ence of cost-effective alternatives. All of them preferred to contact medical store/ drugstore/chemist shop/pharmacy for their minor and major ailments, communicable and non-communicable diseases. Interestingly, most of the respondents agreed to visit public hospitals or contact medical doctors only in case of their child's illness. Most of the respondents showed their trust in herbal therapies rather than allopathic medicines. CONCLUSIONS: The current study identified absence of understanding of generic medicines. Mass media awareness campaigns should be used for educational initiatives to inform the consumer about cost-effective alternatives

A REVIEW OF POSITIVE LIST SYSTEM IN KOREA: ACHIEVEMENTS, CHALLENGES AND SUGGESTIONS
Nongwi, Korea, Seoul, South Korea
OBJECTIVES: In Korea, as drug costs reached up to 30% of total NHIC budget and total drug expenditures doubled from 2002-2006 that led to increasing budget deficits, MOHW(Ministry of Health and Welfare) called for positive list system in December 2006. It requires pharmac-economic evaluation and price negotiation with single payer to pharmaceutical companies. At the point of 3 years passed after this policy introduction, we try to evaluate this policy with balanced manner between its achievements and challenges. We also try to suggest some supplementary proposal to make this policy sustainable in Korea. METHODS: We analyzed four reports which deal with positive list system in Korea from 2007 to 2009. We also reviewed several key analyses performed by media and academic association regarding this policy in the same periods. Among these reports and the investigations, we collected main achievements and challenges raised by all relevant stakeholders from 2007 to 2009.
RESULTS: The main achievements are fast development of HTA infra, the establishment of evidence based decision-making and reduction of reimbursement price level comparing with negative list system. While, the key challenges raised by each stakeholder group are lack of transparency, deficiency of data support by government and price competition in selection of comparable drugs. CONCLUSIONS: Our supplementary suggestions are no reimbursement guarantee in NH for mild disease such as simple cough over the age of 13, reinforcement of health insurance guarantee level based on accurate budget forecast, financial agreement(risk share) between NHIC and company and performance based pricing.

PERPECTIVE OF THAI HEALTH-CARE PROFESSIONALS ON THAI HERBAL MEDICINE POLICY
Tosangkun K, Kapop N, Thavorncharoenp M, Sukumonno N
Health Intervention and Technology Assessment Program (HITAP), Nonthaburi, Thailand
OBJECTIVES: Drug expenditures in Thailand have been rapidly increased every year. A major cause of growing drug expenses is the introduction of western medicine. Thai Ministry of Public Health has implemented a policy to reduce drug expenditures by promoting the use of herbal medicine in all levels of care. In 2011, the proposed policy expects the herbal medicine expenditures grow by 25% of medicine expenditures in households. In order to be successful in this policy, opinion of health-care professionals is important. Hence, we evaluated limitations on herbal medicine use must be explored. The purpose of this study is to examine the opinion of health-care professionals including physicians, pharmacists, and Thai traditional medicine practitioners on Thai herbal medicine policy.
METHODS: Qualitative methods were used. Focus group interviews among the frequent user group and in-depth interviews among occasionally user group were conducted. RESULTS: The findings show the perspective of health-care professional on several issues. 1) Policy is difficult to achieve in all levels of health-care settings. Primary care and the secondary care units are more suitable for herbal medicine utilization, comparing to tertiary care units. Therefore, the policy should set different expenditure targets on Thai herbal medicine for different levels of health care; 2) Leadership is the key determinant in the success of herbal medicine utilization; and 3) health-care professionals were concerned that Thai herbal medicine was not produced according to GMP, and the supply of Thai herbal medicine were insufficient due to limited number of manufacturers and raw materials. CONCLUSIONS: Policy-makers should provide clear and transparent protocols and/or policies in order to develop a practical system for promoting the use of herbal medicine at macro-, meso- and micro-level. Furthermore, the policymakers should provide budgetary support and incentive for hospitals that achieve the target in order to promote the use of Thai herbal medicine.

MEDICATION CHECKUPS BY COMMUNITY PHARMACISTS— EXPERIENCE OF “BROWN-BAG” REVIEWS IN JAPAN
Akazawa M, Nomura K, Igarashi A, Kusuma H
Kagoshima University, Kagoshima, Japan; University of Liverpool, Tokyo, Japan; Tokyo Univ. Faculty of Pharmacy, Tokyo, Japan; The University of Tokyo, Tokyo, Japan
OBJECTIVES: Limited information is available for elderly patients taking multiple medications including prescription drugs, over-the-counter medications and dietary supplements. Brown-bag medication review was examined as a tool for pharmacists to understand drug utilization patterns, reduce potential problems and provide appropriate advises to patients. METHODS: Medication review was carried out by 179 community pharmacies in Hiroshima Japan between October and December, 2009. Elderly patients 65 years or older were asked to bring all medications that regularly used at home to neighborhood pharmacy. Pharmacists checked medication names, usages and potential problems. Patients were advised if medications were used incorrectly, had potential interactions and safety concerns. Patients’ characteristics, medications and pharmacists’ advises were recorded for analyses. RESULTS: Information about medications and advices were corrected from 326 elderly patients. Mean age was 74 years and 37% were male. About 97% patients used at least one prescription and mean number of prescription drug use was 6.3 (range: 1 to 20). Among prescription drug users, 62% used at least five prescription drugs, 34% used over-the-counter medications, and 54% used dietary supplement, concurrently. Pharmacists provided advises to 250 patients (49%) that indicated potential interaction problems (20%), over/under use (5%), inappropriate medication use (10%) and lack of medication adherence (10%) and preventable adverse reactions (15%). Major problems found through medication reviews were multiple combinations of NSAIDs, overdose of benzodiazepines, overuse of dietary supplements, and lack of medication adherence for treatment of osteoporosis and diabetes-related eye disorders. Two cases of contraindicated drugs were found (bezafibrate vs. HMG-CoA reductase inhibitor). CONCLUSIONS: Brown-bag review can be an effective tool to promote patient- pharmacist communications, identify potential safety problems and provide advises for appropriate medication use. Community-based promotion activity is a key factor to increase participants of the event and to reach target populations who have no regular checkups at family pharmacy.

ASSESSMENT OF HEALTH RELATED QUALITY OF LIFE (HRQOL) AMONG NON-PRESCRIPTION MEDICINE CUSTOMERS IN MALAYSIA
Shafee AA, Hassan MA, Mohamed Yahaya AH
Universiti Sains Malaysia, Minder, Penang, Malaysia
OBJECTIVES: To determine the HRQol among over-the-counter (OTC) medicine users in Malaysia as measured by EuroQol instrument and to further examine the factors that affect HRQol. METHODS: A nationwide cross-sectional survey was conducted with adult pharmacy customers (>16 years old) in 10 randomly selected community pharmacies in different states in Malaysia by trained data collectors from May 2008 to June 2008. The self-administered questionnaire includes the EuroQol EQ-5D (Health State Classification), EQ-VAS (thermometer) and demographic questions. Data were analyzed using Kruskal-Wallis and Mann Whitney tests in SPSS v15. RESULTS: A total of 599 customers was included in this study with mean EQ-3D score of 0.90 (SD = 0.16) and VAS score of 0.74 (SD = 0.17). This study found that pain/discomfort (30,36%) and anxiety/depression (13.3%) were the most common problems among the Malaysian pharmacy customers. Elderly had lower mean EQ-3D scores and VAS were lower for older age group and reported more problems in every dimension of EQ-3D Health Classification. This study also found that there was significant differences between EQ-3D score and VAS (p < 0.05). Furthermore, we found that people who used non-prescription medicine's pharmacists' HRQol who are using non-prescription medicine is comparable with the general population. The HRQol of the customers is affected by their age, gender, ethnicity, education, and household incomes.

DETERMINANTS OF HEALTH SERVICE UTILIZATION FOLLOWING THE 2004 TSUNAMI IN THAILAND
Saranawutth B, Guerriars DN, Andre G, Cyna PC
University of Toronto, Toronto, ON, Canada, McMaster University, Hamilton, ON, Canada
OBJECTIVES: On December 26, 2004, a massive earthquake struck Indonesia, triggering a tsunami that affected several countries. This catastrophic event had important implications for health system planning, treatment and response to the long-term impact of this disaster. This prospective cohort study aims to identify the determinants of health service utilization in tsunami-affected provinces of Thailand, 1 and 2 years after the disaster. The relationship between being affected by the tsunami and health service utilization were also investigated. METHODS: Participants were randomly selected Thai citizens (aged 14+), living in Phuket, Phang Nga, Krabi, or Rayong. Approximately 1 and 2 years after the tsunami, participants were interviewed in-person on demographic and socio-economic characteristics, disaster impact, health status, and health service utilization, using five questionnaires. Five types of health services were examined: outpatient, inpatient, home care, medications, and informal/unpaid care. Two-stage sample selection model, more specifically probit model and negative binomial model with Heckman correction, were employed to identify determinants of the probability and intensity of utilization, respectively. RESULTS: There were 2079 participants in the first interview and 1989 in the second interview. Determinants of health service utilization depended on the type of health service being examined, and the assessment time after the disaster. Being affected by the tsunami was significantly associated with the propensity to use medications, 2 years after the disaster, P = 0.0125. CONCLUSIONS: The study findings can assist health providers in identifying population at risk of using health services. Accordingly, regional health officers can request appropriate amount of health resources in order to deliver high quality care tailored to specific population. The findings may also assist policy-makers in the development of long-term disaster recovery plan. Additionally, the study findings may not be specific to a tsunami disaster and may provide insights on post-disaster contexts of other natural disasters.

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