

**การประชุมวิชาการพระมงกุฎเกล้า ครั้งที่ 38**  
**วันพฤหัสบดีที่ 25 พฤศจิกายน 2553**

ห้องประชุมใหญ่ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

0700-0830 ลงทะเบียน

0830-1000 **Symposium 5 : Shock : Update in 2010**

ประธาน	พ.อ.ชัยชุมพล	สุวรรณแต่มีชัย
ประธานร่วม	พ.ท.หญิง สนิตรา	ศิริธางกุล
วิทยากร	พ.อ.ภูษิต	เฟื่องฟู
	พ.อ.วีระชัย	วัฒน์วีระเดช
	พ.อ.โสภณ	สงวนวงษ์
ผู้ดำเนินการอภิปราย	พ.อ.อดิศร	วงษา

ห้องประชุมย่อย ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

0830-1000 **Workshop : (Med-ed)**

**Learner Remediation**

Prof. Miriam Bar-on

ห้องพิธีการ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

0800-0900 **Symposium 6 : AMI Fast Tract กับบทบาทของพยาบาล**

ประธาน	พ.อ.หญิง จารุณี	กัลดเข้มทอง
ประธานร่วม	พ.ท.หญิง ดร.เพ็ญภา	ภักดีวงศ์
วิทยากร	พ.ท.หญิง จารุวรรณ	ปี่ทอง
	พ.ต.หญิง วรรณกร	รักอิสสระ
	พ.ต.หญิง วิไลวรรณ	เพิ่มศิลป์

0900-1000 **Symposium 7 : กฎหมายกับบุคลากรทางการแพทย์**

ประธาน	พ.อ.หญิง จารุณี	กัลดเข้มทอง
ประธานร่วม	พ.ท.หญิง ดร.เพ็ญภา	ภักดีวงศ์
วิทยากร	อาจารย์ วันชัย	สอนศิริ

1000-1030 **Coffee break**

ห้องประชุมใหญ่ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

1030-1200 **Symposium 8 : Modern Trends in Cardiovascular Emergency**

ประธาน	พล.ต.ประสาท	เหล่าถาวร
ประธานร่วม	พ.อ.หญิง ราตรี	ศรีเพ็ญ
วิทยากร	พ.อ.เกรียงชัย	ประสงค์สุกาญจน์
	พ.อ.เฉลิมเกียรติ	ตันตระกุล
	พ.ท.ปรีชา	เอื้อโรจน์อังกูร
ผู้ดำเนินการอภิปราย	พล.ต.ชุมพล	เปี่ยมสมบูรณ์

ห้องประชุมย่อย ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

1030-1200 **Workshop : (Med-ed)**  
**Learner Remediation**  
 Prof.Miriam Bar-on

ห้องพิธีการ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

1030-1200 **Symposium 7 : กฎหมายกับบุคลากรทางการแพทย์**  
**ประธาน** พ.อ.หญิง จารุณี กัลดเซ็มทอง  
**ประธานร่วม** พ.ท.หญิง ดร.เพ็ญนภา ภักดีวงศ์  
**วิทยากร** อาจารย์ วันชัย สอนศิริ

ห้องประชุมใหญ่ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

1200-1300 **Luncheon Symposium 2 : Anticoagulant in Acute Coronary Syndrome Management at ER :**  
 How do we achieve optimal care ?  
**วิทยากร** พ.อ.นครินทร์ คันสนยุทธ์  
**ผู้ดำเนินการอภิปราย** พล.ต.ชุมพล เปี่ยมสมบูรณ์  
**สนับสนุนโดย** บริษัท Glaxo Smith Kline (GSK)

ห้องพิธีการ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

1200-1300 **Luncheon Symposium 3 : The Update Cervical Cancer : Making the Right Choice for All**  
**วิทยากร** พ.อ.กิตติศักดิ์ วิลาวรรณ  
**สนับสนุนโดย** MSD (Thailand) Ltd.

ห้องประชุมใหญ่ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

1300-1412 **ประกวดผลงานวิจัย นพท./นรพ.**

**ประธาน** พ.อ.วิโรจน์ อารีย์กุล  
**ประธานร่วม** พ.อ.หญิง วาสนา นัยพัฒน์

1300-1312 ● Prevalence and Risk Factors of Symptomatic and Asymptomatic Hand Osteoarthritis from Radiographic Findings in 45-Year-Old and Over Thai Population at Baan Na-yao, Moo 15 and Baan Na-ngam, Moo 19 Tagradan Sanamchaiket Chachemgsao Province, Thailand

Ruamhathai Mahavinitchaimontri (Phramongkutklao College of Medicine) **บทคัดย่อที่ 1**

1312-1324 ● The relationship between selected factors and adversity quotient (AQ) of nursing student of the Royal Thai Army Nursing College

Bhumipatana Somjai (The Royal Thai Army Nursing College) **บทคัดย่อที่ 2**

1324-1336 ● Prevalence and Risk Factors of Peripheral Arterial Disease in Moo 15 and 19, Baan Na yao and Baan Na ngam, Takradarn, Sanamchaikhet, Chachoungsao Province

Peeravudh Chantana (Phramongkutklao College of Medicine) **บทคัดย่อที่ 3**

1336-1348 ● The relationship between attitude towards professional nursing and moral behavior of nursing students at the Royal Thai Army Nursing College

Suratsawadee Intarat (The Royal Thai Army Nursing College) **บทคัดย่อที่ 4**

- 1348-1400 ● The Study of Magnitude and Social Interaction of Attention Deficit Hyperactivity Disorder in Primary School Children, Targradarn Subdistrict, Sanarmchaiket Distirict, Chacheongsao Province, Thailand  
Siwagam Arsaipanit (Phramongkutklao College of Medicine) **บทคัดย่อที่ 5**
- 1400-1412 ● The Developmental Assets of first-year students of the 2009 academic year who study in nursing Colleges under The Ministry of Defence and The Royal Thai Police  
Naruepat Buayen (The Royal Thai Army Nursing College) **บทคัดย่อที่ 6**
- 1412-1430 **Coffee break**
- ห้องประชุมใหญ่ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา**
- 1430-1606 **ประกวดผลงานวิจัย นพท./นรพ.**  
**ประธาน** พ.อ.วิโรจน์ อารีย์กุล  
**ประธานร่วม** พ.อ.หญิง วาสนา นัยพัฒน์
- 1430-1442 ● Effectiveness of Community-based Participatory Action Research for Prevention and Control Opisthorchiasis at Baan Nagyam, Tagradan, Sanamchaiket, Chachoengsao  
Wutipong Triwatana (Phramongkutklao College of Medicine) **บทคัดย่อที่ 7**
- 1442-1554 ● The Effect of Music Therapy on Stress Reduction in the First year Nursing Student of RTANC  
Sikan Nitisuchakul (The Royal Thai Army Nursing College) **บทคัดย่อที่ 8**
- 1454-1506 ● Screening of Visual and Eye Abnormalities in Secondary School Students aged 12 – 18 years old in Matthayom Prarajchathan Nayao School, Chachoengsao Province)  
Kritthee Tiyanuchit (Phramongkutklao College of Medicine) **บทคัดย่อที่ 9**
- 1506-1518 ● Effects of Structural Information-Giving Program Applying Gange's Learnin Theory on Level of Knowledge, Consciousness, and Practices in Prevention 2009 Influenza (H1N1) among Pregnant Women  
Patcharakan Suangamiam (The Royal Thai Army Nursing College) **บทคัดย่อที่ 10**
- 1518-1530 ● Prevalence, Associated Factors and Outcomes of Teenage pregnancy aged 13 to under 20 years old in Thai rural area at Baannangam Tahkradaan District Sanamchaiyaketh, Chachoengsao  
Napasorn Thiwongkam (Phramongkutklao College of Medicine) **บทคัดย่อที่ 11**
- 1530-1542 ● The analysis of financial management of Fort Suriyaphong hospital, Phupiang, Nan  
Sukhum Songserm (Phramongkutklao College of Medicine) **บทคัดย่อที่ 12**
- 1542-1554 ● Factors affecting 6-month breastfeeding of mother visiting Thawung hospital and primary health care centers at Tawung district, Lopburi  
Veerayut Anansawat (Phramongkutklao College of Medicine) **บทคัดย่อที่ 13**
- 1554-1606 ● ปัญหาสุขภาพในชุมชนนายาว ตำบลท่ากระดาน อำเภอสนมชัยเขต จังหวัดฉะเชิงเทรา  
นักเรียนแพทย์ทหารชั้นปีที่ ๓ (วิทยาลัยแพทยศาสตร์พระมงกุฎเกล้า) **บทคัดย่อที่ 14**

ห้องประชุมธนาคารออมสิน ชั้น 6 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

- 1300-1410 **ประกวดผลงานวิจัยแพทย์ประจำบ้าน**  
**ประธาน** พ.อ.ฟูไศรขลุ จงเพื่อองปริญญา  
**ประธานร่วม** พ.อ.ธรรมนุญ ศรีสีอ้าน
- 1300-1310 ● Safety of Rapid Potassium Infusion in Pediatric Patients with moderate to severe hypokalemia using a proactive error prevention protocol  
 Chantida Subun (Department of Pediatrics) **บทคัดย่อที่ 15**
- 1310-1320 ● The Comparison of Therapeutic Effectiveness between Leuprorelin 1-month depot (3.75 mg) and 3-month (11.25m mg) in Thai Children with Central Precocious Puberty  
 Chulaluck Kuptanon (Department of Pediatrics) **บทคัดย่อที่ 16**
- 1320-1330 ● Risk factors of preterm birth at Phramongkutkiao Hospital  
 Kulnaree Klanjatturas (Department of Obstetrics and Gynecology) **บทคัดย่อที่ 17**
- 1330-1340 ● Prevalance of Atypical Squamous Cells of Undetermined Significance for Papanicolaou Smears in Phramongkutkiao Hospital  
 Kampol Prabripootalung (Department of Obstetrics and Gynecology) **บทคัดย่อที่ 18**
- 1340-1350 ● Risk factors associated with birth asphyxia in phramongkutkiao Hospital  
 Chayasak Pisawong (Department of Obstetrics and Gynecology) **บทคัดย่อที่ 19**
- 1350-1400 ● Prevalence of Abnormal Cervical Cytology from Cervical Cancer Screening by Papanicolaou smear and Relation between Cytologic and Histologic Diagnoses in Postmenopausal Women at Phramongkutkiao Hospital  
 Wanmongkhol Lornimitdee (Department of Obstetrics and Gynecology) **บทคัดย่อที่ 20**
- 1400-1410 ● การศึกษาเปรียบเทียบการสูญเสียการได้ยินระหว่างการใส่และไม่ใช้เครื่องป้องกันเสียงแบบ 5 ปี  
 ในการฝึกยิงปืนของทหารเกณฑ์  
 วัชรภรณ์ บัวโหม (กองโสต ศอ นาสิกกรรม) **บทคัดย่อที่ 21**
- 1410-1430 **Coffee break**

ห้องประชุมธนาคารออมสิน ชั้น 6 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

- 1430-1530 **ประกวดผลงานวิจัยแพทย์ประจำบ้าน**  
**ประธาน** พ.อ.หญิง จันทราภา ศรีสีสวัสดิ์  
**ประธานร่วม** พ.ท.อดิสรณ์ ลำเพาพงศ์
- 1430-1440 ● The study of emergency response from mass casualty incidence at 10<sup>th</sup> April 2010, among Thai military personnel  
 Nuttapon Boonthap (Department of Trauma Emergency Medicine) **บทคัดย่อที่ 22**
- 1440-1450 ● Appropriable Depth of Right Internal Jugular Central Venous Catheterization : Cricoid Cartilage to Sternal Angle Method Compare with 15 centimetre (cm.) depth Method  
 Sriwana Manatiwson (Department of Trauma Emergency Medicine) **บทคัดย่อที่ 23**

- 1450-1500 ● Phylogenetic analysis of dengue viruses from nucleotide sequence of each parts and whole genome  
Wat Mitthamsiri (Department of Internal Medicine) **บทคัดย่อที่ 24**
- 1500-1510 ● The effect of topical sericin on uremic pruritus in hemodialysis patients  
Nattee Sanohdontree (Department of Internal Medicine) **บทคัดย่อที่ 25**
- 1510-1520 ● การศึกษาความชุกการหักแบ่งเม็ดไตของผู้ป่วยนอกโรงพยาบาลพระมงกุฎเกล้า  
วิจักษณ์ กาญจนอุทัย (กองอายุรกรรม) **บทคัดย่อที่ 26**
- 1520-1530 ● Anatomical Variation of Renal Vessels by 64 Slices Multidetector Computed Tomography (MDCT) Scan of Abdomen at Phramongkutklao Hospital  
Ekkasit Srithammasit (Department of Radiology) **บทคัดย่อที่ 27**
- ห้องประชุมคราประยูร ชั้น 6 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา**
- 1300-1410 **ประกวดผลงานวิจัยแพทย์ประจำบ้าน**
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| <b>ประธาน</b>     | พ.อ.หญิง ขวัญใจ | ชนกจิจารุ |
| <b>ประธานร่วม</b> | พ.ท.เสริมศักดิ์ | หงษ์จินดา |
- 1300-1310 ● Discrimination of Parathyroid gland from adjacent tissue by measuring tissue intact parathyroid hormone  
Prateep Luekaew (Department of Surgery) **บทคัดย่อที่ 28**
- 1310-1320 ● การศึกษาอุบัติการณ์การบาดเจ็บระบบกล้ามเนื้อและกระดูกโครงสร้างในนักเรียนพยาบาลทหารบก ปีที่1  
จุลรัตน์ เตชะวรินทร์เลิศ (กองเวชศาสตร์ฟื้นฟู) **บทคัดย่อที่ 29**
- 1320-1330 ● ความเที่ยงตรงและความน่าเชื่อถือของแบบประเมินตนเองเพื่อวัดอาการปวดหลังส่วนล่าง  
พจิภัทร แก้วพิบูลย์ (กองเวชศาสตร์ฟื้นฟู) **บทคัดย่อที่ 30**
- 1330-1340 ● การศึกษานำร่องประสิทธิผลของยาปฏิชีวนะในการป้องกันการติดเชื้อแบคทีเรียในทางเดินปัสสาวะ  
ก่อนการตรวจประเมินการทำงานของกระเพาะปัสสาวะและหูดูดโดยวิธียูโรพลศาสตร์  
จันทิรา พงษ์พิพัฒน์ (กองเวชศาสตร์ฟื้นฟู) **บทคัดย่อที่ 31**
- 1340-1350 ● การศึกษาระดับความหนาของชั้นกล้ามเนื้อบริเวณท้ายทอย และระยะห่างจากผิวหนังถึงเส้นเลือดแดง  
เวอร์ติบรอล  
ธง พงษ์หาญยุทธ (กองเวชศาสตร์ฟื้นฟู) **บทคัดย่อที่ 32**
- 1350-1400 ● ความน่าเชื่อถือและความเที่ยงตรงของดัชนีประเมินการทำงานของเท้า ฉบับภาษาไทย (FFI-TH)  
พศวีร์ ขวัญช่วย (กองเวชศาสตร์ฟื้นฟู) **บทคัดย่อที่ 33**
- 1400-1410 ● ความสัมพันธ์ระหว่างลักษณะบุคลิกภาพ และปัญหาสุขภาพจิตจากการฝึกปรับสภาพของนักเรียนแพทย์  
วิทยาลัยแพทยศาสตร์พระมงกุฎเกล้า  
ณัฐพล โชคไมตรี (กองจิตเวชและประสาทวิทยา) **บทคัดย่อที่ 34**

1410-1430

**Coffee break****ห้องประชุมคราประยูร ชั้น 6 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา**1430-1540 **ประกวดผลงานวิจัยแพทย์ประจำบ้าน**

<b>ประธาน</b>	พ.อ.วัลลภ	เอี่ยมสมบุญ
<b>ประธานร่วม</b>	พ.ท.หญิง กฤษณมน	ฤทธิธัชชัย

- 1430-1440 ● An Assessment of Intraocular Pressure Change in A Hypobaric Chamber During Simulated Altitude of 25,000 feet  
Warangkana Chaivong (Department of Ophthalmology) **บทคัดย่อที่ 35**
- 1440-1450 ● Findings of Lacrimal drainage system irrigation and dacryocystography in the diagnosis of primary acquired nasolacrimal duct obstruction  
Suphatchaya Wareesai (Department of Ophthalmology) **บทคัดย่อที่ 36**
- 1450-1500 ● A Comparative Study of Intra-ocular Pressure Measured by Rebound Tonometry (ICare), Computerized Non-contact Air-puff Tonometry and Goldmann Applanation Tonometry in Out-patient Ophthalmology Clinic of Phramongkutklao Hospital  
Lerpratch Mangkornkanokpong (Department of Ophthalmology) **บทคัดย่อที่ 37**
- 1500-1510 ● A Comparison of Lateral Plain Film of the Knee in Extended Weight Bearing and 30° Flexion to Predict a Patellar Tendon Length  
Worapong Pongpataral (Department of Orthopaedics) **บทคัดย่อที่ 38**
- 1510-1520 ● Implication of modular radial head prosthesis and radial head morphology  
Piti Chalongviriyalert (Department of Orthopaedics) **บทคัดย่อที่ 39**
- 1520-1530 ● Angles between the Axis Flexed Fingers and the Axis of Third Metacarpal Bone : an Alternative to Quantify Finger Rotation  
Chatchanin Mayurasakorn (Department of Orthopaedics) **บทคัดย่อที่ 40**
- 1530-1540 ● The anatomical variation of the lateral femoral cutaneous nerve in relation to the anterior superior iliac spine and the iliac crest  
Nattapol Nuansalee (Department of Orthopaedics) **บทคัดย่อที่ 41**
- ห้องประชุมย่อย ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา**
- 1300-1400 **ประกวดผลงานวิจัยภาษาอังกฤษ**
- |                   |            |           |
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| <b>ประธาน</b>     | พล.ท.ณรงค์ | รอดวรรณะ  |
| <b>ประธานร่วม</b> | พ.อ.ราม    | รังสินธุ์ |
- 1300-1310 ● Creating a prototype of basic training for mitigation from improvised explosive devices in helping victims at scene in Southern Bordered Provinces of Thailand  
Suthee Intharachat (Center for Excellence in Military Medicine) **บทคัดย่อที่ 42**
- 1310-1320 ● Successful Allogeneic HSCT in HBV Carrier patient : Report of a Case  
Apichai Leelasiri (Department of Internal Medicine) **บทคัดย่อที่ 43**
- 1320-1330 ● Comparison of the efficacy on bilirubin reduction after 24 hours of phototherapy for neonatal jaundice among using 3 light sources : white and blue fluorescent lamp, blue fluorescent lamp and light-emitting diodes (LED) lamp  
Thanin Pirunnet (Department of Pediatrics) **บทคัดย่อที่ 44**
- 1330-1340 ● Periostin : Novel tissue and urinary biomarker of progressive renal injury induces a coordinated mesenchymal phenotype in tubular cells  
Banacha Satirapoj (Department of Internal Medicine) **บทคัดย่อที่ 45**
- 1340-1350 ● Accuracy of Anterolateral Drawer Test in Lateral Ankle Instability : A Cadaveric Study

	Chaisiri Chaicarnkul (Department of Orthopaedics)	<b>บทคัดย่อที่ 46</b>
1350-1400	● To compare the effect on serum bone turnover markers of Thai postmenopausal women after were treated by MK -4 45 mg/day and MK-4 30 mg/day	
	Sakchai Panichwong (Department of Obstetrics and Gynecology)	<b>บทคัดย่อที่ 47</b>
<b>ห้องพิธีการ</b>	<b>ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา</b>	
1300-1700	<b>Symposium 9 : องค์กรพยาบาลที่มีขีดสมรรถนะสูง : How to be ?</b>	
	<b>ประธาน</b> พ.อ.หญิง จารุณี	กัลต์เข็มทอง
	<b>ประธานร่วม</b> พ.ท.หญิง ดร.เพ็ญนภา	ภักดีวงศ์
	<b>วิทยากร</b> ดร.สมสมัย	สุธีรคันต์
1700	<b>Coffee break</b>	

## Symposium 5

### Shock : Update in 2010

25 พฤศจิกายน 2553 เวลา 08.30-10.00 น.

ห้องประชุมใหญ่ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

พ.อ.ภูษิต เพ็องฟู

พ.อ.วีระชัย วัฒนวีระเดช

พ.อ.โสภณ สงวนวงศ์

พ.อ.อดิศร วงษา

ภาวะวิกฤตทางการแพทย์ที่บุคลากรทุกคนต้องทราบและประสบในชีวิตการทำงานคือภาวะ shock ซึ่งเป็นสภาวะที่สำคัญมาก ผู้ป่วยจะสามารถฟื้นจากภาวะที่อาจทำให้เสียชีวิตได้หรือไม่อยู่ที่แพทย์และบุคลากรทางการแพทย์มีความสามารถที่จะวินิจฉัยและรักษาได้เร็วและทันท่วงที ฉะนั้นการทราบถึงชนิด กลไกการเกิด พยาธิสภาพ และการรักษาที่ทันสมัย จึงเป็นเรื่องที่น่าสนใจเป็นอย่างมาก **อาจารย์อดิศร วงษา** ประมาจารย์ผู้เชี่ยวชาญการดูแลผู้ป่วยภาวะวิกฤต กองอายุรกรรม โรงพยาบาลพระมงกุฎเกล้าจะนำคณาจารย์ที่มีประสบการณ์ด้านนี้โดยมี **อาจารย์ภูษิต เพ็องฟู** จากกองศัลยกรรมบรรยายเกี่ยวกับ hypovolemic shock **อาจารย์วีระชัย วัฒนวีระเดช** กุมารแพทย์ด้านโรคติดเชื้อ บรรยาย update in septic shock และ **อาจารย์โสภณ สงวนวงศ์** อายุรแพทย์โรคหัวใจและหลอดเลือดบรรยาย เกี่ยวกับ cardiogenic shock ผู้ที่สนใจและต้องการความทันสมัยในความรู้เรื่องนี้โดยเฉพาะแพทย์ พยาบาล นักเรียนแพทย์ทหารรวมทั้งนักเรียนพยาบาลไม่ควรพลาด



## Learner Remediation

25 พฤศจิกายน 2553 เวลา 08.30-12.00 น.

ห้องประชุมย่อย ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

*Professor Miriam Bar-on, M.D.*



การผลิตแพทย์หรือพยาบาลให้เป็นบุคลากรที่มีประสิทธิภาพไม่ใช่เรื่องง่าย อาจารย์แพทย์และอาจารย์พยาบาลจำเป็นต้องทราบวิธีการที่ถูกต้อง การเป็นแบบอย่างที่ดี ทักษะการสอน การประเมินผลทั้งผู้สอนและผู้เรียน การเข้าใจในบทบาทการเรียนการสอน อันจะนำไปถึงการปรับเปลี่ยนทัศนคติและการพัฒนาอาจารย์ซึ่งจะช่วยให้สถาบันนั้นๆ สัมฤทธิ์ผลในเป้าหมายที่จะผลิตบุคคลที่ดีพร้อมทั้งความรู้และทัศนคติรวมทั้งจริยธรรมสู่สังคมต่อไป **Professor Miriam Bar-on, M.D. Associate Dean, Graduate Medical Education, University of Nevada School of Medicine** อาจารย์ผู้รับผิดชอบ programs การฝึกอบรมแพทย์ประจำบ้านของสถาบันข้างต้น จะจัด workshop ซึ่งรับผู้เข้าร่วมอบรมเพียง 50 ท่าน โดย workshop นี้จัดให้เฉพาะกลุ่มอาจารย์แพทย์หรืออาจารย์พยาบาลที่มีความสนใจที่จะพัฒนาการเรียนการสอน การเข้าใจลูกศิษย์ การประเมินทั้งตนเองและนักเรียนแพทย์ นักเรียนพยาบาล เป็น workshop ที่มีประโยชน์สำหรับคณาจารย์พระมงกุฎเกล้าที่คุ้มค่าต่อการเข้าร่วมอบรม

## Symposium 6

### AMI Fast Tract กับ บทบาทของพยาบาล

25 พฤศจิกายน 2553 เวลา 08.00-09.00 น.

ห้องพิธีการ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

- 1 พ.ท.หญิง จารุวรรณ ปี่ทอง
- 2 พ.ต.หญิง วิไลวรรณ เพิ่มศิลป์
- 3 ร.อ.หญิง สุชาดา วงศ์สะอาด
- 4 พ.ต.หญิง วรธกร รักอิสสระ ผู้ดำเนินการอภิปราย

1	2
3	4



โรงพยาบาลพระมงกุฎเกล้า พัฒนา Excellent cardiac Center และก่อตั้งศูนย์หัวใจสิรินธร เพื่อให้บริการรักษาพยาบาลแก่ผู้ป่วยโรคหัวใจ ให้มีความปลอดภัย และสามารถมีคุณภาพชีวิตที่ดีขึ้น โครงการ **Fast Tract MI** เป็นโครงการหนึ่งที่ได้พัฒนากระบวนการรักษาพยาบาล ผู้ป่วยที่มีภาวะโรคหัวใจเฉียบพลัน ซึ่งต้องได้รับความร่วมมือที่สอดคล้องกันของทีมการรักษาพยาบาล

โครงการ Fast Tract MI นี้ พยาบาลจะมีบทบาทสำคัญอย่างยิ่งในทีมสุขภาพที่จะทำให้การรักษาพยาบาลเป็นไปตามกระบวนการที่วางไว้ ตั้งแต่การช่วยเหลือผู้ป่วยที่ห้องฉุกเฉิน การส่งต่อและการดูแลผู้ป่วยในห้องสวนหัวใจและการดูแลต่อเนื่องที่หน่วย Coronary Care Unit การบรรยายนี้ประกอบด้วย Protocol การดูแลผู้ป่วยที่มีภาวะ MI เฉียบพลัน บทบาทพยาบาลที่สำคัญที่ห้องฉุกเฉิน ห้องสวนหัวใจ และ ห้องผู้ป่วยอาการหนักโรคหัวใจ การบรรยายนี้ยังกล่าวถึงปัจจัยแห่งความสำเร็จของการดูแลผู้ป่วยตามโครงการ MI Fast Tract โรงพยาบาลพระมงกุฎเกล้า

## Symposium 7

### กฎหมายกับบุคลากรทางการแพทย์

25 พฤศจิกายน 2553 เวลา 09.00-12.00 น.

ห้องพิธีการ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา



อาจารย์ วันชัย สอนศิริ

ปัจจุบันสังคมได้มีการพัฒนาเปลี่ยนแปลงอย่างมากจากเทคโนโลยีต่างๆ ประชาชนรับรู้สิทธิของตนเอง การรักษาพยาบาลผู้ป่วยแม้จะมีพัฒนาการก้าวหน้าเป็นอย่างไรก็ดี ด้วยความมุ่งมั่นให้ประชาชนมีสุขภาพที่ดี และมีคุณภาพชีวิตที่ดีขณะที่มีการเจ็บป่วย นอกจากนั้น บุคลากรทางการแพทย์ โรงพยาบาล และสถานบริการสุขภาพ มีโอกาสเสี่ยงต่อการถูกฟ้องร้อง เพิ่มมากขึ้น การบรรยายครั้งนี้ อาจารย์ วันชัย สอนศิริ เลขาธิการสภาทนายความ จะนำเสนอ ข้อกฎหมายที่บุคลากรทางการแพทย์ควรทราบ เพื่อให้สามารถป้องกันการถูกฟ้องร้อง การปฏิบัติ เมื่อถูกฟ้องร้อง และ การเตรียมหลักฐานที่จำเป็นเพื่อป้องกันการถูกฟ้องร้อง

## Symposium 8

### Modern Trends in Cardiovascular Emergency

25 พฤศจิกายน 2553 เวลา 10.30-12.00 น.

ห้องประชุมใหญ่ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา

พ.อ. เกรียงชัย ประสงค์สุกาญจน์

พ.อ. เฉลิมเกียรติ ตันตระกูล

พ.ท. ปรีชา เอื้อโรจน์อังกูร

พล.ต. ชุมพล เปี่ยมสมบุรณ์ ผู้ดำเนินการอภิปราย

ภาวะวิกฤตทางการแพทย์ด้านโรคหัวใจและหลอดเลือดมีความสำคัญ การดูแลรักษาอย่างเร่งด่วนจะช่วยให้ผู้ป่วยมีโอกาสรอดชีวิตสูง **อาจารย์ชุมพล เปี่ยมสมบุรณ์** จะนำคณะแพทย์ของศูนย์**หัวใจลิรินธร** บรรยายเกี่ยวกับภาวะเร่งด่วนด้านหัวใจและหลอดเลือดมี **อาจารย์เกรียงชัย ประสงค์สุกาญจน์** ศัลยแพทย์โรคทรวงอกบรรยายภาวะเร่งด่วนด้านนี้ทางศัลยกรรม **อาจารย์เฉลิมเกียรติ ตันตระกูล** กุมารแพทย์โรคหัวใจเด็ก บรรยายเกี่ยวกับเด็กที่มาด้วยภาวะเร่งด่วนของระบบนี้ ซึ่งอาจแตกต่างจากในผู้ใหญ่ โดยมี **อาจารย์ปรีชา เอื้อโรจน์อังกูร** หัวหน้าหน่วยหัวใจและหลอดเลือด กองอายุรกรรมเป็นผู้บรรยายภาวะเร่งด่วนในผู้ใหญ่

## Symposium 9

### การบรรยาย เรื่อง องค์การพยาบาลที่มีขีดสมรรถนะสูง

25 พฤศจิกายน 2553 เวลา 13.00-17.00 น.

ห้องพิธีการ ชั้น 10 อาคารเฉลิมพระเกียรติ ๖ รอบพระชนมพรรษา



ดร.สมสมัย สุธีรคานต์

องค์การพยาบาลโรงพยาบาลพระมงกุฎเกล้าเป็นองค์หนึ่งที่มีความมุ่งมั่นสู่การเป็นองค์การที่มีสมรรถนะสูง ซึ่งองค์การต้องมีการพัฒนากระบวนการดำเนินงานทั้งด้านการบริหารจัดการ และการปฏิบัติการพยาบาลให้สามารถตอบสนองความต้องการจำเป็นด้านสุขภาพ เพื่อให้ประชาชนชาวไทยมีสุขภาพดี

ปัจจัยที่สำคัญอย่างยิ่งคือ การได้รับการสนับสนุน และ ความร่วมมือจากทุกหน่วยงาน การวางแผนดำเนินงานที่ประสิทธิภาพ การบรรยายครั้งนี้ **ดร.สมสมัย สุธีรคานต์** ที่ปรึกษาหัวหน้าฝ่ายการพยาบาล **รพ.สงขลานครินทร์** จะบรรยายประสบการณ์ในการดำเนินงานเพื่อพัฒนาองค์การพยาบาลให้เป็นองค์การที่มีสมรรถนะสูงและปัจจัยที่ทำให้ประสบความสำเร็จอย่างยั่งยืนจนได้รับรางวัล PMQA ของประเทศไทย

## บทคัดย่อที่ 1

### **Prevalence and Risk Factors of Symptomatic and Asymptomatic Hand Osteoarthritis from Radiographic Findings in 45-Year-Old and Over Thai Population at Baan Na-yao, Moo 15 and Baan Na-ngam, Moo 19, Tagradan, Sanamchaiket, Chacheongsao Province, Thailand**

**Ruamhathai Mahavinitchaimontri<sup>1</sup>, Buraphat Pengnoraphat<sup>1</sup>, Kasamapol Chavanachit<sup>1</sup>, Chatpetch Pemsombat<sup>1</sup>, Charnunnut Tiyapsane<sup>1</sup>, Chayooth Thanapornsanguth<sup>1</sup>, Charlie Arsiravajvanit<sup>1</sup>, Chutiporn Komin<sup>1</sup>, Patamaporn Maenpitak<sup>1</sup>, Preda Kampa<sup>1</sup>, Panhatai Yaisiri<sup>1</sup>, Pojanan Jomkoh<sup>1</sup>, Pornchanok Lausuksuwan<sup>1</sup>, Mastika Phosa<sup>1</sup>, Rapee Pongsamart<sup>1</sup>, Ratanakeit Pongratanakul<sup>1</sup>, Varutama Bensubha<sup>1</sup>, Supawat Watanakulwiwat<sup>1</sup>, Suriya Leunam<sup>2</sup>, Arkaphat Kosiyatrakul<sup>2</sup>, Panithan Padubpongsa<sup>3</sup>, Danai Heebthamai<sup>3</sup>, Ram Rangsin<sup>3</sup>, Suthee Panichkul<sup>3</sup>, Wirote Areekul<sup>3</sup>**

<sup>1</sup>Fourth year medical student, Phramongkutkloa College of Medicine; <sup>2</sup>Department of Orthopaedics, Phramongkutkloa Hospital;

<sup>3</sup>Department of Military and Community Medicine, Phramongkutkloa College of Medicine

**Introduction :** Osteoarthritis is the most common joint disorder that can cause morbidity especially among elderly. This disease mostly found in weight-bearing and high activity joint, hand joint. Because the population earn their living by agriculture, consequently, they excessively use of hand for their main occupation, digging potatoes. In addition, most of the residents are elderly which associated with degenerative joint. Besides, no such research was done in Thailand before. This leads to the question whether the population in this community have high prevalence of hand osteoarthritis and can reflect the problems in this community and lead to health promotion.

**Objective :** To study prevalence and risk factors of radiographic and symptomatic hand osteoarthritis in 45-years-old and over Thai Population at Baan Na-Yao Moo 15 and Na-ngam Moo 19 Tagradan, Sanamchaiket Chacheongsao Province, Thailand. In addition, to study association between hand osteoarthritis and grip strength and association between hand osteoarthritis and modified Thai version AUSCAN.

**Study design :** Cross-sectional study.

**Methods :** We recruited population aged 45-year-old and over from Na-ngam and Na-yao. Participants answered questionnaire on demographic data, exclusion criteria, risk factor, joint symptoms and modified Thai version AUSCAN and measured grip strength by hand grip dynamometer. Then, they provided posteroanterior radiograph of hand. The diagnosis of osteoarthritis condition was defined when Kellgren and Lawrance grading scale  $\geq 2$ .

**Results :** There were 401 participants. Average age was 51 - 69 years old. Majority was female (62.34%). Prevalence of radiographic and symptomatic hand osteoarthritis in the community was 86% and 18.7%. Risk factors of both radiographic and symptomatic hand osteoarthritis were old age and history of hand trauma.

The population who were over 60 years of age have higher risk to develop radiographic hand osteoarthritis (Adjusted OR 3.088, 95% CI 1.635-5.832) and have higher risk to develop symptomatic hand osteoarthritis (Adjusted OR 2.549, 95% CI 1.171-5.55). The population who had history of hand trauma had higher risk of developing radiographic hand osteoarthritis (Adjusted OR 4.731, 95% CI 1.106-20.248) and symptomatic hand osteoarthritis (Adjusted OR 2.902, 95% CI 1.135-7.422). Risk factors of symptomatic hand osteoarthritis were old age, dyslipidemia and history of hand trauma. Population with dyslipidemia tended to develop the disease more than those who without (Adjusted OR 2.736, 95% CI 1.205-6.21). The research found the association between quality of life evaluated by Modified Thai version AUSCAN and symptomatic hand osteoarthritis in all three domains (pain, stiffness and hand function). There is no association between grip strength and both radiographic and symptomatic hand osteoarthritis.

**Conclusion and Discussion :** Prevalence of radiographic and symptomatic hand osteoarthritis in the community is high. The reasons are average age of participants (average age is 51-69) and repetitively excessive use of hand due to their occupation. Age over 60 is the risk of developing hand osteoarthritis because osteoarthritis is degenerative disease of joint. So, Population with old age tend to have this disease. History of hand trauma is risk factors because it can cause secondary hand osteoarthritis. The other risk factor is dyslipidemia. Dyslipidemia can cause vascular pathology and this can lead to compromised nutrient and gas exchange into articular cartilage. Result in degradative changes in cartilage and apoptosis of osteocytes. Modified Thai version AUSCAN associated with symptomatic hand osteoarthritis.

**Key Words :** ● *Hand osteoarthritis* ● *Prevalence* ● *Risk factor* ● *Modified Thai version AUSCAN*  
● *Radiography, Symptom*

## บทคัดย่อที่ 2

### The Relationship between Selected Factors and Adversity Quotient (AQ) of Nursing Student of the Royal Thai Army Nursing College

Bhumipatana Somjai<sup>1</sup>, Boondharika Croomclong<sup>1</sup>, Tatiya Khunsathien<sup>1</sup>, Tassaya Srichan<sup>1</sup>, Naruemonrat Northong<sup>1</sup>, Papassara Pootapan<sup>1</sup>, Prachaya Judaboot<sup>1</sup>, Pattaraporn Junmuengthai<sup>1</sup>, Wacharee Prachongpan<sup>1</sup> and Pattamaporn Anuchon<sup>2</sup>

<sup>1</sup>Senior Nursing student; <sup>2</sup>Nursing Instructor of the Royal Thai Army Nursing College

**Background :** The only Nursing college of Royal Thai Army have mission to train the army nursing students to be Royal Thai Army Nursing College excellent nurses for the Military Hospitals. The Army nursing students in RTANC were prepared nursing skills and developed incompetency to making decision leadership and responsibility for nursing professional. In the other hand the RTANC have Military regulations follow regulations for army nursing students to conduct. All above conditions put them to stress that showed in the previous study, found that the stress level of Army nursing students were moderate. The researcher attend to study about level of AQ there fore, and relationship between selected factors and AQ to be encourage the Army Nursing students more AQ.

**Objective :** To explore the level of self-regulation, optimism and social support and adversity quotient and to study relationship between the selected factors and adversity quotient among nursing student of the Royal Thai Army Nursing College.

**Study Design :** Descriptive Research.

**Material and Method :** Two hundred Army nursing students were selected by two state random sampling. The questionnaires which divided by 4 part; optimism, social support, self-regulation, and adversity quotient was used in this study. The reliability of instruments were 0.739, 0.871, 0.649, and 0.807 respectively. The Pearson's moment product correlation coefficient was used to analyze collecting data.

**Results :** The most of nursing students were in moderate level of adversity quotient and self-regulation, optimism and social support were in slightly high level. There were significant relationship between selected factors and adversity quotient ( $r=0.405, .333$  and  $.186$  respectively,  $p<.01$ ).

**Conclusion :** The result of this study will guide all stakeholders to focus on the selected factors in order to apply curriculum and help Army nursing students to develop their adversity quotient by supporting programs such as learning activity, additional curriculum and counseling. All above could encourage them to increase their adversity quotient.

**Key Words :** ● Adversity Quotient ● Self-Regulation ● Optimism ● Social Support ● Nursing student



### บทคัดย่อที่ 3

## Prevalence and Risk Factors of Peripheral Arterial Disease in Moo 15 and 19, Baan Na yao and Baan Na ngam, Takradarn, Sanamchaiket, Chacheongsao Province

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 Phumiphat Wongchaiwatcharakul<sup>1</sup>, Chitavorn Jirajun<sup>1</sup>, Nattapark Pratakpiriya<sup>1</sup>,  
 Kollawat Sirapalanon<sup>1</sup>, Saharath Punyapholsakul<sup>1</sup>, Thanachit Angkapunyadech<sup>1</sup>,  
 Koson Kojorntanakit<sup>1</sup>, Piyada Wiriyeenawat<sup>1</sup>, Manasawee Wantanatavatod<sup>1</sup>,  
 Suparnee Poorisawatpong<sup>1</sup>, Tanchanok Supajarupan<sup>1</sup>, Kittawit Rungjang<sup>1</sup>, Pinyapa Tantivitayakorn<sup>1</sup>,  
 Sutira Siripoonyothai<sup>1</sup>, Aupathum Supasin<sup>2</sup>, Apassanee Bunyaworakul<sup>3</sup>, Thoranich chanthararat<sup>4</sup>,  
 Hasaya prasithdamrong<sup>4</sup>, Wanchat Numprasertchai<sup>5</sup>, Supuk Saengow<sup>6</sup>, Pannipa Tengtrakulcharoen<sup>6</sup>,  
 Suthee Panichkul<sup>7</sup>, Ram Rangsin<sup>7</sup>, Danai Heebthamai<sup>7</sup>, Panithan Pradubpongsa<sup>7</sup> and Wirote Areekul<sup>7</sup>

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**Introduction :** The study about Prevalence and Risk Factors of Peripheral Arterial Disease in Thailand is limited in urban and hospital base so it can not represent overall Thai people because Thailand is agricultural country and most people live in rural. Their lifestyles are different from urban group. This concerns us to find out about Prevalence and Risk Factors of Peripheral Arterial Disease in urban including signs, symptom and risk factors for the benefit of public health.

**Objective :** To study The Prevalence and Risk Factors of Peripheral Arterial Disease in people who are above 50 years old in Moo 15 and 19, Baan Na yao and Baan Na ngam, Takradarn, Sanamchaiket, Chacheongsao province and to find out the association between signs and symptom including risk factors in Peripheral Arterial Disease and Ankle-Brachial Index in rural.

**Study design :** Cross-sectional descriptive study.

**Methods :** Collect data from people who are above 50 years old in Moo 15 and 19, Baan Na yao and Baan Na ngam, Takradarn, Sanamchaiket, Chacheongsao province, during 20<sup>th</sup> - 23<sup>rd</sup> February 2010. By general physical examination such as measurement of body weight, height, waist circumference, blood pressure, specific physical examination by specialist, serum testing for Diabetes mellitus, lipid profile, questionnaire and measurement ankle-brachial index.

**Result :** The number of participants was 367. Participants were 141 males and 221 females with a mean age of 61±9 years. The prevalence of PAD in participants according to interesting factors; there were 17 participants with ABI below 0.9, resulting in an overall prevalence of PAD at 4.45%; the age-standardized prevalence was 5.37% for men and 3.86% for women. Multiple logistic regression analysis using PAD as the dependent variable

showed that the risk factors that had a statistically significant association with PAD (P value < 0.05) were presence of diabetes mellitus, smoking and high BMI

**Conclusion :** The prevalence of PAD in our study is 4.45% in population aged older than 50. Current smoking, ex-smoking, diabetes mellitus and high BMI value are significantly associated with higher prevalence of PAD. None of the symptoms and signs can replace standard ABI measurement for diagnosis.

**Key Words :** ● *Peripheral arterial disease* ● *Diabetes mellitus* ● *Smoking* ● *BMI* ● *ABI* ● *Thailand*

## บทคัดย่อที่ 4

### The Relationship Between Attitude Towards Professional Nursing and Moral Behavior of Nursing Students at The Royal Thai Army Nursing College

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**Introduction :** The professional nursing, that is a profession, treats to any human being. So that nursing care is implemented by mean of science and morality to get the best quality. The professional nursing has the main morality which conducts to the standard behavior and controls the nurses for working with a good quality. There are bringing to confidence of the customers and social. The good attitude in professional nursing that will make the nurses to work in the better job and good serviceable behavior.

**The objectives of this study :** (1) To study the level of attitude towards professional nursing and moral behavior of nursing students. (2) To study the relationship between attitude towards professional nursing and moral behavior of nursing students at the Royal Thai Army Nursing College.

**Types of Research :** Descriptive Research.

**Research Methodology :** The population was 196 third year and fourth year nursing students at the Royal Thai Army Nursing College. The sample was 166 nursing students, selected by stratified random sampling technique. The research instruments were questionnaire and consisted of (1) attitude towards professional nursing (2) moral behavior. The content validity was verified by three experts. Cronbach's alpha coefficients were .70 and .90, respectively. The data were analyzed by Pearson Product Moment Correlation Coefficient.

**The result of this study :** The major findings were as followed (1) nursing students rated attitude towards the professional nursing and moral behavioral at high and highest level ( $\bar{X} = 3.78$  and  $\bar{X} = 4.59$ , respectively). (2) There was significant correlation between the attitude towards professional nursing and moral behavior of nursing students ( $r = .33$ ,  $p < .01$ ).

**Discussion :** A good of attitude towards professional nursing have to do with a positive moral behavior of nursing students. So that the nursing school should be promote the activity in the classroom and outside the classroom to improve positive attitude towards professional nursing. Furthermore, another factors still have to promote moral behavior such as background, environment etc.

**Key Words :** ● *Attitude towards professional nursing* ● *Moral behavior*  
● *Nursing students at the Royal Thai Army Nursing College*

## บทคัดย่อที่ 5

### **The Study of Magnitude and Social Interaction of Attention Deficit Hyperactivity Disorder in Primary School Children, Targradarn Subdistrict, Sanarmchaiket Distirict, Chacheongsao Province, Thailand**

**Siwagarn Arsaipanit<sup>1</sup>, Pichai Sutarattanakul<sup>1</sup>, Chaniga Poompuang<sup>1</sup>, Premwadee Tawornpradit<sup>1</sup>,  
Minth Panpichet<sup>1</sup>, Nattapong Iamwatcharin<sup>1</sup>, Tim Phetthong<sup>1</sup>, Komgrit Rattanajak<sup>1</sup>,  
Chayanit Pichaibenjasook<sup>1</sup>, Worapong Nasomsong<sup>1</sup>, Pacharawat Jirasuthat<sup>1</sup>, Amaraporn Wisedsook<sup>1</sup>,  
Wannasiri Limsooknirun<sup>1</sup>, Woottinee Sutichaiworapong<sup>1</sup>, Suwimon Karasompope<sup>1</sup>, Alisara Kaehom<sup>1</sup>,  
Pattasook krittikakul<sup>1</sup>, Apirak Huengsr<sup>1</sup>, Chakriya Teeranet<sup>2</sup>, Jittrapun Wetchaporn<sup>2</sup>,  
Nawaporn Hirunwiwatkul<sup>3</sup>, Mathirut Mungthin<sup>4</sup>, Ram Rungsin<sup>5</sup>, Panitan Pradubpongsa<sup>5</sup>,  
Suthee Panichkul<sup>5</sup> and Wirote Areekul<sup>5</sup>**

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**Background :** Attention Deficit Hyperactivity Disorder (ADHD) is a common and the highest diagnosed pediatric psychiatric disorder. Symptoms are usually found in early childhood since school age. Furthermore, sometimes it is difficult to find the symptoms to be distinguished from the same normal aged children. The children do not possibly receive suitable treatments. Worse than that the prognosis continues until their adulthood. In addition, it sometimes causes conflicts between the children and their social world due to the misinterpretation in the behaviors of the children, which considerably affects the children themselves and their social communities. The early diagnosis would help improve their prognosis, promoting the understanding of risk factors and making the ADHD children caretaker to realize suitable upbringings to decrease the coming flow-on effects.

**Objective :** The purpose of the study was to estimate the prevalence of attention-deficit/hyperactivity disorder (ADHD) and its effects in Ban-Na-Yao Village, Targradarn Subdistrict, Sanarmchaiket District, Chacheongsao Province, Thailand.

**Study design :** Cross-sectional study and Qualitative study (Focusing on group discussion and In-depth interview).

**Method :** Data from class teachers, parents/guardians and students of Ban-Na-Yao Border Patrol Police Primary School, Targradarn Subdistrict, Sanarmchaiket District, Chacheongsao, Thailand on February 20-24, 2010. All of them agreed to sign an agreement to participate the research. Volunteer class teachers and parents/guardians took the SNAP-IV parents/teacher score scale screening test, and then researchers screened risk group children. Positive screening test of parents/guardians or teachers or both were examined and confirmed by specialist physicians who diagnosed them. After that researchers randomly selected some parents/guardians and class

teachers of the children for a qualitative study, focusing on group discussion in class teachers and did In-depth interview with parents/guardians.

**Results :** The prevalence of positive SNAP-IV is in 106 cases (17.58%), and 61 cases out of 106 cases were examined by specialist physicians. Pediatricians found the prevalence of 21 cases (34.4%) from ADHD children of those 61 cases who were examined, or 3.48% of all population. The social responses depended on ADHD children themselves and the knowledge and the understanding of ADHD from the experience and via mass media. The social responses showed in 2 ways: community to community; community to ADHD children leading to social concomitances, social acceptances, and social problems.

**Conclusions :** The study result is that the prevalence of ADHD is 3.48%, and the social responses, resulted from the children themselves, the social world, and the knowledge and the understanding of ADHD, cause social concomitances, social acceptances, and social problems.

**Key Words :** ● *Attention-deficit/hyperactivity disorder* ● *Prevalence* ● *Risk factor*  
● *The effect on the children and community* ● *SNAP-IV parents/guardians/teacher score scale*

## บทคัดย่อที่ 6

### **The Developmental Assets of First-year Students of the 2009 Academic Year Who Study in Nursing Colleges Under The Ministry of Defence and The Royal Thai Police**

**Naruepat Buayen, Kunyapa Ngampore, Jaratsee Tunyarit, Treechada Junmanee, Luckkana Seekuntha, Waraporn Bhumtong, Waraporn Tontakunrat, Wilasinee Cheewakun, Sayumporn Bhongbhurriluck, Arpiradee Seemoung, and Su-ari lamtrakul\***

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**Background :** At present in the social of globalization era that effect to everyone especially adolescences. Not only the external environment but also internal environment are the important factors for youth developmental assets. Developmental Assets represent the relationships, opportunities, and personal qualities that young people need to avoid risks and to thrive. For nursing professional academy that should be concern about the developmental assets of their students for preparing the curriculums and methodology to support and develop their students assets

**Research purpose :** To study Developmental Assets of first-year students of the 2009 academic year who study in nursing colleges under The Ministry of Defence and The Royal Thai Police.

**Research design :** Survey research

**Research place :** The Royal Thai Army Nursing College, The Royal Thai Air-Force Nursing College, The Royal Thai Navy Nursing College and The Royal Thai Police Nursing College.

**Population :** The population for this study comprised first-year nursing students of the 2009 academic year who study in nursing colleges under The Ministry of Defence and The Royal Thai Police i.e. The Royal Thai Army Nursing College 100, The Royal Thai Air-Force Nursing College 90, The Royal Thai Navy Nursing College 60 and The Royal Thai Police Nursing College 76. The sample was selected by convenience sampling by choosing.

**Research Methodology and Instrument :** The instruments used for this research is Developmental Assets Questionnaires for Thai Youth. For this study, the researcher submitted the questionnaires to trial use with 32 nursing students and calculated Cronbach's alpha coefficient to be 0.915. After that the researcher submitted the questionnaires to sample use with 182 32 nursing students and calculated data was analyzed by use of descriptive statistics i.e. distribution of frequency, percentage, mean, range, standard deviation

**Research finding :** The Developmental Assets Score by average is 76.18 represent by good developmental assets. When consideration in detail the researcher found that the lowest score is the item relate communication skill with their teacher about mass communication.

**Conclusion :** The Developmental Assets Score of first-year students in 2009 academic year who study in nursing colleges under The Ministry of Defence and The Royal Thai Police are higher level but they have some assets that should be improve such as community power, joining activity, communication skill with their teachers, so the researcher provide this research finding are the base data for guideline.

**Key Words :** ● *Developmental Assets* ● *First-year nursing students*

● *Nursing students who study in nursing colleges under The Ministry of Defence and The Royal Thai Police*

## บทคัดย่อที่ 7

### Effectiveness of Community-based Participatory Action Research for Prevention and Control Opisthorchiasis at Baan Nagyam, Tagradan, Sanamchaiket, Chachoengsao

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Gritcharat Watthanasathitapha<sup>1</sup>, Wongsiya Viarasilpa<sup>1</sup>, Pasathorn Potivongsajarn<sup>1</sup>,  
Teerawat Kunathinan<sup>1</sup>, Nuttadon Wongprakob<sup>1</sup>, Juthamas Suwankanoknark<sup>1</sup>,  
Kornkla Panprapakorn<sup>1</sup>, Kittisak Werapolchai<sup>1</sup>, Premmatat Kalsaulvapakkul<sup>1</sup>, Kittiphat Thonglek<sup>1</sup>,  
Kongchai Wisedongtham<sup>1</sup>, Nat Wimolsiri<sup>1</sup>, Yanisa Kanjanavithayakul<sup>1</sup>, Panee Jansasithorn<sup>1</sup>,  
Saovanee Leelayoova<sup>2</sup>, Paanjit Taamasri<sup>2</sup>, Picha Suwanhithathorn<sup>2</sup>, Tawee Naaglor<sup>2</sup>,  
Wirote Areekul<sup>3</sup>, Suthee Panichkul<sup>3</sup>, Ram Rangsin<sup>3</sup>, Panitan Praduppongsa<sup>3</sup> and Mathirut Mungthin<sup>2</sup>

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**Background :** Opisthorchiasis remains a major public health problem in Thailand. Although a decade long of the public health prevention and control program for opisthorchiasis was well-established, the results of its interventions have not been fully satisfied. These people still have a habit of consuming uncooked freshwater fishes. So as to obtain more effective intervention model, a focus on the habit of uncooked fish consumption is required to design the more effective public health intervention based on Participatory Action Research (PAR).

**Objectives :** To study the effectiveness of community-based participatory action research for prevention and control opisthorchiasis at Baan Nangam, Tagradan, Sanamchaiket, Chachoengsao.

**Study Designs :** Experimental Field Trial และ Qualitative Study.

**Materials and Methods :** The incidence rate and risk factors of opisthorchiasis was determined in February 2010 at Baan Nagyam, Tagradan, Sanamchaiket, Chachoengsao after PAR intervention compared to conventional intervention. The PAR intervention was mainly the health promotion delivered by children of the community during the 6-month harvest season. Standardized questionnaires and stool examination using direct simple smear, modified Kato thick technique and sedimentation concentration technique were utilized to determine the incidence and risk factors of opisthorchiasis. Qualitative study by focus group discussion was used to determine the idea and experiences of PAR-based prevention and control opisthorchiasis.

**Result :** The incidence of opisthorchiasis in the PAR intervention and conventional intervention was equal at 6.82/100 person-years. The risk factors of acquiring opisthorchiasis were those who older than 60 years, consumed Koi pla in the past 6 months and not always used toilets. From qualitative study, after the health promotion using children in the community as the messenger, most villagers knew and understood the problem of opisthorchiasis and its complications.

**Conclusion :** Although the incidence of opisthorchiasis of PAR and conventional intervention group was not different. The incidence of opisthorchiasis in this community was much lower than the near-by community. The information from this study will be used for the next loop of PAR to get more suitable intervention for this community.

**Key Words :** ● Opisthorchiasis ● Participatory action research ● Incidence ● Risk factors ● Koi pla

## บทคัดย่อที่ 8

### The Effect of Music Therapy on Stress Reduction in the First Year Nursing Student of RTANC

**Sikan Nitisuchakul, Karuna Klinsakul, Junpen Sittichaiyakul, Jipatra Monyaton, Pradthana Mekaew, Piyapat Puengpong, Wisuttida Jumnonnart, Siripron Jalearnwong, Sakaw Tinnuch, Suwimon Srisomboon and Arisara Yourong\***

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**Background :** The 1<sup>st</sup> year nursing student of The Royal Thai Army Nursing College (RTANC) may confront with several situations which differ from their familiar such as new environment, new friend, rule of school and school tradition. These situations can lead to stress on students. From a literature review, music therapy was used for relieve stress in various population. Because listening music stimuli the pituitary gland to release endorphine : neurotransmitters, which help decrease the stress and anxiety. So the investigators examined the effect of music therapy on stress responses in 1<sup>st</sup> year nursing student of RTANC.

**Objective :** The purpose of this study were to : a) assess the stress level of 1<sup>st</sup> year nursing student of RTANC; b) examine the effect of music therapy on reducing stress in 1<sup>st</sup> year nursing student of RTANC; and c) assess the coping strategies with stress.

**Research Design :** Pre- Experimental design

**Material and Methods :** A purposive sampling including 100 nursing students; was obtained from the First year of RTANC. The subjects were completed the questionnaires, as follow: the demographic questionnaires the perceived stress questionnaires, and the coping strategies with stress. The design was used to compare the mean change of stress level in subjects before and after the intervention.

**Results :** Before music therapy intervention, the 1<sup>st</sup> year nursing students were perceived normal stress level (M=.69,SD=.29). After music therapy the 1<sup>st</sup> year nursing students were perceived normal stress level (M=.65,SD=.26). The test showed that after intervention, the stress level was significantly decreased more than before intervention (p<.05).

**Conclusion :** The study showed that music therapy can help in decreasing stress of 1<sup>st</sup> year nursing student of RTANC. There fore, the administrators, teachers, of RTANC should concern and plan to reduce stress in nursing student and promotes appropriate coping strategies with stress.

**Key Words :** ● Stress ● Stress level ● Music therapy  
● 1<sup>st</sup> year nursing student of The Royal Thai Army Nursing College



## บทคัดย่อที่ 9

### Screening of Visual and Eye Abnormalities in Secondary School Students aged 12 - 18 years old in Matthayom Prarajchathan Nayao School, Chachoengsao Province

**Kritthee Tiyanuchit<sup>1</sup>, Daraneenuch Prasarnpan<sup>1</sup>, Pulthip Charoenphol<sup>1</sup>, Kanchanok Pourik<sup>1</sup>, Kittisak Wongchansom<sup>1</sup>, Jin Yingchankul<sup>1</sup>, Jittapa Sangsuvarnto<sup>1</sup>, Jonathan Alan Tangsrivimol<sup>1</sup>, Chonnavee Jatchavala<sup>1</sup>, Chayapon Trekajonsak<sup>1</sup>, Natthaporn Laoharajwongsa<sup>1</sup>, Tippaporn Sripol<sup>1</sup>, Nopporn Limwatanapan<sup>1</sup>, Piyoros Lertsanguansinchai<sup>1</sup>, Piraya Ooncheun<sup>1</sup>, Ruechuphong Phuphakdee<sup>1</sup>, Weerut Supirat<sup>1</sup>, Sirinkan Sukdee<sup>1</sup>, Neungruethai Poonpima<sup>1</sup>, Yutthapong Imsuwan<sup>2</sup>, Narisara Klanarongran<sup>3</sup>, Danai Heebthamai<sup>4</sup>, Suthee Panichkul<sup>4</sup>, Ram Rangsin<sup>4</sup>, Panitan Praduppongsa<sup>4</sup> and Wirote Areekul<sup>4</sup>**

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**Background :** Vision is a significant factor for the learning process of human especially in a child. Visual impairment can have a significant impact on a child's life in terms of education and development, which will affect the choice of occupation and, therefore, socio-economic status in adult life. Therefore the earlier the vision screening and proper management for children who have abnormal visual status would be more benefit for them.

**Objective :** To assess the prevalence and associated factors of refractive error, strabismus, amblyopia, color blindness and stereopsis disorder in student grade 7-12 aged 12-18 in Matthayom Prarajchathan Nayao school, Chachoengsao province, Thailand.

**Study Design :** Cross-sectional analytic study.

**Material and Methods :** The general personal and visual behavior data were collected using questionnaire which was validated by experts. The examination included visual acuity measurements, external eye inspection, pupil examination, corneal light reflex, cover-uncover and alternated cover test, binocularity (stereoacuity) test, color blindness test and autorefractometry under cycloplegia. The children with abnormal visual status were then examined by an ophthalmologist.

**Results :** A total of 452 children (response rate = 93.00%) aged between 12-19 years were examined. The prevalence of visual impairment is 1.54% (Refractive error 0.88%, amblyopia 0.44%). The prevalence of refractive errors is 36.06%. Astigmatism was the main cause in 28.32% of children with refractive error. Other abnormal visual status consists of pinguecula in 25.88%, colorblindness in 1.33% and strabismus in 5.96%. Refractive error risk was associated with keratometry, reading in driving car, near-sight reading and daily outdoor activity < 3 hours. A higher prevalence of pinguecula was associated with age > 15 years old.

**Conclusion :** Refractive error was the main cause of visual impairment in participated children. The most common type is astigmatism which was associated with keratometry. A higher prevalence of refractive errors was associated with reading in driving car, near-sight reading and, daily outdoor activity < 3 hours. Moreover, risk of pinguecula was associated with age > 15 years old.

**Key Words :** ● *Pediatric eye and vision screening* ● *Visual behaviors* ● *Visual impairment*  
● *Refractive errors* ● *Prevalence* ● *Associated factors* ● *Secondary school student*  
● *Chachoengsao province*

## บทคัดย่อที่ 10

### **Effects of Structural Information-Giving Program Applying Gange' s Learning Theory on Level of Knowledge, Consciousness, and Practices in Preventing 2009 Influenza (H1N1) among Pregnant Women**

**Patcharakan Suangamiam, Ketsara Hannarong, Jittasopee Chaiyanant, Jitlada Reeam, Juthaporn Prapakorn, Nutchanok Chalakabuth, Benjamas Phanprasart, Waraporn Chaiwanitchaya, Suthasinee Soonthornchai\* and Wassana Naiyapatana\*\***

*\*Army nursing students class 44; \*\*Nursing lecturer the Royal Thai Army Nursing College*

**Introduction :** Ministry of Public Health has given an importance and ranked pregnant women into the precedent high risk group for being possibly infected with 2009 influenza (H1N1). The infection could cause severe complications to the fetus and lead to an abortion. Therefore, pregnant women should be enhanced their knowledge, consciousness, and practices to prevent 2009 influenza (H1N1). The structural information-giving program applying Gange' s learning theory was supposed to be an effective teaching method.

**Objectives :** To study the effects of structural information-giving program on level of knowledge, consciousness, and practices in preventing 2009 influenza (H1N1) and the need of receiving vaccines among pregnant women.

**Research design :** Quasi-experimental research, two-group pretest-posttest design.

**Material and Method :** Pregnant women undergoing antenatal care at Phramongkutklo Hospital were purposively selected based on the inclusion criteria and were assigned into an experimental and a control groups based on the series of the study in order to avoid contaminating the intervention. After obtaining informed consent, 39 pregnant women in the experimental group and 34 in the control group were asked to fill the questionnaires for pre-evaluating their level of knowledge, consciousness, and practices in preventing 2009 influenza (H1N1) that were validated, tried them out, and adjusted until their reliabilities were .68, .82 and .95 respectively. In addition, they were asked about their need of receiving the vaccine. The experimental group was participated in the structural information-giving program, whereas the control one was received the regular services and mother education from the clinic. One week later, both groups were asked to answer the same questionnaire again by mails and/or by phones to evaluate their knowledge, consciousness, and practices. There were 31 complete questionnaires in each group. The data were analyzed by using descriptive statistics, independent t-test and paired t-test.

**Results :** Before the intervention, the level of knowledge in preventing 2009 influenza in both groups were not significantly different, but the level of consciousness, and practices were statistically different at the significant level of .001. After the intervention, level of knowledge in preventing 2009 influenza in the experimental group was better than before and those of the control group at the significant level of .05 and .001 respectively. The level of consciousness and practices in preventing 2009 influenza was not different. For the need of receiving

vaccine after the intervention, it was increasing in the experimental group from 48.4 to 61.3 percentages, whereas in the control group, it remained the same as 38.7 percentages. The reasons for most pregnant women who refused vaccination were that they were not sure about its efficiency and afraid that it could affect oneself and the baby.

**Discussion :** The structural information-giving program by applying Gange' s learning theory was an effective method to increase the level of knowledge in preventing 2009 influenza and enhance the need of receiving vaccination among pregnant woman. For their consciousness and practices in preventing 2009 influenza, it needed an appropriate study to select the similar samples into the experimental and control group in terms of all measured variables before the intervention. For the vaccination, its evolution should be followed periodically and a vaccination guideline should be designed for pregnant women to make a decision to receive the vaccine further.

**Key Words :** ● *2009 influenza (H1N1)* ● *Structural information-giving program* ● *Gange's learning theory*  
● *Pregnant women*

## บทคัดย่อที่ 11

### Prevalence, Associated Factors and Outcomes of Teenage pregnancy aged 13 to under 20 years old in Thai rural area at Baan Na-ngam Tahkradaan District Sanamchaiket, Chachoengsao

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**Introduction :** At currently, the global teenage pregnancy rate is increasing. Especially in Thailand, this leads to a series of problems, health problems of mother and child, illegal abortion, abandoned child, educational problem, economic problem, and family relationship problem. Moreover, the previous studies of teenage pregnancy had been conducted only in urban area. Therefore, there was inadequate data in suburban area to relate the problem and to come up with the right solution.

**Objective :** Prevalence and outcomes of teenage pregnancy as well as prevalence and associated factors of sexual intercourse among teenagers aged 13 to under 20 years old in Thai rural area at Baan Na-ngam Tahkradaan District Sanamchaiket, Chachoengsao.

**Study design :** Descriptive and analytic cross sectional study, Focus group discussion and in-depth interview  
Setting: Baan Na-ngam Tahkradaan District Sanamchaiket, Chachoengsao.

**Participants :** Population aged 13 between 20 years old both male and female.

**Methods :** Using a questionnaire to study the prevalence and consequences of teenage pregnancy and associated factors of sexual intercourse then select interesting factors to discuss on the focus group discussions and in-depth interviews about effects of teenage pregnancy, attitude of sexual intercourse and birth control behaviors in Baan Na-ngam Tahkradaan District Sanamchaiket, Chachoengsao.

**Results :** Total of 455 teenagers participated in the study, 184 male (40.44%), and 271 female (59.56%). The study indicated that total of 95 students had sex, which was 22.61%. Of this amount, 61.11% were male and 38.9% were female. The study of protection during sexual activities found that 76 teenagers used some form of protections (84.44%), and condom is the most used. The prevalence study of pregnancy showed that there was 3.69%, 40% of which decided to keep the child, the other 60% decided to accept abortion because of educational

reasons, family reasons, and social reasons. The cause of having sex, after categorized by gender, indicated that the highest risk factor for male was having seen other people having sex, which had a risk factor of 6.22 times than the ones who had not seen it (95%CI :2.51-15.38). For female, the highest risk factor was the number of times that their family members discussed problems, which was 4.10 times than those who had a frequent discussion. The qualitative study pointed out that the teenagers thought sexual intercourse among teenagers was a normal practice and can be proud of while pregnancy conversely was stigmatized and troublesome. The way to solve it mostly was abortion due to afraid of villagers' perception. Otherwise, if pregnant teenagers decide to keep the baby, they have to move out of the village. There are interesting factors differed from urban setting. First, due to the structure of housing in the rural area where they have no proper private room, many teenagers may witness the sexual behavior and curious to follow the pattern. Second, many teenage guys can earn income in the early age and have a feeling of being adult-wanna-be. Third, the situation allowed the teenagers to hang out at night such as temple fair or fishing. And lastly, the pornographic clips promoted the copy-cat behaviors. The common used contraceptive method was condom which was available. But the problem was inaccessibility because of embarrassment to let people know that they were going to have sex. The other method which mostly used was external ejaculation which thought as a one hundred percent protectable. And another problem was low knowledge about how to use contraceptive pills led to unfavorable methods.

**Conclusion :** The study indicates that teenage pregnancy and sexual intercourse problems in rural area were tremendous. Still the sexual intercourse was thought among teenagers as normal practice and can be proud of while pregnancy conversely was stigmatized and affecting various aspects. Accessibility to contraceptive devices was another serious issue raised. Compared to urban setting, the factors found in rural area were different. Hence proper campaigns and potent strategies are needed to promote contraception and alter the sexual behavior.

**Key Words :** ● *Teenage pregnancy* ● *Sexual intercourse* ● *Rural area* ● *Stigma*

## บทคัดย่อที่ 12

### The Analysis of Financial Management of Fort Suriyaphong Hospital, Phupiang, Nan

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**Background :** To give the standard medical care to patient, hospital must have sufficiently latency such as quality of service, personnel development. When the hospital was in the red, it's scarcely possible to improve the hospital quality by budget-using. In the present, many of governed hospital were encountered the loss of monetary problem. But there is some of governed hospital which managed the hospital to have the monetary liquidity. Fort Suriyaphong hospital, Nan province, had become one of those hospitals. Because of that, the researchers picked up the point of financial management of Fort Suriyaphong hospital to study and developed the choice of management to almost-graduated-medical-cadet-student who, anyway, will participate in hospital management.

**Objective :** To study and analysis to financial management system of Fort Suriyaphong hospital which had prolonged the monetary liquidity, Management of thirty-bed sized hospital, factor which affected hospital income and to develop the choice in hospital financial management planning to medical student who will become the part of hospital management system.

**Study design :** Descriptive study.

**Material and Method :** The researchers gathered the general data of Fort Suriyaphong hospital such as location of hospital, quantity of nan people, distance of Fort Suriyaphong hospital to another hospital nearby and picked the hospital financial data especially the part of hospital income on the fiscal year 2552 which was another income that didn't from governed income. Then researchers analyzed these data to find out the detailed of the income and compared these data with amount of the patient in this fiscal year and hospital outcome such as investment. After that these data would compare with hospital financial data in other fiscal year (2550, 2551, and 2552) to find out what amount of patient that physician should treat to maintained the hospital monetary liquidity with no loss and no gain.

**Results :** Fort Suriyaphong hospital was 30-bed sized fort hospital and located in Phupiang, Nan province. Nan hsd 475,614 people meanwhile Phupiang district had 5,800 people. The distance from Nan hospital to this hospital was 1.2 kilometers. Patients who had rights of comptroller issue were the principal patient. Principal income of this hospital was from government and hospital income. The governed income was entirely spent for government personnel which wasn't analyzed. Hospital income, which hospital was able to manage it, in fiscal

year 2552 was 94,461,219.63 bahts. 72 percent (67,661,591.5 bahts) of these came from medications and medical equipment income. About 28 percent (26,297,415 bahts) was come from medical services fee. In the section of medication and medical equipment income, about 92 percent (62,288,886 bahts) came from patient who had rights of comptroller issue. Estimate income per patient was 1,299 bahts per patients. About hospital outcome of the fiscal year 2552, it was 81,492,895.91 bahts. It was spend for medications and medical equipments buying which was about 66 percent (53,679,205.84 bahts) and 19 percent (15,324,732 bahts) was from medical equipment borrowing fee. Five percent (3,917,589.26 bahts) was spent for other hospital outcomes. Investment was about 4 percent (3,326,645.6 bahts). About 3 percent (1,968,265 bahts) was spent for on-duty-fee. Researchers considered the income and outcome which depended on amount of patient. We calculated the amount of patient that must examined per year as shown below.

$$\text{This amount of patient per year} = \frac{\text{Hospital outcome} - \text{Medicalltion and medical equipments buying}}{\text{Profit from medical services per patient}}$$

**Discussion :** This research was established in hospital which almost of all patients were government personnel that had the rights of comptroller issue. Because of that, hospital income was come from increased in amount of patient and profit from medication and medical equipments fee. This equation was unable to use in hospital which several of patient had rights of universal coverage. This calculation was depending on hospital policy and planning of development for estimate outcome which wasn't depending on the amount of patient. This calculation was only the estimation of patient. Furthermore, how to get the exact amount of patients just like this equation, it had another factor such as quality of treatment, promotion, good service. Finally, the direct purpose of hospital establishment was, inevitably, supporting the people who had sickness by standard treatment, low capitals and widely distribution.

**Key Words :** ● *Financial management* ● *Finance* ● *Fort Suriyaphong Hospital*



## บทคัดย่อที่ 13

### Factors Affecting 6-month Breastfeeding of Mother Visiting Thawung Hospital and Primary Health Care Centers at Tawung District, Lopburi

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**Background :** Breast milk is the best food for infants. They are proved as source of essential nutrition that strengthens the immune system in child. Feeding infants with breast milk is considered to be more convenient and clean with additional economic advantages. Because breast milk is a unique nutritional source that cannot adequately be replaced by any other food, including infant formula, thus WHO (World Health Organization) advocate 6 month exclusive breastfeeding for the new born.

In Thailand, “Baby-Friendly Hospital” campaign was also launched to promote breastfeeding; however the statistic results remain underestimated. Determine factors affecting the success of breastfeeding in Thailand become significance.

**Objective :** To study factors affecting at least 6 months breastfeeding.

**Study design :** Qualitative study (In depth interview).

**Material and Method :** Qualitative data using in-depth interview is conducted among 28 mothers of children aged 6 months to 1 year living in Thawung district, Lopburi. This is to determine the factors affecting at least 6 month breastfeeding of new born.

**Results :** From the qualitative study, the majority has recognized the benefits of breast milk but they are lack of proper knowledge and information toward exclusive breastfeeding; attitude of majority toward breastfeeding is positive. The factors affecting mothers to stop breastfeeding during 6 months are their lifestyle where mothers are employed which cause them less time to nurture their children due to poor socio-economic status. The study also found that this population is lack of knowledge toward proper milk storage. Mothers who attend prenatal care at public health facilities gain more information and support from government sector than mothers who attend prenatal care at private clinics/hospitals. Public health centers also monitor the progress and provide useful information during postnatal which results in continuous exclusive breastfeeding. On the other hand, the study shows that family factor is another importance influence; family with family members and relatives especially the husband with positive attitude and perception toward breast milk affect the duration of exclusive breastfeeding.

**Conclusion :** The problems causing early weaning are insufficient milk supply and incorrect child feeding techniques. The problems lead to the termination of breastfeeding before suitable period. Lack of proper information and knowledge from grandmothers who share child raising experiences toward exclusive breastfeeding also result in improper breastfeeding methods. Moreover, the changes in lifestyle which mothers are employed and have limit maternity leave also affect duration of breastfeeding. The advertising toward infant milk formula products also leads to misunderstanding and perception toward exclusive breastfeeding in mothers.

**Key Words :** ● *Breast feeding* ● *6 month breastfeeding* ● *Factors affected breastfeeding*

## บทคัดย่อที่ 14

### An Investigation of Health Problems in Moo 11 And Moo 18 Villages, Tha-Kradan Subdistrict, Sanarm-Chaikate, Chachengsao

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**Introduction :** Health problems in urban and rural social are different. Thus, this research aims to explore health problems in Nayao community in all walks of life. Health problems which are subject to be evaluated by researchers are Hypertension, Nutritional Condition in children, Intestinal Parasite Infection, Menopause, Dependency, Violence in adolescents, and Addictive Drug in a rural community.

**Objectives :** To find health problems in Nayao community, Tha-Kradan, Sanarm-Chaikate, Chachengsao in every age ranges such as nutritional conditions in 6 to 12-year-old children, prevalence of violence in 7 to 18-year-old adolescents, prevalence of addictive drug usage such as alcohol, cigarette in 11 to 24-year-old adolescents, prevalence of hypertension in over 30-year-old, prevalence of menopause in over 35-year-old, prevalence and incidence of intestinal parasite infection, prevalence of dependency in 3 age ranges, 0 to 14, 15 to 59, and over 60-year-old populations

**Study Methods :** Descriptive study (cross-sectional survey) was conducted to investigate Nayao populations followed by questionnaires to find out the solutions and sustainable development.

**Study Results :** Hypertension in over 30-year-old adults, studying in sample group (380 of populations), prevalent are 27.9%. Nutritional conditions in 6 to 12-year-old children, studying in sample group (138 of populations), show in range of Thai's standard weigh-high relative ratio 67.4%, Thai's standard weight 66.3%, and Thai's standard height 73.9%. Intestinal parasite infection, studying in sample group (167 of populations), show the infected of *Blastocystis hominis* 18.5%, *Opisthochis viverrini* 5.4%, and *Strongyloides stercoralis* 3.7%. Menopause in over 35-year-old female, studying in sample group (182 of populations), show female are still menstrual period 33%, menopause 67%. In the menopause, the study shows osteoarthritis 35.4% and backache 70.7%. Dependency, studying in sample group (923 of populations), show populations in 15 to 59-year-old range are 59.1%, over 60-year-old range are 10.7%, the impairment are 36 persons (3.9%) and total dependency ratio are 69.27. Violence in 7 to 18-year-old adolescents, studying in sample group (131 of populations), show corporal or vocal harmed (object) 61.10% and harm (subject) 58.50%. Addictive drug usage in 11 to 24-year-old adolescents, studying in sample group (91 of populations - 37 male and 54 female), show the populations still consume alcohol, as the result 24.32% in male and 11.11% in female, consume cigarette 30.56% in male and 1.85% in female.

**Conclusion :** The health problems of populations found in Tha-Kradan, Sanarm-Chaikate, Chachengsao are hypertension, liver fluke (*Opisthochis viverrini*) infection, osteoarthritis and backache in menopause, and violence in adolescents. Many health problems in this community may result from personal behavior, their routine and long time behavior. It could be suggested that participations from localities are necessary for improving their health status and behavior.

**Key Words :** ● Hypertension ● Nutritional conditions ● Intestinal parasite infection ● Menopause  
● Dependency ● Addictive drug

## บทคัดย่อที่ 15

### การศึกษาความปลอดภัยของการบริหารยาโปแตสเซียมแบบเข้มข้นสูงทางหลอดเลือดดำในผู้ป่วยเด็กตามแนวทางการแก้ไขภาวะโปแตสเซียมในเลือดต่ำของโรงพยาบาลพระมงกุฎเกล้า

จันทร์ธิดา สุนุญ สุพิชญา จິงจิตรักษ์ สนิตรา ศิริธางกุล และ ดุสิต สถาวร

กองกุมารเวชกรรม โรงพยาบาลพระมงกุฎเกล้า

**บทนำ :** การให้โปแตสเซียมแบบเข้มข้นสูงทางหลอดเลือดดำ ( $> 8 \text{ mEq/dL}$ ) เป็นวิธีหนึ่งในการรักษาภาวะโปแตสเซียมในเลือดต่ำ แต่ก็มีความเสี่ยงในเกิดอันตรายจากภาวะโปแตสเซียมในเลือดสูงได้ จึงจำเป็นต้องติดตามอาการผู้ป่วยอย่างใกล้ชิด

**วัตถุประสงค์ :** เพื่อศึกษาความปลอดภัยของการบริหารยาโปแตสเซียมแบบเข้มข้นสูงทางหลอดเลือดดำในผู้ป่วยเด็กตามแนวทางการแก้ไขภาวะโปแตสเซียมในเลือดต่ำของโรงพยาบาลพระมงกุฎเกล้า

**วิธีการศึกษา :** ทำการศึกษาในผู้ป่วยเด็กที่เข้ารับการรักษาในหอผู้ป่วยเด็กวิกฤต โรงพยาบาลพระมงกุฎเกล้า ระหว่าง 1 กันยายน 2552 - 31 สิงหาคม 2553 ที่มีโปแตสเซียมในเลือดต่ำ ซึ่งได้รับการรักษาด้วยการให้โปแตสเซียมแบบเข้มข้นสูงทางหลอดเลือดดำ ( $0.3 \text{ mEq/kg/hr}$ ) พร้อมติดตามสัญญาณชีพ คลื่นไฟฟ้าหัวใจ และตรวจค่าโปแตสเซียมในเลือดซ้ำ 1 ชั่วโมงหลังบริหารยา

**สถิติ :** ใช้สถิติเชิงพรรณนา และสถิติเชิงอนุมานวิเคราะห์ความสัมพันธ์โดยใช้ค่าร้อยละ ค่าเฉลี่ย และค่าเบี่ยงเบนมาตรฐาน

**ผลการศึกษา :** มีผู้ป่วยเด็กที่ได้รับการรักษาตามแนวทางปฏิบัติ 24 ราย มีจำนวนการให้โปแตสเซียมแบบเข้มข้นสูงทางหลอดเลือดดำ 38 ครั้ง ผู้ป่วย 13 ราย (ร้อยละ 54) มีภาวะโปแตสเซียมในเลือดต่ำปานกลางถึงรุนแรง และ 3 ราย (ร้อยละ 12.5) มีอาการจากภาวะโปแตสเซียมในเลือดต่ำ ไม่พบการเกิดเหตุการณ์ไม่พึงประสงค์หลังการบริหารยา 34 ครั้ง (ร้อยละ 89) พบภาวะโปแตสเซียมในเลือดสูงกว่า  $4.5 \text{ mEq/L}$  หลังการรักษา 3 ครั้ง (ร้อยละ 7.8) และปวดแสบบริเวณที่ให้ยา 1 ครั้ง (ร้อยละ 2.6) โดยเฉลี่ย ค่าโปแตสเซียมในเลือดหลังให้ยาเพิ่มขึ้น  $0.62 \pm 0.55 \text{ mEq/L}$

**สรุป :** การบริหารยาโปแตสเซียมแบบเข้มข้นสูงทางหลอดเลือดดำในผู้ป่วยเด็กตามแนวทางของโรงพยาบาลพระมงกุฎเกล้า มีความปลอดภัย การศึกษาค่าโปแตสเซียมในเลือดที่เพิ่มขึ้นหลังบริหารยาอาจจำเป็นต้องใช้จำนวนกลุ่มตัวอย่างที่มากขึ้น

## บทคัดย่อที่ 16

### **The Comparison of Therapeutic Effectiveness between Leuporelin 1-month depot (3.75 mg) and 3-month depot (11.25 mg) in Thai Children with Central Precocious Puberty**

**Chulaluck Kuptanon, Nawaporn Numbenjapon, Kwanjai Thanakitcharu and Phairuch Chaiyakul**

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**Introduction :** Leuporelin (LP) 1-month depot, 3.75 mg, has been used as a standard treatment in inhibiting pubertal advancement in children with central precocious puberty (CPP). However, frequent injections monthly make it inconvenient for the patients and their families.

**Objective :** To determine whether LP 3-month depot, 11.25 mg, treatment is able to suppress gonadotropins secretion and increase predicted adult height (PAH) as compare to LP 1-month depot in patients with CPP.

**Study design :** Analytic cohort study.

**Methods :** Twenty five girls with CPP were enrolled in the study. Fourteen patients received LP 1-month depot, while the others received LP 3-month depot. LHRH stimulation test at 6 month after treatment was performed to evaluate the adequate suppression of gonadotropins. Skeletal age was obtained initially and 1 year after treatment to calculate PAH.

**Results :** The progression of puberty ceased or regressed in all treated patients. The adequate suppression of gonadotropin secretion was found in 80% and 91% of patients receiving 1-month and 3-month depot, respectively. The increases in PAH are not statistically different between the groups ( $P > 0.05$ ).

**Conclusion :** LP 3-month depot is a satisfactory alternative treatment in Thai children with CPP.

## บทคัดย่อที่ 17

### Risk Factors of Preterm Birth at Phramongkutklao Hospital

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**Objective :** To identify the risk factors of preterm birth (between 28 weeks and before complete 37 weeks of gestation) in Phramongkutklao Hospital.

**Materials and Methods :** This retrospective case-control study recruited 306 women who delivery between January 2008 and December 2009 were divided into 2 groups: 151 had preterm delivery (study group) and 155 had term delivery (control group). Pregnancies complication by multiple gestation, maternal underlying diseases (hypertension, diabetes mellitus, autoimmune disease and other disease with poor control) and major fetal anomalies (chromosome or structure) were excluded. The possible risk factors for preterm birth among women with prior preterm delivery, prior cesarean section, bacterial vaginosis, premature rupture of membrane and pre-eclampsia were assessed.

**Results :** Risk factors of preterm birth were bacterial vaginosis (OR= 13.188 [1.439- 120.853]; P= 0.022), prior preterm delivery (OR= 9.942 [1.128 -87.591]; P= 0.039), prior cesarean section (OR= 5.584 [1.06- 29.419]; P= 0.043), and premature rupture of membrane (OR= 2.874 [1.406- 5.876]; P= 0.004). The women with pre-eclampsia (OR= 6.604 [1.452- 30.03]) was found to associated with preterm birth but no statistically significant.

**Conclusion :** The risk factors of preterm birth are increased in bacterial vaginosis, prior preterm delivery, prior cesarean section, and premature rupture of membrane in Phramongkutklao Hospital.

**Key Words :** ● Risk factor ● Preterm birth

## บทคัดย่อที่ 18

### Prevalance of Atypical Squamous Cells of Undetermined Significance for Papanicolaou Smears in Pramongkutklao Hospital

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**Background :** Due to prevalence of ASCUS has not yet been study at Pramongkutklao Hospital and optimal method for managing a patient diagnosed with atypical squamous cells of undetermined Significance (ASCUS) has not yet been established.

**Aim :** The objective of this study was to define the prevalence of ASCUS based on the Bethesda System and to assess the significance of ASCUS in predicting the presence of underlying squamous intraepithelial lesion(SIL) of the uterine cervix.

**Methods :** This study was conducted at Pramongkutklao Hospital, Bangkok, Thailand. A review of ASC-US cytology from the 1<sup>st</sup> January 2007 to the 31<sup>st</sup> December 2009 and cytologic and histologic follow-up of each patient was evaluated. The outcome was recorded as the most significant (highest grade) subsequent cervical smear or biopsy.

**Results :** Overall, 168 of 37,591 (0.44 %) cervical cytologic specimens were reported as ASC-US. The study group consisted 154 of patients for whom pathologic follow-up was available. Follow-up by colposcopy with cervical biopsies and/or endocervical curettage had no pathologic abnormalities 143 of patients (92.85%). Low-grade squamous intraepithelial lesions/cervical intraepithelial neoplasia (CIN) 1 was found in 4 (2.59%) and high-grade squamous intraepithelial lesions/CIN 2 or 3 occurred in 7 (4.54%). No case of invasive carcinoma were found.

**Conclusion :** In conclusion the prevalence of ASC-US in this study was slightly low relative to other studies and results suggest that colposcopy follow-up of women with low grade Pap smear abnormalities will identify a large number whose smears will regress to normal. A small but significant proportion of women showed subsequent CIN 2 or 3.

**Key Words :** ● *Atypical squamous cells of undetermined significance (ASC-US)* ● *Cervical cancer* ● *CIN*

## บทคัดย่อที่ 19

### **Risk Factors Associated with Birth Asphyxia in Phramongkutkiao Hospital**

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**Objective :** To determine risk factor for birth asphyxia.

**Setting :** Department of Obstetrics and Gynecology, Phramongkutkiao Hospital.

**Study Design :** Retrospective study.

**Subject :** Cases were 150 women with delivery newborns 1-minute APGAR score of 7 or less. Control were 300 women with delivery newborns with 1-minute APGAR score more than 7. Between 1 January to 31 December 2009

**Methods :** Antepartum factors, intrapartum factors and fetal factors were analysed with univariate analysis and multilogistic regression analysis.

**Results :** Factors significantly associated with birth asphyxia included breech presentation (OR 3.78, 95% CI 1.55-9.23), moderate to thick meconium (OR 4.39, 95% CI 2.12-9.08), sedation with morphine or pethidine (OR 1.84, 95% CI 1.14-2.97), birth weight less than 2,500 grams (OR 2.40, 95% CI 1.42-4.04), preterm delivery (OR 2.08, 95% CI 1.24-3.51) and fetal distress (OR 2.28, 95% CI 0.98-5.30)

**Conclusion :** Risk factor of birth asphyxia included breech presentation, moderate to thick meconium, sedation with morphine or pethidine, birth weight less than 2,500 grams, preterm delivery and fetal distress.

**Key Words :** ● *Birth asphyxia* ● *Risk factor*



## บทคัดย่อที่ 20

### Prevalence of Abnormal Cervical Cytology from Cervical Cancer Screening by Papanicolaou smear and Relation between Cytologic and Histologic Diagnosis in Postmenopausal Women at Phramongkutklao Hospital

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**Objective :** To determine the prevalence of abnormal cytology and relation between cytologic and histologic diagnosis in postmenopausal women who have checked cervical cancer screening by Papanicolaou smear in Phramongkutklao Hospital.

**Study design :** Retrospective descriptive study.

**Setting :** Department of Obstetrics and Gynecology and department of Pathology, Phramongkutklao Hospital.

**Materials and methods :** Medical records of 11,473 postmenopausal women or women aged older than or equal to 55 years old who were checked for cervical Papanicolaou smear from 1<sup>st</sup> May 2005 to 30<sup>th</sup> April 2010 were retrospective reviewed. The demographic data and abnormal cytology reports base on the Bethesda system (2001) were recorded. The women who have abnormal Papanicolaou smear were investigated for histology confirmation. The data was analyzed and compared between cytology and histology results.

**Main outcome measures :** Prevalence of abnormal cervical cytology from cervical cancer screening by Papanicolaou smear and relation between cytologic and histologic diagnoses.

**Results :** Prevalence of abnormal cervical cytology in postmenopausal women was 0.72% (83 cases) with age group less than or equal to 60 years old was 31.33%, and greater than 60 years old was 68.67%. There were classified into ASC-US, ASC-H, LSIL, HSIL, squamous cell carcinoma, AGC NOS, AGC flavor neoplastic and adenocarcinoma 18.07%, 7.23%, 7.23%, 20.48%, 32.53%, 3.61%, 1.21%, and 9.64% respectively. In cases of preinvasive cervical cancer and cervical cancer, the results of abnormal cervical cytology when compared with histologic finding in ASC-US, ASC-H, HSIL, squamous cell carcinoma and adenocarcinoma were 14.3%, 80%, 75%, 100% and 50% respectively.

**Conclusion :** Although the prevalence of abnormal cervical cytology in postmenopausal women was low relative to other age groups, the detected rate of high grade preinvasive cervical cancer and cervical cancer in this study was high. Therefore, this should be recommended for annually cervical cancer screening by Papanicolaou smear in postmenopausal women.

**Key Words :** ● *Papanicolaou smear* ● *Cervical cytology* ● *Cervical histology* ● *Postmenopausal women*

## บทคัดย่อที่ 21

การศึกษาเปรียบเทียบการสูญเสียการได้ยินระหว่างการใช้และไม่ใช้เครื่องป้องกันเสียงแบบ 5 ปีก ในการฝึกยิงปืนของทหารเกณฑ์

### Comparitive Study of Hearing Loss Between Using and Non-using 5 Wings Ear Protection of Thai Military Training Conscripts

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<sup>1</sup>แพทย์ประจำบ้านชั้นปีที่ 3; <sup>2</sup>กองโสต คอ นาสิกกรรม โรงพยาบาลพระมงกุฎเกล้า

**บทคัดย่อ :** ในปัจจุบันการฝึกยิงปืนของทหารเกณฑ์ ยังไม่มีการใช้เครื่องป้องกันเสียง อีกทั้งยังต้องอยู่ในสนามยิงปืนที่มีเสียงดัง ทำให้ทหารเกณฑ์มีโอกาสสูญเสียการได้ยินทางระบบประสาทได้ ทางโรงพยาบาลพระมงกุฎเกล้าได้พัฒนาเครื่องป้องกันเสียงแบบ 5 ปีกเพื่อป้องกันการสูญเสียการได้ยินในกลุ่มทหารเกณฑ์เหล่านี้

**วัตถุประสงค์ของการวิจัย :** เพื่อศึกษาเปรียบเทียบการสูญเสียการได้ยินทั้งก่อนและหลังการฝึกยิงปืนในกลุ่มทหารเกณฑ์ที่ใช้และไม่ใช้เครื่องป้องกันเสียงชนิด 5 ปีก โดยเครื่องมือ Audiogram และ DPOAEs และศึกษาเปรียบเทียบความถี่ของการได้ยินที่ลดลงของทหารเกณฑ์ที่ใช้และไม่ใช้เครื่องป้องกันเสียง

**วิธีการดำเนินงานวิจัย :** ทหารเกณฑ์จากกองร้อยพลเสนารักษ์จำนวน 60 คน ได้รับการชักประวัติและตรวจร่างกายทางหู คอ จมูก (ENT) แล้วคัดเลือกผู้ผ่านเกณฑ์ตาม Inclusion criteria คือเป็นทหารเกณฑ์อายุตั้งแต่ 18 ปีขึ้นไป และไม่มีโรคทางหู เช่นหูน้ำหนวกหรือมีความพิการทางหูแต่กำเนิดหรือเคยรับการผ่าตัดหูมาก่อน โดยตรวจร่างกายทางหู คอ จมูกอยู่ในเกณฑ์ปกติ จากนั้นทำการแบ่งเป็นสองกลุ่มคือกลุ่มที่ใช้เครื่องป้องกันเสียงชนิด 5 ปีกและกลุ่มที่ไม่ใช้เครื่องป้องกันเสียงโดยวิธีการศึกษาแบบ Prospective cross-sectional study and Randomized control trial กลุ่มละ 30 คน จากนั้นทำการตรวจการได้ยิน (Audiogram) และ ตรวจ DPOAEs (Distortion product otoacoustic emissions) ก่อนการฝึกยิงปืน หลังยิงปืนทันที(ภายใน 24 ชั่วโมง) และในวันที่ 3 และวันที่ 7 หลังฝึกยิงปืนตามลำดับทั้ง 2 กลุ่ม หลังจากนั้นจึงนำผลที่ได้มาเปรียบเทียบการสูญเสียการได้ยินระหว่างกลุ่มที่ใส่เครื่องป้องกันเสียงชนิด 5 ปีกและกลุ่มที่ไม่ใส่เครื่องป้องกันเสียง

**ผลการศึกษา :** พบว่าหลังจากยิงปืนทันที ระดับการได้ยินทั้งจากการตรวจ Audiogram และ DPOAEs มีการสูญเสียการได้ยินในกลุ่มที่ไม่ใส่เครื่องป้องกันเสียงมากกว่ากลุ่มที่ใส่เครื่องป้องกันเสียงอย่างมีนัยสำคัญทางสถิติ หลังจากติดตามผลหลังจากยิงปืน 3 วัน และ 7 วัน พบว่าในกลุ่มที่ไม่ใส่เครื่องป้องกันเสียงยังคงมีการสูญเสียระดับการได้ยินมากกว่ากลุ่มที่ใส่เครื่องป้องกันเสียง แต่ระดับการได้ยินจะค่อยๆดีขึ้นตามลำดับ ความถี่ที่ลดลงต่ำสุดคือ ความถี่ 6000 Hz. การตรวจด้วย DPOAEs สามารถตรวจพบความผิดปกติระดับเล็กน้อยได้ในขณะที่ผลตรวจด้วย Audiogram พบอยู่ในเกณฑ์ปกติช่วงหลังยิงปืน 7 วัน นอกจากนี้ ยังพบทหารเกณฑ์ที่ไม่ใส่เครื่องป้องกันเสียงยังมีการสูญเสียการได้ยินหลังยิงปืนวันที่ 7 อยู่ระดับเล็กน้อยจำนวน 1 คนคิดเป็น ร้อยละ 3.3 และระดับปานกลางถึงรุนแรง จำนวน 2 คนคิดเป็น ร้อยละ 6.7

**สรุปผลการวิจัย :** เครื่องป้องกันเสียงแบบ 5 ปีก สามารถลดการสูญเสียการได้ยินแบบเฉียบพลันหลังการฝึกยิงปืนในกลุ่มทหารเกณฑ์ได้ ระดับความถี่ที่สูญเสียมากที่สุด คือที่ระดับ 6,000 Hz. ในกลุ่มที่ไม่ใส่เครื่องป้องกันเสียงพบว่ามีถึงร้อยละ 10 ที่มีการสูญเสียการได้ยินหลังยิงปืนวันที่ 7 การใช้ DPOAEs ได้ผลไวว่าการตรวจ Audiogram ในการพบสูญเสียการได้ยินระดับเล็กน้อยในช่วงหลังยิงปืน 7 วัน

## บทคัดย่อที่ 22

### The Study of Emergency Response from Mass Casualty Incidence at 10<sup>th</sup> April 2010, Among Thai Military Personnel

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**Background :** The conflict in Bangkok, Thailand cause mass events with varying numbers of casualties, especially the event occurred at 10<sup>th</sup> April 2010. The pattern of injury in Thai military personnel had been changed from two years ago. The increasing number of blast injuries from explosive devices in downtown caused more complex injury pattern.

**Objective :** To study the In-hospital management (emergency response), The factor influenced Injury Severity Score (ISS), characteristics and distribution of injuries of casualty arrival at the Phramongkutklao Hospital.

**Methodology :** A retrospective analysis study from mass casualty incidence (MCI) at 10<sup>th</sup> April 2010 managed by the Phramongkutklao's rescue teams. Thai military personnel injured from MCI with defined as major data category were included in this study. The statistic analysis by t-test and ANOVA test were tested the factor influenced Injury Severity Score (ISS) and Trauma Injury Severity Score (TRISS).

**Results :** After exclusion was done, we enrolled a total of 153 victims in the study with 276 body region injuries. All were male. mean age was  $27.4 \pm 9$  years. Blast injury was the most common injury and affected 90.2% of the victims. Firearm injury was 6.54%. All firearm injuries were high-velocity gunshot wounds. The most common region of injuries was extremities 48.5 % (blast 90.2%, firearm 6.5% and personal assault 3.3%). Victims which Injury Severity Score (ISS) more than 16 were 18 from 153 (11.76%). The factor influenced Injury Severity Score (ISS) were age (P-value < 0.0028), head injury (P-value < 0.0362), abdominal injury (P-value < 0.0108). Three victims were expected death due to high Revised Trauma Score (RTS) and one victim was unexpected survived.

**Conclusion :** Blast injury was the most common injury in Thai military personnel from MCI at 10<sup>th</sup> April 2010. The factor influenced Injury Severity Score and rate of injuries of torso and unprotected part of the head should be concerned for effective medical treatment and preparing equipment for prevention of injuries in the future.

**Key Words :** ● *Mass casualty incidence* ● *Blast injury* ● *Firearm injury* ● *Military personnel*  
● *Emergency response*

## บทคัดย่อที่ 23

### Appropriable Depth of Right Internal Jugular Vein Catheterization : Cricoid Cartilage to Sternal Angle (CSA) Method Compared with 15 centimetre (cm.) depth Method

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**Background :** Central venous catheterization (CVC) is an importance procedure for emergent or critical patients. The principle approach of right internal jugular vein catheterization is central approach. CVC tip should lie at the carina\* level or less than 5 cm. proximally. The appropriable depth of CVC insertion may avoid unnecessary catheter reposition and complication.

**Study objective :** To assess the appropriable and accurate method of CVC positioning compared between Cricoid cartilage to Sternal Angle\*\* method and 15 cm. depth method.

**Methods :** We performed prospectively randomized study in 40 patients who needed CVC at emergency department of Phramongkutklao hospital during August 2009 to January 2010. The standard procedure was done by second or third year emergency medicine residents with emergency physician supervision. Each enrolled patient was measured with the CSA method and divided into 2 groups. The first group was inserted catheter by the CSA method and the second group by 15cm. depth method. There were 20 patients in each group. CVC tips were confirmed with chest x-ray in all patients. Reposition was done if CVC tip was lie below the carina level or more than 5 cm. proximally. Both groups were compared in number of reposition and followed up complications until they were discharged from hospital.

**Results :** There was no reposition in the CSA group. There were 17 reposition (85%) in the 15 cm. depth group. From all patients, the mean of CSA distances, CSA to carina level distances (CSA to carina distances), and depth of CVC tip at carina level (Carina distances) were  $10.70 \pm 1.11$ ,  $2.20 \pm 1.36$ , and  $12.80 \pm 1.62$  cm., respectively

**Conclusion :** The CSA method is appropriable more than the 15 cm. method for catheter positioning in the central approach of right internal jugular vein catheterization.

**Key Words :** ● *Central venous catheterization depth (CVC depth)* ● *Right internal jugular vein catheterization*  
 ● *Cricoid cartilage to Sternal Angle method (CSA method)*  
 ● *15 cm. depth method (15 cm. depth method)*

\* carina; *The carina is a cartilaginous projection of the last trachea ring and keel like ridge between the orifices of the main bronchi from bronchoscopic view*<sup>(19)</sup>

\*\* *Sternal Angle; prominent part of sternum, It is the junction of manubrium and sternal body*

## บทคัดย่อที่ 24

### Phylogenetic Analysis of Dengue Viruses from Nucleotide Sequence of Each Parts and Whole Genome

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**Background :** Dengue virus is a well-known pathogen of dengue fever, dengue hemorrhagic fever, and dengue shock syndrome which is found around the world. Dengue virus is the RNA virus with high genetic evolving ability. Genetic evolution in each serotype could affect epidemiology and severity of infection. Phylogenetics of dengue requires analysis of nucleotide based on evolution relationship. Group of nucleotides must be chose properly as genetic marker of each serotype. Currently, phylogenetics studies of nucleotides in dengue serotypes are still in beginning and not yet extensive. Mostly, they were analyzed from the entire dengue genome.

**Objective :** To analyze genetic evolution relationship of dengue virus from the entire dengue genome, all of its genes, and genome segments and find unique nucleotide pattern of each dengue serotype.

**Method :** We studied nucleotide bases of 4 dengue serotypes using nucleotide samples from GenBank. Phylogenetic trees were created based on nucleotide bases from the entire dengue genome of 38 samples and based on genes of 10 samples which had complete nucleotide information of dengue genes. Phylogenetic trees were analyzed by neighbor-joining and maximum likelihood using computer software and confirm with bootstrap comparison.

**Results :** We created phylogenetic trees based on nucleotide bases from entire dengue genome 1 tree and based on 10 genes 10 trees. All of the phylogenetic trees corresponded to grouping by serotype.

**Conclusion :** There is a unique pattern of nucleotide bases in each dengue serotype when analyzed on entire genome and we also found this unique when analyzed on gene level.

## บทคัดย่อที่ 25

### The Effect of Topical Sericin on Uremic Pruritus in Hemodialysis Patients

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**Background :** Pruritus is a common disabling problem in patients with advanced end-stage renal disease. The prevalence of uremic pruritus in patients on dialysis is approximately 60%, but its treatment is often ineffective. Sericin, the protein-rich substrate from silk worm has the properties of collagen type 1 stimulation and relieves skin dryness by water holding capacity.

**Objective :** The aim of this study is to determine whether topical sericin has a significant antipruritic effect for uremic pruritus in patients undergoing hemodialysis .

**Method :** The randomized, double-blind, placebo-controlled study was conducted in 48 patients who undergoing maintenance hemodialysis in the dialysis unit of the Kidney Foundation of Thailand, Priest hospital between June 2010 to September 2010.

Patients were started either with topical sericin or matched placebo (cream base). The study drug was applied on the half-side of the patient's body and placebo was also applied on another half-side in the same patient. Pruritus intensity was scored weekly by a visual analogue scale (VAS) and skin dryness assessed by clinical grading and measurement of stratum corneum hydration using a corneometer every 2 weeks. The study was performed 6 weeks duration. Hemoglobin, blood urea nitrogen, creatinine, calcium, phosphate, and intact parathyroid hormone were measured.

**Result :** Forty-eight of 50 patients completed the study. One patient was withdrawn from the study because of poor compliance and 1 patient was excluded because she later took hemodialysis elsewhere. All patients experienced a rapid subjective improvement in pruritus. During the topical sericin period, pruritus decreased by 82.79% on the right side and 72.35% on the left side on the VAS. In comparison, pruritus decreased by 75.40% on the right side and 84.86% on the left side on VAS during the placebo period; P-value of 0.22 on the right side and P-value 0.05 on the left side. The difference between the topical sericin and the placebo for relieve uremic pruritus was not statistically significant. The water holding property of legs skin at 6 weeks was statistically difference between topical sericin and placebo group. However there was no difference of water holding property in arms skin between both groups.

**Conclusion :** This study demonstrated that topical siricin is more effective than placebo (cream base) in increasing water holding property in the non-vascular area without any side effects. By visual analogue scale, the symptom of pruritus was not different between sericin or placebo at six weeks of the study.

## บทคัดย่อที่ 26

### การศึกษาความชุกการหักแบ่งเม็ดยาของผู้ป่วยนอกโรงพยาบาลพระมงกุฎเกล้า

วิจักขณ์ กาญจนอุทัย และ นครินทร์ คັນสนยุทธ์

แพทย์ประจำบ้านกองอายุรกรรม โรงพยาบาลพระมงกุฎเกล้า

**บทคัดย่อ :** การหักแบ่งเม็ดยาออกเป็นสองส่วนหรือมากกว่าสองส่วน เป็นแนวปฏิบัติที่ทุกโรงพยาบาลใช้กัน และมักจะมีปัญหาต่างๆ ที่เกิดจากการหักเม็ดยา ในปัจจุบันยังมีการหักแบ่งเม็ดยาที่ไม่เหมาะสมทั้งชนิดของยา ประเภทผู้ป่วย แพทย์และเภสัชกรควรตระหนักถึงผลเสียที่อาจเกิดขึ้นจากการหักแบ่งเม็ดยา และควรตรวจสอบว่ายามีเม็ดแต่ละชนิดสามารถหักแบ่งได้หรือไม่ รวมทั้งพิจารณาว่า ผู้ป่วยมีปัญหาในการหักแบ่งเม็ดยาหรือไม่ ก่อนการสั่งจ่ายยา

**วัตถุประสงค์ :** การศึกษานี้จะเป็นการรวบรวมข้อมูลการใช้ยาแบบหักแบ่งเม็ดยาของผู้ป่วยนอก โรงพยาบาลพระมงกุฎเกล้าทุกแผนกในเดือนตุลาคม พ.ศ. 2552

**วิธีการศึกษา :** ผู้ป่วยนอกทุกแผนกที่มารับบริการในเดือนตุลาคม พ.ศ. 2552 ณ โรงพยาบาลพระมงกุฎเกล้า โดยการรวบรวมข้อมูลของผู้ป่วยที่ใช้ยาแบบแบ่งเม็ดผ่านฐานข้อมูลของโรงพยาบาลที่มีการเก็บข้อมูล ผ่านการสั่งยาทางคอมพิวเตอร์ของแพทย์ที่แผนกผู้ป่วยนอกทุกแผนก และข้อมูลที่เภสัชกรลงข้อมูลในคอมพิวเตอร์ตามใบสั่งยาที่แพทย์ระบุชนิดยา ขนาดยา ในแผนกที่ไม่ได้สั่งยาผ่านคอมพิวเตอร์

**ผลการศึกษา :** ใบสั่งยาผู้ป่วยนอกทั้งหมด 49,240 ใบสั่ง มีการสั่งยาแบบแบ่งเม็ด 9,129 ใบสั่ง คิดเป็น 1 ใน 5 ของผู้ป่วยที่มารับบริการทั้งหมด เป็นเพศชายร้อยละ 47 อายุมากกว่า 60 ปีร้อยละ 64 กองอายุรกรรมร้อยละ 49 สิทธิการรักษาจ่ายตรงกรมบัญชีกลางร้อยละ 62 มีจำนวนร้อยละ 7 ของจำนวนใบสั่งยาทั้งหมดที่ใช้ยาแบบหักเม็ดไม่เหมาะสม

**สรุป :** ความชุกของการหักแบ่งเม็ดยาของผู้ป่วยนอกโรงพยาบาลพระมงกุฎเกล้ายังพบมาก ยังมีการแบ่งยาที่ไม่เหมาะสมทั้งชนิดยา กลุ่มผู้สูงอายุเป็นกลุ่มที่ต้องเฝ้าระวังเป็นพิเศษ ดังนั้นจึงเป็นข้อมูลพื้นฐานสำหรับการวางแผนการดูแลผู้ป่วยที่ต้องใช้ยาแบบหักเม็ดต่อไปในอนาคต

## บทคัดย่อที่ 27

### **Anatomical Variation of Renal Vessels by 64 Slices Multidetector Computed Tomography (MDCT) Scan of Abdomen at Phramongkutklao Hospital**

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**Background :** The information about variations of renal vessels are very important in medical practice, especially for patients who prepare to kidney surgical or interventional procedure. MDCT allows confident detection and classification of a variety of anatomic and incidental anomalies. **Objective :** The goal of this study is to describe anatomical variation of the renal arteries and veins by 64 Slices MDCT at Phramongkutklao Hospital.

**Material and Methods :** A retrospective review of 325 abdominal MDCT studies at Phramongkutklao hospital from January 2009 to July 2010 were done to determine the prevalence of each anatomical variation of both renal arteries and veins. **Results :** Among 235 abdominal MDCT studies, the anatomical variation of renal arteries are 27.08%. Major arterial variants including accessory and early branching arteries present in 26.46% and 0.62%, respectively. The anatomical variation of renal veins are 1.85%, including circumaortic renal vein and retroaortic renal vein were present in 1.23% and 0.62%, respectively. **Conclusion :** MDCT provides a reliable method to evaluate the anatomical variations of renal vessels. Recognition of such variations is important in treatment planning of renal pathology and avoiding treatment complication.

**Key Words :** ● *Anatomical Variation* ● *Renal Vessels* ● *Multidetector Computed Tomography*



## บทคัดย่อที่ 28

### Discrimination of Parathyroid Gland from Adjacent Tissue by Measuring Tissue Intact Parathyroid Hormone

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**Background :** Identifying parathyroid tissue is the crucial step in successful parathyroidectomy. Frozen section is current standard maneuver, however, requires a pathologist and high operative cost. Recent method describes measurement of intact parathyroid hormone (i-PTH) in questionable tissue, but it is not widely practiced. We intend to verify this technique in patients with renal hyperparathyroidism.

**Material and Methods :** A cross-sectional study included 5 patients undergoing parathyroidectomy. Two groups of tissue effusate, taken from either parathyroid or non-parathyroid specimens, were measured for i-PTH. Tissue identification was then confirmed histologically.

**Results :** A total of 24 samples were collected. Fifteen parathyroid glands had higher i-PTH concentrations (531.8 – 85190 pg/mL, median 28330) than 9 non-parathyroid specimens (20.4 – 48.6 pg/mL, median 23.8). The difference was statistically significant ( $p < 0.001$ , Mann-Whitney U test).

**Conclusion :** Our study highlights the distinct difference in tissue i-PTH level comparing parathyroid with non-parathyroid specimen. Tissue i-PTH measurement can be considered an alternative method for confirming parathyroid tissue.

**Key Words :** ● Parathyroid Hyperplasia ● Renal Hyperparathyroidism ● Intact Parathyroid Hormone (i-PTH)

## บทคัดย่อที่ 29

### **Incidence of Musculoskeletal Injuries in the First year Thai Army Nursing Students during the Basic Military Training**

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**Objectives :** To assess the incidence of musculoskeletal injuries in first year thai army nursing students during the basic military training.

**Study Design :** Descriptive, cross-sectional study.

**Setting :** The Royal Thai Army Nursing College.

**Subjects :** Eighty five first year thai army nursing students during the basic military training.

**Methods :** A questionnaire was used for each subject. Demographic data, past medical history of musculoskeletal injuries, physical activity with measurements of Q angle, carry angle, foot deformities, then physical fitness was tested before and after the basic military training. Data about musculoskeletal injuries occurring during the training period were collected.

**Results :** Of all, there were thirty four thai army nursing students suffering from any kinds of musculoskeletal injuries (40%). The most common sites of injuries were knee (47.1%) ankles (44%) equal lower leg (44%), respectively. The study revealed that the past medical history of musculoskeletal injuries was significantly related to the new injuries.

**Conclusion :** The incidence of musculoskeletal injuries in the first year thai army nursing students during the basic military training was 40%. The past medical history of musculoskeletal injuries was significantly related to the new injuries during the basic military training.

**Key Words :** ● *Musculoskeletal injury* ● *Thai army nursing students* ● *Basic military training*

## บทคัดย่อที่ 30

### Validity and Reliability of A New Self-administrated Questionnaire for Low Back Pain

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**Objective :** To determine the validity and reliability of a new self-administrated questionnaire for low back pain.

**Study design :** Descriptive study.

**Setting :** Rheumatology and rehabilitation out-patient departments, orthopedics and rehabilitation In-patient departments of Phramongkutklo Hospital.

**Subjects :** Low back pain patients.

**Methods :** Proposed “self-administrated questionnaire for low back pain” was developed according to the opinions from 13 experts including physiatrists, rheumatologists, neurosurgeons and orthopedic surgeons. Pilot study was carried out in 40 patients. The final questionnaire composed of two parts. Part 1 which measured pain severity consisted of 9 items; each scaled from 0 (no pain) to 4 (most severe pain). Part 2 evaluated areas of the painful sensation which were pictures showing front, back and sides of human body determining 15 areas of pain. The final questionnaires were tested in 199 patients. Two physiatrists were invited to give the scores of part 2 questionnaire independently to study the validity of pain severity assessment, compared with visual analogue scale (VAS) and the reliability-validity of areas of the painful sensation determination.

**Results :** The 199 participants, age  $53.90 \pm 15.35$  years, were 91 rehabilitation patients, 86 orthopedics patients and 22 rheumatology patients. The validity of severity of pain questionnaire had good to very good agreement value (92.80-97.11% and kappa 0.722-0.898). The reliability of the areas of the painful sensation questionnaire assessed by 2 physiatrists had a good to very good agreement (kappa 0.796-1.000, 0.839-0.989 respectively) for intra-rater reliability and a good agreement (kappa 0.604-0.793) for validity.

**Conclusion :** The proposed self-administrated questionnaire for low back pain had a good validity of severity of pain and a good reliability and validity of the areas of the painful sensation.

**Key Words :** ● Validity ● Reliability ● The questionnaire for low back pain ● Low back pain

## บทคัดย่อที่ 31

### **The Effectiveness of Antibiotic Prophylaxis in Urodynamic Study : Preliminary Study**

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**Objectives :** To assess the effectiveness of prophylactic antibiotics for the prevention of urinary infection in patients undergoing urodynamic study.

**Study design :** Randomized ,assessor-blinded control study.

**Setting :** Physical Medicine and Rehabilitation Department, Phramongkutklao Hospital.

**Participants :** Patients with neurogenic bladder were examined by urodynamic study at Physical Medicine and Rehabilitation Department ,Phramongkutklao Hospital.

**Methods :** Fourty patients were randomly allocated into 2 groups. The patients in the study group received one gram of intravenous ceftriaxone one hour prior to urodynamic examination. The patients in the control group did not received any antibiotics. The assessment of urinary symptoms and urine culture were conducted one week after the examination and the results were compared.

**Results :** Seven patients in the study group and eight patients in the control group were observed to have urinary tract infection. The difference between the two groups were not statistical significantly (P = 0.943)

**Conclusions :** There was insufficient evidence to show that 1 gram of intravenous ceftriaxone one hour prior to urodynamic study had any effects on the incidence of urinary tract infection 1 week post examination.

**Key Words :** ● *Urinary tract infection* ● *Antibiotic* ● *Urodynamic study*

## บทคัดย่อที่ 32

### The Study of the Thickness of Suboccipital Muscles and the Distance from Skin to Vertebral Artery for Trigger Point Release

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**Objectives :** To study the thickness of suboccipital muscles from occipital bone to atlas bone, the distance from skin at each reference points on parallel line of atlas bone to vertebral artery and the distance from occipital bone to atlas bone for safe trigger point release.

**Study design :** Retrospective descriptive study

**Setting :** Physical Medicine and Rehabilitation Department and Radiology Department, Phramongkutklao Hospital

**Subjects :** One hundred forty-two patients whom underwent computed tomography scan of brain and neck at Radiology Department, Phramongkutklao Hospital

**Methods :** The thickness of suboccipital muscles were measured by using computed tomography scan monitor at the reference points vertically set at 1 cm., 2 cm. from occipital protuberance and at the level of posterior arch of atlas bone, and horizontally set at 1 cm. ,2 cm. and 3 cm. from spinous process. In addition the distances from skin at each reference points on atlas bone level to vertebral artery, and the distances from occipital bone to atlas bone were also measured. All data were calculated using mean and standard deviation, besides correlation among data mean and body mass index were analyzed.

**Results :** The mean thickness of suboccipital muscles from occipital bone to atlas bone were 10.0 - 68.1 mm. The mean distance from skin at each reference points on parallel line of atlas bone to vertebral artery were 32.1 - 56.0 mm. In addition the mean distance from occipital bone to atlas bone were 39.9 - 41.5 mm. The correlation among data and body mass index were different.

**Conclusion :** The thickness of suboccipital muscles from occipital bone to atlas bone, the distance from skin at each reference points on parallel line of atlas bone to vertebral artery, and the distance from occipital bone to atlas bone were different among sites of measurement, sex and body mass index. By using 30 mm. acupuncture needle or 27G needle, the underweight female and avoidance of the point at 2 cm. from spinous process at atlas bone level were considered for safe trigger point release.

**Key Words :** ● *The thickness of suboccipital muscles* ● *The distance from skin to vertebral artery*

## บทคัดย่อที่ 33

### Reliability and Validity of the Thai Version of the Foot Function Index (FFI-TH)

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**Objectives :** To test the reliability and validity of the Thai version of the Foot Function Index (FFI-TH).

**Study Design :** Descriptive study.

**Setting :** Department of Physical Medicine and Rehabilitation and Orthopedic, Phramongkutklao Hospital.

**Subjects :** Patients with foot problems from various causes in outpatient department setting.

**Methods :** The Foot Function Index was translated into Thai version by two translators who were English expert and physiatrist. It consists of 23 items that are divided into 3 subscales : pain (9 items), disability (9 items) and activity limitation (5 items). The content validity was evaluated by 5 experts in physical medicine and rehabilitation and orthopedic fields using item correlation. The items that its item correlation exceed 0.5 were tested in patients with foot problems. The reliability was assessed by internal consistency using Cronbach's alpha coefficient. The criterion validity was assessed for correlation with Thai version of the Medical Outcomes Study Short Form 36 (SF-36) questionnaire using Pearson's correlation coefficient.

**Results :** Sixty patients (male 25, female 35) with foot problems enrolled in the present study. The average age of patients was 41.2 years. Among these 20 (33.3%) were diagnosed as plantar fasciitis, 17 (28.4%) as foot fracture and 7 (11.7%) as foot deformities. The content validity of each items ranged from 0.6-1.0. Cronbach's alpha coefficient was 0.93. There was a moderate correlation between the FFI-TH total score to the Physical Component Summary scores (PCS) and Mental Component Summary scores (MCS) of the SF-36 Thai version. Pearson's correlation coefficient was - 0.58 and - 0.46 respectively.

**Conclusion :** The Thai version of the Foot Function Index (FFI-TH) is reliable and valid to assess foot problems in Thai patients.

**Key Words :** ● Reliability ● Validity ● Foot function index ● Foot problem

## บทคัดย่อที่ 34

### **Correlation between Personality Profile and Psychological Distress in 34<sup>th</sup> Class of Medical Cadet and Medical Student Phramongkutklao College of Medicine during Basic Military Training**

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**Background :** We have never been study about correlation between personality and psychological distress in medical cadet and medical student of Phramongkutklao College of Medicine who entering Basic Military Training.

**Objective :** The purposes of this research were to study the prevalence of psychological distress and the relationship between personality and psychological distress in medical cadet and medical student after Basic Military Training.

**Methodology :** Cohort study was conducted in second year class of medical cadet and medical student of Phramongkutklao College of Medicine academic year of 2008. General demographic data, attitude questionnaire, Thai General Health Questionnaire-28 and MMPI-2 profile.

**Results :** Prevalence rate of Psychological distress in medical cadet and medical student in this study was 0.16 and up to 0.43 after Basic Military Training. Mean score of Pd scale (with K-correction) in students who had psychological distress were higher than who had not ( $p = 0.027$ ).

**Conclusion :** Medical cadet and medical students develops more psychological distress after Basic Military Training. No significant correlation between personality profile and psychological distress.

**Key Words :** ● *Basic Military Training* ● *Psychological distress* ● *Personality*

## บทคัดย่อที่ 35

### **An Assessment of Intraocular Pressure Change In A Hypobaric Chamber During Simulated Altitude of 25,000 feet**

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**Background :** An exposure to high altitude leads to various systemic and ocular effects on human beings. Changes in an intraocular pressure at high altitude have been proposed and discussed, which were controversial.

**Purpose :** To determine the effect of high altitude on intraocular pressure in a hypobaric chamber during simulated air flight.

**Design :** Case-control study.

**Methods :** Healthy flight surgeons and flight nurses, who work at the Institute of Aviation Medicine Royal Thai Air Force in Bangkok, Thailand, were enrolled. An intraocular pressure was measured at ground level before entering the hypobaric chamber, which simulated altitude of 25,000 feet, and during a training session in chamber while breathing 100% oxygen from oxygen mask and 1 hour after leaving the chamber.

**Results :** There were 27 participants (54 eyes). Age ranged from 21-54 years, median age was 29. An intraocular pressure was  $15.54 \pm 2.3$  mmHg (mean  $\pm$  SD) at ground level, which increased statistically significant at simulated altitude of 25,000 feet,  $18.06 \pm 3.74$  mmHg (mean  $\pm$  SD),  $p < 0.001$ . At 1 hour after leaving the chamber, an intraocular pressure was lowered to  $14.76 \pm 2.68$  mmHg (mean  $\pm$  SD).

**Conclusion :** This study demonstrates a temporary increasing of an intraocular pressure during an exposure to high altitude of 25,000 feet.

**Key Words :** ● *Intraocular pressure* ● *Hypobaric chamber* ● *Altitude*



## บทคัดย่อที่ 36

### Findings of Lacrimal Drainage System Irrigation and Dacryocystography in the Diagnosis of Primary Acquired Nasolacrimal Duct Obstruction

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**Purpose :** To study the findings of lacrimal drainage system irrigation and dacryocystography in the diagnosis of primary acquired nasolacrimal duct obstruction.

**Design :** Cross-sectional study.

**Material and methods :** Subjects with epiphora symptom were evaluated by lacrimal drainage irrigation. Patients with Primary Acquired Nasolacrimal Duct Obstruction (PANDO) in one or both sides were enrolled. Dacryocystography (DCG) on both side of lacrimal drainage were consecutively performed. Findings of lacrimal irrigation and DCG were interpreted and analyzed in a masked fashion.

**Results :** A total of 47 patients (94 eyes) were assessed. Forty-two (89.4%) females and 5 (10.6%) males, aged from 34 to 93 years,  $64.73 \pm 14.19$  years (mean  $\pm$  SD). Negative lacrimal irrigation were 53 eyes and abnormalities were detected with DCG in 59 eyes. Positive lacrimal irrigation were 41 eyes and normal DCG result showed in 35 eyes. An agreement between lacrimal irrigation and DCG was 89.36% and Kappa 0.78,  $p < 0.001$ .

**Conclusion :** Findings of lacrimal irrigation was substantially correlated with DCG results.

**Key Words :** ● Lacrimal irrigation ● Dacryocystography ● Primary acquired nasolacrimal duct obstruction

### บทคัดย่อที่ 37

## A Comparative Study of Intra-ocular Pressure Measured by Rebound Tonometry (ICare), Computerized Non-contact Air-puff Tonometry and Goldmann Applanation Tonometry in Out-patient Ophthalmology Clinic of Phramongkutklao Hospital

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**Background :** Glaucoma is best defined by the presence of acquired loss of retinal ganglion cells and axon, leading to progressive, irreversible loss of vision. Raised intraocular pressure (IOP) is a significant risk factor for developing glaucoma.

**Objective :** To compare the measurements of intraocular pressure (IOP) with Rebound tonometry (ICare), Computerized non-contact air-puff tonometry (NOT) and Goldmann applanation tonometry (GAT).

**Design :** Comparative Study

**Methods :** Healthy subjects who come to out-patient clinic, were enrolled in this study. The exclusion criteria were: allergic to topical anesthesia; corneal astigmatism > 4 diopters; history of ocular surgery; and present of infectious ocular disease. Inform consent was done. Slit-lamp inspection, Autorefraction, Computerized non-contact air-puff tonometry (NOT), Rebound tonometry (ICare), Goldmann applanation tonometry(GAT), central corneal thickness (CCT) are measured in the same order by masked operators.

**Results :** Two hundred and twenty-nine eyes of 115 subjects with an average age of 57.03 years (SD 11.91; range, 18 - 98 years old) were included. Intra-class Correlation Coefficient (ICC) compared NOT with GAT in moderate agreement (ICC=0.55, 95%CI: 0.42 - 0.66) and ICC compared ICare with GAT in almost perfect agreement (ICC=0.81, 95%CI: 0.76 - 0.86) both were strong correlated (p-value<0.001). The mean difference of NOT - GAT and ICare - GAT were 2.20 mmHg and 0.33 mmHg respectively, the difference is statistically significant (p-value<0.001). Whilst the mean IOP difference between 'NOT-GAT' and 'ICare-GAT' was 1.88 mmHg (95%CI: 1.49 - 2.25). The graphically analysis of the agreement between mean IOP measurements revealed that the measurements made with ICare were in more agreement than NOT comparison with GAT. NOT, ICare and GAT showed a weak relationship with CCT which also increased correspondingly.

**Conclusion :** Measurements of IOP in healthy subjects using Rebound tonometry can be considered a reliable alternative for IOP screening and in cases topical anesthesia is to be avoided.

**Key Words :** ● *Glaucoma* ● *Intraocular pressure* ● *Tonometry* ● *Screening*

## บทคัดย่อที่ 38

### A Comparison of Lateral Plain Film of the Knee in Extended Weight Bearing and 30° Flexion to Predict a Patellar Tendon Length

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**Background :** Anterior cruciate ligament (ACL) and posterior cruciate ligament (PCL) reconstruction with bone patellar tendon bone graft (BPTB) are commonly performed. No study can predict a precise patellar tendon length resulting in a graft-tunnel mismatch. Presently, preoperative planning needs to evaluate the limb alignment from film knee extended weight bearing and the length of the patellar tendon from film knee 30° flexion.

**Purpose :** To compare film knee extended weight bearing and 30° flexion to find which one can predict the patellar tendon length more precise.

**Study Design :** Cross-sectional diagnostic study.

**Methods :** Thirty-six patients who received a cruciate ligament reconstruction with BPTB graft at Phramongkutkloa Army Hospital were involved. Patellar tendon lengths were measured from film knee extended weight bearing and film knee 30° flexion, then compared to a real intraoperative patellar tendon length. Analysis using intra-class correlation coefficient and paired t-test was done.

**Results :** The mean patellar tendon length from radiographic taken at 30° of knee flexion and extended weight bearing are 43.90 mm. and 42.95 mm. respectively. The difference is less than 1 mm. which might not be clinically significant. The prediction of patellar tendon length from 30° flexed film is statistically closer (ICC 0.760:0.717, p-value < 0.001) by the way, they are both in intermediate reliability level (0.6 < ICC < 0.8). It also seems not clinically different.

**Conclusion :** Preoperative film knee extended weight bearing alone is enough for evaluation both limb alignment and length of the patella tendon leading to decreasing cost, time and radiation exposure of patients.

**Key Words :** ● *Anterior cruciate ligament* ● *Posterior cruciate ligament* ● *Bone patellar tendon bone graft*  
● *Preoperative planning* ● *Patellar tendon length prediction*

## บทคัดย่อที่ 39

### Implication of Modular Radial Head Prosthesis and Radial Head Morphology

**Piti Chalongviriyalert and Suriya Luenam**

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**Background :** Radial head fracture is a traumatic problem when patient present with elbow trauma and have other bone or ligamentous injury such as anterior band of medial collateral ligament or lateral ulnar collateral ligament. In the past, treatment has only radial head resection that cause elbow instability. Radial head prosthesis was created to restore elbow instability substitute native radial head but not yet have implant used in Thailand and no data correlation with radius of Thai people in the radial head prosthesis.

**Objective :** To study different of head-shaft angle of radius between native radius and radius that inserted radial head prosthesis. This study also includes morphology of radial head too.

**Methodology :** Descriptive study was conducted, using inclinometer via android program inclinometer in cadavers at Anatomic Department, Phramongkutklao Medical College during May 2010 to October 2010. The data were collected and calculated statistically by SPSS program via Wilcoxon Signed Ranks Test.

**Results :** Forty radiuses was measured different angle before and after trial radial head prosthesis. The results show mean different angle between native radial head and radial head prosthesis about 3.83degree in Y axis and 1.49 degree in X axis ,standard deviation of Y and X axis were 7.23 and 4.16 consequently which no clinical significant angle different between both of radial head that not exceed than 10 degrees and mean of diameter of radial head were 22.56 millimeters in X axis and 21.67 millimeters in Y axis, mean of neck of radius were 14.56 millimeters in X axis and 12.97 millimeters in Y axis.

**Conclusion :** Radial head prosthesis can be substituted native radial head by no significant different of angle between radial head prosthesis and native radial head in Thai people. We concluded that radial head prosthesis can be used for Thai people and not have clinical significant.

**Key Words :** ● Radial head ● Radial head prosthesis ● Head-shaft angle of radius ● Radial head morphology

## บทคัดย่อที่ 40

### Angles between the Axis Flexed Fingers and the Axis of Third Metacarpal Bone: an Alternative to Quantify Finger Rotation

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**Background :** Malrotation of metacarpal and phalangeal fractures can cause finger scissoring, leading to diminished normal hand function. Various methods have been proposed to determine finger rotation; however, there are still inconclusive. Therefore, we established a new quantitative method using the angle formed between the axis of middle and distal phalanges of each of flexed fingers and the axis of the third metacarpal bone.

**Purpose :** To determine whether the proposed angle was symmetrical and constant between both hands in adult population.

**Study design :** Cross-sectional diagnostic study.

**Methods :** Thirty-one volunteers (12 males and 19 females) having normal and uninjured hands with an average age of 37 years underwent a fluoroscopic examination of their hands. All volunteers put their hands in a special positioning device that passively held the metacarpophalangeal and proximal interphalangeal joints in full flexion with distal interphalangeal joint in 0° extension. Fluoroscopic images were then taken and angles were digitally measured.

**Results :** Mean angles of the flexed index, middle, ring and small fingers compared to the third metacarpal bone were  $-4.07 \pm 6.02$ ,  $5.22 \pm 5.21$ ,  $12.91 \pm 5.09$  and  $23.11 \pm 6.46$  degrees, respectively. In majority of volunteers, the angles were statistically symmetrical between both hands and constant ( $P > 0.05$ ). Moreover, we found that the angle differences comparing each finger to the angle of middle finger were also symmetrical and constant ( $P > 0.05$ ).

**Conclusion :** The angles formed between the axis of flexed fingers and the third metacarpal bone measured from radiographic images can be used as an additional alternative to determine the finger rotation. Each angle difference compared to the angle of middle finger may also be used in case of X-ray beam projection variation.

**Key Words :** ● *Digit alignment* ● *Digit rotation* ● *Rotational alignment* ● *Finger fracture*

## บทคัดย่อที่ 41

### The Anatomical Variation of the Lateral Femoral Cutaneous Nerve in Relation to the Anterior Superior Iliac Spine and the Iliac Crest

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**Background :** The lateral femoral cutaneous nerve (LFCN) of the thigh is a sensory nerve. It is formed from the roots of L2 and L3 and travels along the posterolateral aspect of the psoas and over the iliacus muscles to the region of the anterosuperior iliac spine(ASIS). It exits pelvis and supply the sensation of anterolateral thigh. The lateral femoral cutaneous nerve (LFCN) can be at risk of injury when bone grafts are harvested from the anterior iliac crest in many surgical procedure. Many studies have shown that the course of the LFCN is variable, particularly in the area of the anterior superior iliac spine (ASIS).

**Objective :** To study the anatomical variation of lateral femoral cutaneous nerve (LFCN) of the thigh in relation to the anterior superior iliac spine and the iliac crest

**Methodology :** Descriptive study was done in 96 embalmed cadavers at Department of Anatomy, Phramongkutklao Collage of Medicine, during October 1, 2008 - September 30, 2009. The data was collecte and analyzed.

**Results :** The location of lateral femoral cutaneous nerve (LFCN) in relation to the anterior superior iliac spine (ASIS) and the iliac crest was investigated in 96 embalmed cadaveric specimens. Fifty-six nerves (58.3%) passed medial to the ASIS. Twenty-two nerves (22.9%) passed at the ASIS. Eighteen nerves (18.8%) passed lateral to the ASIS. The LFCN is usually located at  $2.1 \pm 0.8$  to  $3.9 \pm 1.0$  cm below the crest in the range of 2-5 cm lateral to the ASIS, respectively.

**Conclusion :** When the anterior iliac crest bone graft harvesting is planned, the anatomical variation in this area should be concerned to reduce the risk of LFCN injury.

**Key Words :** ● *Lateral femoral cutaneous nerve of thigh (LFCN)* ● *Anterior superior iliac spine (ASIS)*  
● *Iliac crest*

## บทคัดย่อที่ 41

### The Anatomical Variation of the Lateral Femoral Cutaneous Nerve in Relation to the Anterior Superior Iliac Spine and the Iliac Crest

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**Conclusion :** When the anterior iliac crest bone graft harvesting is planned, the anatomical variation in this area should be concerned to reduce the risk of LFCN injury.

**Key Words :** ● *Lateral femoral cutaneous nerve of thigh (LFCN)* ● *Anterior superior iliac spine (ASIS)*  
● *Iliac crest*

## บทความที่ 43

### Recurrent Amoxicillin-induced Aplastic Anemia : Report of a Case

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**Abstract :** Drug-induced aplastic anemia is not common in clinical practice. Causative drugs are chloramphenicol, phenylbutazone, ticlopidine, NSAIDS, carbamazepine and phenytoin. Here we report a case of recurrent aplastic anemia possibly from amoxicillin and was successfully treated with G-CSF and antibiotics. The patient was a 85-year-old man with dyslipidemia, hypertension and obesity. First episode was in 6/2007, at that time he had dental root abscess and received amoxicillin without improvement. He subsequently developed high grade fever and sore throat. His CBC showed Hct 40.9%, WBC  $1 \times 10^9/L$ , PMN 5%, platelet  $92 \times 10^9/L$ . Bone marrow aspiration and biopsy revealed severe aplastic marrow. He was treated with G-CSF and meropenem. It took 8 days for neutrophils to recovery ( $>1 \times 10^9/L$ ). The second episode was in 1/2010 when he had fever with productive cough and received amoxicillin and clavulanic acid. He subsequently experienced fever with chills. His CBC was Hct 43.1%, WBC  $1.6 \times 10^9/L$  with no PMN, platelet  $14 \times 10^9/L$ . His bone marrow exam showed severe aplastic marrow. Again, he was treated with G-CSF, ceftazidime, amikacin and platelet transfusions. He had complete recovery with only 5 days for neutrophils to be more than  $1 \times 10^9/L$ . This patient is possibly idiosyncratic amoxicillin-induced acute aplastic anemia and is warning for careful drug ingestion especially amoxicillin.

**Key Words :** ● *Aplastic anemia* ● *Amoxicillin* ● *Granulocyte-colony stimulating factor*



## บทคัดย่อที่ 44

### Comparison of The Efficacy on Bilirubin Reduction after 24 Hours of Phototherapy for Neonatal Jaundice Among Using 3 Light Sources : White and Blue Fluorescent Lamp, Blue Fluorescent Lamp and Light-Emitting Diodes (LED) Lamp

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**Background :** Phototherapy is a standard treatment for neonatal hyperbilirubinemia. Recently, special blue fluorescent and light-emitting diodes (LED) have been developed and generated higher light irradiance level.

**Objective :** To compare the efficacy of 3 phototherapy devices; fluorescent lamp, special blue fluorescent lamp and LED lamp with respect to bilirubin photodegradation and adverse effects within the first 24 hours of treatment.

**Methods and Materials :** Non - randomized controlled trial was conducted in neonates with hyperbilirubinemia born at Phramongkutklo Hospital between January 2009 and January 2010. Eligible infants were sequentially allocated into one of 3 groups of phototherapy; group 1: fluorescent lamp, group 2: special blue fluorescent lamp and group 3: LED lamp. Serum microbilirubin levels before and 12 and 24 hours after phototherapy were recorded. Absolute and relative changes in serum microbilirubin levels were calculated. Adverse effects of phototherapy were also recorded.

**Results :** 45 infants were enrolled into the study. Sixteen 14 and 15 infants were allocated in group 1, 2 and 3 respectively. Median gestational ages were 39 weeks in all groups, median birth weights were 3,075, 3,225 and 3,000 grams, respectively. The cause of hyperbilirubinemia in most cases was inconclusive. There were significant differences in distance between infants and phototherapy lamps and in irradiance ( $p < 0.001$ ). There were significant differences in the rate of microbilirubin reductions between group 2 and 3 ( $p = 0.005$ ), and between group 1 and 3 ( $p = 0.049$ ). None had adverse effect of phototherapy.

**Conclusions :** LED lamp is more efficient in bilirubin reduction compared to fluorescent and special blue fluorescent lamp.

## บทคัดย่อที่ 45

## Periostin: Novel Tissue and Urinary Biomarker of Progressive Renal Injury Induces A Coordinated Mesenchymal Phenotype in Tubular Cells

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**Background :** Periostin acts as an adhesion molecule during bone formation. Knowledge of expression of periostin in kidney injury is still scanty.

**Methodology :** We investigated periostin function and expression in vitro of distal nephron tubular cells (DT), in Sprague- Dawley rats after 5/6 nephrectomy (Nx), in DBA2J mice after streptozotocin-induced diabetes (SZ-DM), and in the urine of chronic kidney disease (CKD) patients.

**Results :** Periostin was identified by microarray and confirmed by real-time PCR in renal tissue after 5/6Nx, and SZ-DM demonstrating generalizability of the periostin increment in renal injury. Periostin was expressed predominantly in DT and in tubule cells shed into the lumen. In affected DT after 5/6Nx, periostin expression appeared de novo, the epithelial cell adhesion molecule E-cadherin became undetectable, and tubule cells displayed the mesenchymal marker proteins fibroblast specific protein-1 (FSP1) and matrix metalloproteinase-9 (MMP9). To assess whether periostin plays a direct role in renal tubular epithelial mesenchymal transition (EMT), we overexpressed periostin in cultured DT dramatically increased MMP9 and FSP1 protein, and decreased E-cadherin protein expression. In addition, the effect of periostin on the renal tubular EMT was also blocked by periostin siRNA transfection. Urine periostin excretion increased over time after 5/6Nx, and it was also excreted in the urine of CKD patients. Urine periostin ELISA at a cutoff value of 32.66 pg/mg creatinine demonstrated sensitivity and specificity for distinguishing patients with progressive CKD from healthy people (92.3%, and 95.0%, respectively).

**Conclusions :** These data demonstrate that periostin is a mediator and marker of EMT, and a promising tissue and urine biomarker for kidney injury in experimental models and in clinical renal disease.

**Key Words :** ● Biomarker ● Chronic kidney disease ● Epithelial mesenchymal transition ● Periostin

## บทคัดย่อที่ 46

### **Accuracy of Anterolateral Drawer Test in Lateral Ankle Instability: A Cadaveric Study**

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**Background :** In the assessment of lateral ankle instability, the anterior drawer test has been found to be inaccurate and the focus on pure anterior translation cannot properly perceive the anterolateral rotatory nature of the talar displacement. In order to address this, the anterolateral drawer test can be done with digital palpation of the talar displacement anterolaterally with a controlled angle of plantarflexion as well as application of the translational force.

**Materials and Methods :** We evaluated the anterolateral drawer test and the original anterior drawer test in 10 fresh below-the-knee specimens using a direct anatomic measurement (DAM) loaded by a Telos stress device as a reference. Specimens were assigned into three groups: intact ligaments, AT FL-cut, and ATFL&CFL-cut. The examiners were blinded with one performing the anterolateral drawer test (E1) while the other performed the original anterior drawer test (E2).

**Results :** Pearson's correlation coefficient indicated a statistically significant linear relationship between DAM/E1  $r = 0.931$ ,  $p < 0.001$  but not between DAM/E2  $r = 0.519$ ,  $p = 0.124$ . Intra-class correlation coefficient show correlation between DAM/E1 and DAM/E2 to be  $0.945$  ( $p < 0.001$ ) and  $0.683$  ( $p = 0.051$ ). When 3 mm or more was used as the threshold to diagnose a lateral ligament rupture, sensitivity and specificity were **E1** (100%, 100%) and E2 (75%, 50%).

**Conclusion :** The anterolateral drawer test showed high accuracy in the determination of lateral ankle instability and in the diagnosis of a ligament rupture.

**Clinical Relevance :** Further investigation regarding the accuracy and reliability of this test in comparison with the original anterior drawer test is warranted in a patient population with ankle instability.

## บทคัดย่อที่ 47

### **Efficacy of Low Dose Vitamin K2 in Decreasing Bone Turnover Markers in Thai Postmenopausal Women**

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**Objective :** To compare the effect on serum bone turnover markers of Thai postmenopausal women after were treated by MK-4 45 mg/day and MK-4 30 mg/day.

**Study Design :** Prospective Randomized control trial.

**Setting :** The Menopause clinic, Department of Obstetrics and Gynecology, Faculty of Medicine Ramathibodi Hospital, Mahidol University.

**Subjects :** Thirty eight women with postmenopausal.

**Intervention:** Postmenopausal women were randomized in two groups. The group one is MK-4 45 mg/day (n=20) compares with the group two is MK-4 30 mg/day (n=18), both groups were received calcium carbonate 1,250 mg/day.

**Main Outcome Measures :** Bone resorption marker was assessed by serum betacrosslap (C-terminal telopeptides of collagen type I fragment) and bone formation marker was assessed by serum under-carboxylated osteocalcin (ucOC). Both bone markers was collected at baseline, 3 months and 6 months in both groups.

**Result :** The MK-4 45 mg/day group showed significantly decrease of betacrosslap at 3 months compared to baseline, but it was not significantly decrease at 6 months. The MK-4 30 mg/day group was not significantly decrease of betacrosslap at 3 months and 6 months compared to baseline. However the MK-4 45 mg/day group and MK-4 30 mg/day group were significantly decrease of ucOC at 3 months and 6 months compared to baseline. The percentage change of betacrosslap was significantly decreased in the MK-4 45 mg/day group (13.82%, p=0.029) compare MK-4 30 mg/day group at 3 months, but they were not significantly different in both groups at 6 months. The percentage change of ucOC was significantly decreased in the MK-4 45 mg/day group (86.68%, p=0.027) compared to MK-4 30 mg/day group at 3 months, but they were not significantly different in both groups at 6 months. There were no side effects in this study.

**Conclusion :** We conducted the study comparing vitamin K2 efficacy between 45 mg/day and 30 mg/day on bone health by serum bone turnover markers, betacrosslap and ucOC in postmenopausal women. It appears that vitamin K2 30 mg/day has similar effect on bone formation comparing 45 mg/day. Vitamin K2 30 mg/day may have equivalent effect of bone resorption at 6 months. No any side effect was found in this study.

**Key Words :** ● *Postmenopausal* ● *Vitamin K2* ● *Serum bone turnover markers*