



## ทัศนคติของแพทย์ต่อมาตรการระบุเหตุผลประกอบการสั่งใช้ยานอกบัญชียาหลักแห่งชาติ

เชิดชัย สุนทรภาส<sup>1,\*</sup>, จุฬารณณ์ ลิ้มวัฒนานนท์<sup>1</sup>, สมศักดิ์ เทียมเก่า<sup>2</sup>, รัชฎาพร สุนทรภาส<sup>3</sup>

### บทคัดย่อ

ทัศนคติของแพทย์ต่อมาตรการระบุเหตุผลประกอบการสั่งใช้ยานอกบัญชียาหลักแห่งชาติ

เชิดชัย สุนทรภาส<sup>1,\*</sup>, จุฬารณณ์ ลิ้มวัฒนานนท์<sup>1</sup>, สมศักดิ์ เทียมเก่า<sup>2</sup>, รัชฎาพร สุนทรภาส<sup>3</sup>

ว. เกษตรศาสตร์อีสาน, มีนาคม 2558; 11(ฉบับพิเศษ) : 108-111

**บทนำ:** การระบุเหตุผลประกอบการสั่งใช้ยานอกบัญชียาหลักแห่งชาติเป็นหนึ่งในมาตรการควบคุมค่าใช้จ่ายด้านยา และสนับสนุนการใช้ยาอย่างสมเหตุผลในผู้ป่วยสิทธิสวัสดิการรักษายาบาลข้าราชการ **วัตถุประสงค์:** การศึกษานี้มีวัตถุประสงค์เพื่อประเมินความเห็นด้วย และความร่วมมือในมาตรการควบคุมยานอกบัญชียาหลักแห่งชาติในโรงพยาบาลศรีนครินทร์ **วิธีการดำเนินการวิจัย:** เก็บข้อมูลจากแบบสอบถามของแพทย์ที่ปฏิบัติงาน ณ โรงพยาบาลศรีนครินทร์ และมีอำนาจสั่งใช้ยานอกบัญชียาหลักแห่งชาติในช่วงวันที่ 1 มกราคม ถึง 31 มีนาคม 2556 **ผลการศึกษา:** จากจำนวนแพทย์รวมทั้งสิ้น 222 ราย มีแพทย์ตอบแบบสอบถาม 51 ราย (ร้อยละ 23.0) ส่วนใหญ่อายุต่ำกว่า 36 ปี (ร้อยละ 27.5) รองลงมาคืออายุมากกว่า 55 ปี (ร้อยละ 19.6) ส่วนใหญ่มีอายุงานมากกว่า 20 ปี (ร้อยละ 45.0) รองลงมาคืออายุงานต่ำกว่า 10 ปี (ร้อยละ 31.4) แพทย์มีระดับความเห็นด้วยในการบันทึกการวินิจฉัยโรค รายละเอียดการใช้ยาในบัญชียาหลักแห่งชาติและลักษณะทางคลินิกของผู้ป่วยที่เป็นสาเหตุให้ไม่สามารถใช้ยาในบัญชียาหลักในเวชระเบียนนั้น เฉลี่ยเท่ากับ 4.84 4.27 และ 3.98 ตามลำดับ และมีระดับความร่วมมือเฉลี่ยเท่ากับ 4.71 3.90 และ 3.55 ตามลำดับ **สรุปผล:** มาตรการควบคุมยานอกบัญชียาหลักแห่งชาติได้รับการยอมรับจากแพทย์ส่วนใหญ่ทั้งความเห็นด้วยและความร่วมมือในการระบุเหตุผลประกอบการสั่งใช้ยานอกบัญชียาหลักแห่งชาติ

**คำสำคัญ:** การระบุเหตุผลประกอบการสั่งใช้ยานอกบัญชียาหลักแห่งชาติ สิทธิสวัสดิการรักษายาบาลข้าราชการ

### Abstract

#### Physicians' attitude toward non-essential drug prescription criteria measure

Cheardchai Soontornpas<sup>1,\*</sup>, Chulaporn Limwattananon<sup>1</sup>, Somsak Thiamkao<sup>2</sup>, Ratchadaporn Soontornpas<sup>3</sup>

IJPS, March 2015; 11(Supplement) : 108-111

**Introduction:** Non-essential drug prescription criteria (NPC) is a control measure for drug expenditure and promote the rational drug use in patients under civil servant medical benefit scheme. **Objective:** This study aimed to explore the physicians' agreement and complying to control measure for non-essential drug (NED) at Srinagarind Hospital. **Materials and methods:** Data were collected using questionnaire from physicians working at Srinagarind Hospital with authority for NED prescribing during January 1 to March 31, 2013. **Results:** There were 51 from 222 questionnaires returned from the physicians (23.0%). Most physicians aged below 36 years (27.5%) followed by age over 55 years (19.6%). Most physicians had service year over 20 years (45.0%) followed by service year less than 10 years (31.4%). For the documentation of diagnosis in medical record, detail of essential drug use and detail of clinical manifestation opposed the use of essential drug, the average level of physicians' agreement was 4.84, 4.27 and 3.98, respectively and the average level of complying was 4.71, 3.90 and 3.55, respectively. **Conclusion:** Control measure for NED was recognized by most physicians. Most of them agreed and complied with NPC.

**Keyword:** Non-Essential Drug Prescribing Criterion, Civil Servant Medical Benefit Scheme

<sup>1</sup>Division of Clinical Pharmacy, Faculty of Pharmaceutical Sciences, Khon Kaen University

<sup>2</sup>Department of Pharmacy Service, Srinagarind Hospital, Faculty of Medicine, Khon Kaen University

<sup>3</sup>Department of Medicine, Faculty of Medicine, Khon Kaen University

\*Corresponding author: Tel. 043 202378 Fax. 043 202379 E-mail: chesoo@kku.ac.th



## Introduction

At present, medical cost has been growing up worldwide including Thailand. The expense of medical treatment per the whole treatment expense of outpatients was increased from 46% in the budget year 2002 to 74% in the budget year 2009 and the medicinal cost was the biggest portion of reimbursement as 80% of all treatment expenditure. The Comptroller General's Department (CGD), Ministry of Finance, Thailand had performed a retrospective checking the prescription of 34 target government hospitals in the budget year 2009 and reported 16.6 million prescriptions with totally valued 15,247.96 million Baht. Non-essential drugs (NED) were contained in 40% of the prescriptions which cost 10,048 million Baht or 66% of medical gross value. To sustain the entire health system, the CGD had implemented many measures for controlling drug prescribing and promoting the rationale drug use in patients under civil servant medical benefit scheme (CSMBS)(CGD, 2010). Therefore, a measure namely "The Non-essential Drug Prescription Criteria" (NPC or A-F items) was announced on 1 May 2012 for conducting NED reimbursement in 168 public hospitals since the fiscal year 2013. Briefly, the NED fee can be compensated only when the essential drug (ED) cannot be applied to some specific case due to medical limitation. The medical staffs or the physicians must select one from six items of NPC (adverse drug reaction or allergy occurred, A; the treatment cannot be accomplished, B; no essential drugs available and the patient need non-essential drug usage indicated by Food and Drug Administration, C; patient has contraindication or drug interaction with the essential drugs, D; essential drug is more expensive when considering worthiness aspect, E; in case the patient shows his intention and the reimbursement cannot be completed, F) in the prescription. In addition, prescriber must provide detail of diagnosis, previously using essential drug and clinical manifestation that oppose the use of ED and support the selection of NED instead of

ED in patient medical record. Srinagarind Hospital was a medical school with 1,190 beds and there were 252,233 government officers registered at the hospital with 134,149 outpatient visiting (41.38%) in the budget year 2007 (Songsung, 2009). As the hospital served the outpatients with CSMBS more than 100,000 prescriptions a year, the hospital was included in 168 target hospitals and must comply with this control measure.

## Objective

The aim of the present study was to explore the physician attitude toward NPC measure in term of agreement and complying with this control measure.

## Materials and methods

The study protocol was approved by the Institutional Research Ethics Committee at Khon Kaen University (HE551310). The population was registered physician at Srinagarind Hospital working with authority for NED prescribing during January 1 to March 31, 2013. The questionnaires were sent to 222 physicians subjected to participate into the present study. The questionnaire divided into 2 parts. The first part was about the physician characteristics composed of gender, age, service year and medical specialty. The second part was about the attitude toward control measure composed of level of agreement and level of complying to 3 steps of NPC measure composed of step 1 document the diagnosis in medical record, step 2 document the detail of essential drug use and step 3 document the detail of clinical manifestation opposed the use of essential drug, using 5-point Likert scales (very favorable, 5; 4 favorable, 4; neutral, 3; unfavorable, 2; very unfavorable, 1). (Likert, 1932). Physicians may also write other comments about the NPC measure on the questionnaire.

All questionnaires must be returned to the researcher within 1 month for analysis. Data were quantitatively analyzed using descriptive statistics. The patient characteristics were presented as number and percentage of responders. The degree of agreement and



complying to control measure were presented as average score and standard deviation.

## Results

There were 51 from 222 questionnaires returned from the physicians (23.0%) for evaluating. Most responders aged below 36 years (27.5%) followed by age over 55 years (19.6%). Most physicians had service year over 20 years (45.0%) followed by working less than 10 years (31.4%) as shown in Table 1. The average level of physicians' agreement with the control measure in documentation of diagnosis in medical record were 4.84, detail of previous using essential drug were 4.27 and detail of clinical manifestation not support the use of essential drug were 3.98. The average level of physicians' complying with the control measure in documentation of diagnosis in medical record were 4.71, detail of previous using essential drug were 3.90 and detail of clinical manifestation not support the use of essential drug were 3.55 as shown in Table 2. Some physicians gave reasons why they felt inconvenient with the control measure such as lack of time, conflict with patient, difficult for working and inconsistency between control measure and clinical practice guideline. Moreover, some physician gave suggestions for improving the complying with control measure such as NED list should be modified according to update clinical practice guideline or real practice and the workload of physician to perform patient service must be concerned.

## Discussion and conclusion

Control measure for non-essential drug was recognized by most physicians. Most of them agreed and complied with non-essential drug prescription criteria. They also agreed that NPC was a good tool for promoting rational drug use. This finding was similar to study of Deom *et al.* who investigated the practitioners' opinions about the expected efficiency from 8 medical tools. In case of the expense control estimation, most practitioners expressed positive or neutral opinions and

realized that these tools influenced the efficiency and safety of treatment and promoted the rational drug use.

**Table 1** Characteristics of the physicians

| Characteristics           | Numbers (%) |
|---------------------------|-------------|
| <b>Gender</b>             |             |
| Male                      | 33 (64.7)   |
| Female                    | 18 (35.3)   |
| <b>Age</b>                |             |
| <36 yr                    | 14 (27.5)   |
| 36-40yr                   | 5 (9.8)     |
| 41-45 yr                  | 9 (17.6)    |
| 46-50 yr                  | 6 (11.8)    |
| 51-55 yr                  | 7 (13.7)    |
| >55 yr                    | 10 (19.6)   |
| <b>Service year</b>       |             |
| <6 yr                     | 8 (15.7)    |
| 6-10 yr                   | 8 (15.7)    |
| 11-15 yr                  | 6 (11.8)    |
| 16-20 yr                  | 6 (11.8)    |
| >20 yr                    | 23 (45.0)   |
| <b>Medical specialty</b>  |             |
| Medicine                  | 15 (29.4)   |
| Surgery                   | 6 (11.8)    |
| Eye nose throat           | 5 (9.8)     |
| Obstetrics and gynecology | 5 (9.8)     |
| Pediatric                 | 4 (7.8)     |
| Ophthalmology             | 3 (5.9)     |
| Orthopedics               | 3 (5.9)     |
| Psychiatry                | 3 (5.9)     |
| Radiology                 | 2 (3.9)     |
| Rehabilitation medicine   | 2 (3.9)     |
| Anesthesiology            | 1 (2.0)     |
| Other                     | 2 (3.9)     |



**Table 2** The attitude of physicians toward the control measure for NED

| Issue  | Number of responder(percentage) <sup>a</sup> |               |               |              |             | Mean<br>(SD)   |
|--|--|---------------|---------------|--------------|-------------|----------------|
|  | 5  | 4             | 3             | 2            | 1           |                |
| <b>Agreement with documentation in patient medical record</b>                        |  |               |               |              |             |                |
| 1. Diagnosis   | 44<br>(86.27)                                | 6<br>(11.76)  | 1<br>(1.96)   | 0            | 0           | 4.84<br>(0.42) |
| 2. Detail of previous using essential drug   | 25<br>(49.02)                                | 18<br>(35.29) | 6<br>(11.76)  | 1<br>(1.96)  | 1<br>(1.96) | 4.27<br>(0.90) |
| 3. Certificate reasons why non-essential drug was selected instead of essential drug | 22<br>(43.14)                                | 15<br>(29.41) | 8<br>(15.69)  | 3<br>(5.88)  | 3<br>(5.88) | 3.98<br>(1.17) |
| <b>Complying with documentation in patient medical record</b>                        |  |               |               |              |             |                |
| 1. Diagnosis   | 40<br>(78.43)                                | 8<br>(15.69)  | 2<br>(3.92)   | 1<br>(1.96)  | 0           | 4.71<br>(0.64) |
| 2. Detail of previous using essential drug   | 19<br>(37.25)                                | 16<br>(31.37) | 11<br>(21.57) | 2<br>(3.92)  | 3<br>(5.88) | 3.90<br>(1.14) |
| 3. Certificate reasons why non-essential drug was selected instead of essential drug | 14<br>(27.45)                                | 16<br>(31.37) | 10<br>(19.61) | 6<br>(11.76) | 5<br>(9.80) | 3.55<br>(1.29) |

<sup>a</sup>Very favorable (5), favorable (4), neutral (3), unfavorable (2), very unfavorable (1).

However, some practitioner still warned about negative effect to professional practice (Deom *et al.*, 2010). The average score of complying with the control measure was less than the agreement in all of 3 question items. This may be resulted from the high workload of physician, so they think that they lack of time to complete the documentation. As the consistency between NPC and data supporting the NPC was found in half of the cases and the rational drug use was found in only one third of the assessable cases following the implementation of internal audit system on NED prescribing (Soontornpas *et al.*, 2014), the relation among physicians' attitude, real practice of physicians and rational drug use should be further investigated.

## References

Comptroller General's Department. Measures to promote and regulate the use of reasonable drug of hospital under the Ministry of Public Health [online] 2010 [cited Feb 18, 2013]. Available from:

[http://www.hisro.or.th/main/download/Handout\\_3\\_240755.pdf](http://www.hisro.or.th/main/download/Handout_3_240755.pdf).

Deom M, Agoritsas T, Bovier PA, Perneger TV. What doctors think about the impact of managed care tools on quality of care, costs, autonomy, and relations with patients? BMC Health Services Research 2010, 10: 1-8.

Likert R. A technique for the measurement of attitudes. Archives Physiology 1932; 140: 5-55.

Songsung C, Pattaranit R, Chatachum V. Assessment of the change in numbers and proportions of government officers being cared for at the Srinagarind University Hospital considering the modification of payment for the service received. KKU J Public Health Research 2009; 2: 88-96.

Soontornpas C, Limwattananon C, Tiamkao S, Soontornpas R. Implementation of internal audit system on non-essential drug prescribing at Srinagarind Hospital. Srinagarind Med J 2014; 29 (suppl): 150-3.