identified as a risk factor and also a prevalent condition for diabetic patients. Vitamin D supplementation has been found to achieve appropriate glycemic control in South Korea. Due to mixed evidence and lack of guidelines, however, the extent of use of vitamin D in diabetic patients is under studied. The objective of this study was to understand the perceptions of vitamin D supplements amongst adults with type 2 diabetes. METHODS: A literature review was conducted to facilitate questionnaire designing. A separate version was created for both the pharmacists and the physicians. These versions were designed to reflect the scope of current Pharmacy and Medical practices in India. Being a pilot study, a convenience sample of 10 physicians and 20 pharmacists was interviewed from the urban areas of Mumbai, India. Descriptive analyses were performed to compare the questionnaire responses. RESULTS: The relationship between vitamin D deficiency and diabetes was perceived to be positive in 70% of the physicians and 75% of the pharmacists. The physicians perceived a pandemic of vitamin D deficiency. Vitamin D supplements, however, were not commonly seen to be used by diabetic patients. Amongst the users, the most common form of vitamin D supplement was in combination with calcium carbonate. Use of fortified food items with vitamin D and laboratory testing of serum D3 levels was also not popularly done. CONCLUSIONS: In absence of pharmacy claims and utilization records, this pilot study improves our understanding about the variability in the administration of standard of care. Enhanced understanding of the perceptions and usage of nutritional supplements like vitamin D amongst many others can significantly improve health outcomes in patients with Diabetes.

DB3 INDIRECT TREATMENT COMPARISON (ITC) OR COST-EFFECTIVENESS ANALYSIS (CEA): A STUDY
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OBJECTIVES: It is often unclear what the relative efficacies of available treatments are due to lack of head-to-head clinical trial evidence. Indirect treatment comparison (ITC) and cost-effectiveness analysis (CEA) are outcome standard methods for comparing the relative efficacies of treatments in the absence of head-to-head trial evidence. This study sought to examine the difference in cost-effectiveness results between a series of decision analyses compared to synthesising the clinical evidence with adjusted indirect comparison (AIC). METHODS: The indirect treatment comparison (ITC) versus cost-effectiveness analysis (CEA) of hypothetical Drug A versus Drug B for three different scenarios were performed using a Markov model. Three assumptions were made regarding the relative efficacies of these drugs: 1) Drug A = Drug B; 2) Drug B 10% worse than Drug A and; 3) Drug B 20% worse than Drug A. ITCs were undertaken for each scenario and the results were compared to the results from the cost-effectiveness analysis. RESULTS: For Assumption 1, the ITC showed a difference of up to 12%, whereas the CEA showed an almost perfect overlay of the two scatterplots and the acceptability curves. In Assumption 2, the ITC difference was up to 13%, while the scatterplots for the CEA were overlapping and the acceptability curves clearly represented two different treatments with only a small overlap at the upper range of the threshold. In Assumption 3, statistical superiority of Drug A was demonstrated through the ITC, and the acceptability curves of the CEA did not overlap. CONCLUSIONS: The methodology introduced in this paper is an alternative for decision makers to further examine the relative efficacies of treatments when no head-to-head clinical trial data are available. A major limitation of this method is that detailed inputs (such as cost and quality of life data) need to be readily available for the various treatments being compared.

DB4 SCREENING FOR DIABETIC RETINOPATHY IN HONG KONG: IS INVERSE CARE LAW OPERATING?
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OBJECTIVES: The inverse care law, whereby health care services are less accessible to those in greater need, has been found to operate in a variety of health systems. Tudor Hart asserted that market forces would exaggerate the maldistribution of resources. The objective of this study is to examine whether the inverse care law applies in the screening program for diabetic retinopathy (DR) in Hong Kong (HK) with a mixed medical economy like other Asian countries. METHODS: A randomized controlled trial has been conducted. All those with Type 1 or Type 2 diabetes from two public primary care clinics in Hong Kong were recruited and then were randomly allocated into one group paying a fee of HK$60 (US$8) for screening. HbA1c tests were done at the same time with free access. The outcome measures were the rate of screening and extent of DR detected. RESULTS: After randomization, 1387 in free and 1379 in pay groups were eligible for screening. 94.9%(1316/1379) and 94.9%(1316/1379) respectively agreed to participate in the study. After randomization, 1379 in pay groups were eligible for screening. 94.9%(1316/1379) and 94.9%(1316/1379) respectively agreed to participate in the study. The final screening uptake rate were 88.5%(1165/1316) and 82.4%(1092/1377) respectively. Being in the pay group was associated with lower uptake of screening than in the free group (OR=0.59, 0.47-0.74) and lower prevalence of DR detected (20.3% VS 25.9%, P<0.004). Subjects with higher socioeconomic status were more likely to take up screening but with less DR detected. CONCLUSIONS: The inverse care law appears to operate in a preventive intervention even with a relatively small co-payment. There is a strong case for making effective preventive services free of charge.

PODIUM SESSION 1:
HEALTH CARE USE AND POLICY STUDIES
HC1 PRICE PREMIUM FOR INNOVATION? COST CALCULATION METHOD IN JAPAN VERSUS COST UTILITY ANALYSIS IN SOUTH KOREA
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OBJECTIVES: Evaluation and pricing mechanisms vary across countries for new therapies. In Asia, South Korea has established a system based on cost-utility analyses for pricing recommendations and subsequent negotiations. Japan, however, uses a different pricing mechanism for new drugs that lack a comparator where a treatment is priced based on a benchmarking method. This study aims to compare the launch prices of drugs determined through different pricing mechanisms. METHODS: Drugs listed and priced using the cost calculation method in Japan from 2008 to 2011 were identified from the MHLW website. The same drugs and their published launch prices were identified for South Korea. Using average annual exchange rates, South Korean prices were converted to Japanese yen for comparison. Sensitivity analyses were conducted using purchasing power parities for GDP. RESULTS: There were 54 new drugs launched and priced using the cost calculation method in Japan. Among those, 24 (44%) were rewarded a premium from 10% to 40% with an average of 17.9%. Five products were subject to a 5% price cut and the rest were priced at a breakeven price. Only 16 (30%) of the 54 were identified for South Korea. In addition, for products priced with several different dosage strengths available in Japan, only 1-2 strengths were reimbursed in South Korea. Each product listed in South Korea was priced lower compared to its equivalent in Japan by 9% to 88% - or by 60% on average. Results of a sensitivity analysis showed a wider variation in price difference with an average of 14% lower in South Korea. CONCLUSIONS: For products priced using the cost calculation method in Japan, a more limited coverage with lower listing prices was observed in South Korea. Further research is required to study the impact of cost-utility analyses and pricing dynamics in the region.

HC2 A REVIEW OF ECONOMIC EVALUATIONS OF NEW DRUGS PRICED BY THE SIMILAR DRUG COMPARISON METHOD IN JAPAN: DID COST-EFFECTIVENESS RESULTS JUSTIFY PREMIUMS?
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OBJECTIVES: To confirm whether price premiums rewarded for new drugs in Japan were justified by pharmacoeconomic analysis. METHODS: We systematically reviewed the economic evaluation studies of new drugs launched in Japan between April 2000 and March 2010 that were priced by the similar drug comparison method, in which prices are set by comparison with prices of similar drugs. The ‘Ichushi’ and PubMed databases were used to search the published articles. RESULTS: 20 drugs were priced by the similar drug comparison methods during the 10-year period. In total, 22 published articles (16 drugs) were identified: 3 CUAs, 18 CEAs, and 1 CMA. In 10 out of 22 articles, only drug costs were included in the cost estimation. There was a wide range of variation in outcome measures utilized and the majority were only applicable to 18 CEAs. The most common outcome used was the proportion of patients who achieved target clinical results. Incremental analysis was performed in 11 articles; however, the threshold for decision making was mentioned in only 3 of these articles, even though 3 other studies did not take into account because the results were dominant. While 8 of the 12 drugs were rewarded to all new drugs reviewed, only 8 of 16 drugs were cost-effective, 5 drugs were not cost-effective, and the cost-effectiveness of 3 drugs was uncertain or inconsistent between articles. CONCLUSIONS: Our literature review indicated only halves of the drugs with premiums were reported to be cost-effective. However, cost-effectiveness of the drugs could not be determined objectively because of a wide range of variation in methods such as outcome measures and cost calculation. To utilize economic evaluations in policy making and clinical practice in Japan, formulation of methodological standards is necessary to ensure consistency among studies.

HC3 THE PROCESS OF UPDATING THE ITEMS OF NATIONAL HEALTH INSURANCE BENEFITS SCHEDULE IN TAIWAN: IS IT FAIR AND LEGITIMATE?
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OBJECTIVES: With the increasing demands for health care from rapid medical technological advancement, the Taiwan National Health Insurance (NHI) demands for the development of systematic, transparent, and participatory processes for the evaluation and recommendation of new health interventions to be included into the NHI Benefits Schedule (NIBS). Though evaluation of applications from the medical profession for the listing of new health intervention on the NIBS is recognized as a democratic decision making, its fairness and legitimacy have not been assessed. This study aimed to assess the fairness and legitimacy of decisions in the priority setting process for new health interventions into the NIBS. METHODS: Both the four conditions of accountability for reasonableness (Daniels and Sabih,2002) relevance, publicity, appeals, and enforcement and the four steps of the trans-disciplinary model operational goals for priority setting in health care(Gibson et al, 2002) reasonableness, transparency, responsiveness, and accountability are used to assess the fairness and legitimacy of the priority setting decisions. The data for