly associated with good glycemic control.

Keywords: ● Type 2 diabetes ● Risk factors of good glycemic control

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Qualitative Study Investigating Perceptions Towards Deaths from Road Traffic Accidents in Thaluang Community, Thaluang District, Lopburi Province

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Background: Road traffic accidents are still of one of the major public health issues worldwide. According to the WHO 14,059 road deaths occurred in Thailand in 2012. As a consequence, Thailand is ranked the second deadliest worldwide. Thaluang District of Lopburi Province accounted for the highest location, where the road traffic accidents especially those involving motorcycles have occurred in the past two years. Currently, people in that community remain barely concerned over such incidents in the district. Hence, it should be of benefit to conduct a study to explore why community members pay little attention towards preventable crashes to reduce the death rate from road traffic accidents.

Objectives: To explore how Thaluang community members perceive what constitutes right and wrong when driving and what they or the government should do to reduce preventable deaths from road traffic accidents.

Methods: This study was conducted using indepth interviews during 2016 to determine community members' perceptions towards road traffic accidents in Thaluang community, Thaluang District, Lopburi Province.

Results: Community members in Thaluang community, Thaluang District, Lopburi Province provided their perceptions regarding road traffic accidents mainly categorized in 5 distinct domains, i.e., people, environment, roads, vehicles (only motorcycles) and government. Mostly, violating traffic rules was the key character defect community members reported, e.g., speeding and not wearing a helmet. Apart from the people domain, some criticized road maintenance. To illustrate, many bushy trees blocked vision along the traffic ways. In addition the local environment included narrow and poorly constructed roads that significantly obscured drivers' vision. In some way, a number of community members thought old and nearly disrepaired vehicles (motorcycles) could potentially reduce the accident rate. On the other hand, some voiced that the government should take part in campaigns to diminish preventable deaths from the traffic use.

Conclusion: The identified domains including people, roads, environment, vehicles and government which could be used to correct and reduce road traffic accidents to some extent. For instance, people using the roads must be aware of their own safety by simply following the traffic laws. A key community leader should be identified to campaign to diminish preventable deaths and lower the rate of traffic accidents. In addition, educating the main community groups involved in road traffic accidents especially adolescents about traffic rules may help shape the community safety guidelines. Moreover, it would prove useful to allow the young educated generation to express their thoughts regarding how to cope with those main factors contributing to road traffic accidents. To summarize, community members should take action together to prevent and solve such preventable causes of road traffic accidents.

Keywords: ● Road traffic accidents ● Perceptions ● Helmet use

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