and 1-month (OR=1.16, 95% CI: 1.02-1.32), but not 6-month (OR=1.03, 95% CI: 0.87-1.21). When stratified by 3 age groups (45-54,55-64, >=65), varenicline was only associated with around 40.0% higher odds of abstinence in 6 months in smokers aged 45-54 years (1-week: OR=1.39, 95% CI: 1.17-1.66; 1-month: OR=1.41, 95% CI: 1.18-1.69). **CONCLUSIONS:** In smoking cessation clinics, varenicline was more effective than NRT patch/gum to achieve abstinence for 1 week and 1 month among smokers aged 45-54 years, but no significant effectiveness for smokers aged >=55 years.

HEALTH TECHNOLOGY ASSESSMENT STUDIES

HT1
WHAT DO HTAS LOOK LIKE AROUND THE WORLD? A COMPARISON OF SOUTH KOREAN AND BRITISH HTA AGENCIES

Versoza L, Adler B, Blumenthal J, Chang R, Ho Y, Rubinstein ER, Rubinstein JL, Sliman RC, Smith MZ

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OBJECTIVES: To compare factors used in the reimbursement decisions of two health technology assessment (HTA) agencies: the United Kingdom's National Institute for Health and Care Excellence (NICE) and South Korea's Health Insurance Review Agency (HIRA). HIRA uses the pricing average of seven countries. Of these seven, NICE has the richest cost-effectiveness data. **METHODS:** The data set comprised 50 diseases from the Market Access Platform of Context Matters' Data Model. Sixty-eight NICE decisions were matched to 35 HIRA decisions across 36 drugs and 19 diseases from 2009 to 2015. If the HTA included several indications for the same drug, it was split into subpopulations to ensure the most appropriate comparison. Reimbursement decisions, along with the presence of patient-reported outcomes (PROs) and patient access schemes (PAS), and whether the agency had a favorable view of the clinical and economic evidence submitted were examined. **RESULTS:** There were a total of 68 NICE decisions and 35 HIRA decisions. Of these, 71% of NICE and 83% of HIRA decisions were positive. When the two agencies were matched by drug, the decisions agreed twelve times, partially agreed four times, and disagreed seven times. NICE and HIRA had 62% and 100% positive views on the clinical evidence submitted, respectively, and 68% and 83% positive views on the economic evidence submitted, respectively. Sixty-five percent of NICE reviews mentioned PROs, compared to 31% of HIRA reviews. Forty-four percent of NICE reviews had a PAS, while 43% of HIRA reviews did. **CONCLUSIONS:** Although NICE and HIRA evaluate drugs using similar frameworks, HIRA often comes to more positive conclusions regarding a technology's appropriateness for its population. When compared to the industry gold standard, South Korea has created a comprehensive and effective way of evaluating drugs.

HT2
A HEALTH TECHNOLOGY ASSESSMENT OF HOME-BASED HAEMODIALYSIS IN ESRD PATIENTS

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OBJECTIVES: This HTA aims to investigate the disease burden of ESRD, and assess the clinical and economic impact of Home based Hemodialysis (HD) compared to Hospital based Hemodialysis (HD) to further the reach of dialysis services amongst patient with Renal Failure. **METHODS:** Health technology assessment by systematic review of published literature. An electronic literature search was performed in Cochrane, PubMed, British Medical Journal, Kidney International, and Journal of the American Society of nephrology databases for randomized controlled trials that compared, Home Haemodialysis & Hospital Haemodialysis. RevMan 5.3 was used for data analysis and quantitative synthesis. **RESULTS:** Out of 221 studies which were screened, 6 studies involving a total of 16,248 participants (3,465 received Home Haemodialysis, 12,783 receive Hospital Haemodialysis) were found to be suitable & were included. In comparison with Hospital Haemodialysis, Home Haemodialysis significantly reduced mortality: Risk Ratio (RR) 0.65 (95%CI, 0.61 to 0.69). Evaluation of current infrastructure shows that there is shortage of Hospital based Haemodialysis services by 51.92%. With the cost of Home based Haemodialysis as INR 18,000 (US$ 291.47) per month in India, cost of INR 56,854 (US$ 923.33) per QALY gained would be incurred with extremely cost-effective intervention for India. **CONCLUSIONS:** Home based Haemodialysis is clinically and economically effective in reducing the mortality of patient with ESRD. Given the high burden of disease there is an urgent need for expanding the reach of for Home based Haemodialysis care.

HT3
DIFFERENTIAL PATTERNS OF PERSISTENT OPIOID USE IN PATIENTS WITH CANCER AND NON-CANCER PAIN

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OBJECTIVES: In light of lacking evidence, persistence is an important component of assessing opioid safety and effectiveness. This study aims to evaluate different patterns of persistent opioid use in patients with cancer and non-cancer pain. **METHODS:** This cross sectional study was conducted at an outpatient pharmacy Hospital Tengku Ampuan Afzan Kuantan (HTAA) Malaysia. Prescription records for four opioids (dihydrocodeine, fentanyl, morphine and oxycodone) issued between January 2013 and December 2015 were examined. Persistence pattern is defined based on different levels of dispensed opioid amounts, number of prescriptions and the number of quarters out of the year in which prescriptions were dispensed. The strict definition describes a typical patient using opioids to achieve a continuous serum concentration in the therapeutic range, the intermediate definition represents a typical patient using opioid daily but not around the clock and the wide definition describes a typical patient who uses opioids for at least half of the days in a year. Patients who did not meet any of the definitions were categorized as non-persistent. Number of patients for each persistence group was calculated and all analyses were performed using Stata 13. **RESULTS:** A total of 1,684 opioid prescriptions for 379 patients were dispensed during the study period. Seventy five percent of (n=283/379) patients were associated with cancer diagnosis while 25% (n=96/379) with non-cancer diagnosis. The prevalence of persistent opioid users was higher in the non-cancer group (13.5%) compared to the cancer group (9.9%). The prevalence of strict, intermediate, and wide definitions were (23.1% vs .28.6%), (15.4% vs 10.7%), and (61.5% vs 60.7%) in the non-cancer and cancer groups respectively. **CONCLUSIONS:** Persistent opioid users were more prevalent in the non-cancer group with the majority in the wide and intermediate persistence patterns. Further investigation is required to examine the clinical outcomes related to differential patterns of persistence.

HT4
HUMANISTIC AND ECONOMIC OUTCOMES OF PHARMACIST-PROVIDED MEDICATION REVIEWS IN THE ELDERLY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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OBJECTIVES: Published studies have focused on the clinical outcomes of pharmacist-provided medication review in the elderly. This review aims to assess its humanistic and economic outcomes. **METHODS:** A systematic search of MEDLINE, EMBASE, CINAHL, Web of Science and the Cochrane Library for studies published in English from inception till 28th August 2015 was conducted. The review included studies lasting at least three months that randomly assigned elderly participants (i.e. age≥ 65 years) to receive either pharmacist-provided medication review or usual care. Meta-analysis of the effects of medication review on health-related quality of life (HRQoL) was performed, while a narrative summary was conducted for economic outcomes. **RESULTS:** The review identified 26 trials that included 15,440 participants, with follow-up ranging from three to 36 months. Twenty-one studies reported HRQoL, with 11 using the EuroQol-5D (EQ-5D) and visual analogue scale (EQ-VAS), and 10 using the 36-item short form health survey (SF-36). Sixteen studies evaluated economic outcomes, with 13 reporting healthcare costs, and three reporting incremental cost-effectiveness ratios (ICERs). Meta-analyses of HRQoL measures showed that pharmacist-provided medication reviews had largely similar effects compared with usual care. Nonetheless, the SF-36 bodily pain (mean difference 2.94, p= 0.02) and general health perception (mean difference 1.83, p= 0.03) domains significantly favored usual care. Medication reviews did not result in significant cost savings, and the ICERs reported varied widely. **CONCLUSIONS:** Humanistic and economic outcomes of pharmacist-provided medication review were similar to those of usual care. Careful thoughts should be given to the capturing of relevant outcomes that reflect the potential benefits of this intervention.

RESEARCH POSTER PRESENTATIONS – SESSION I

HEALTH CARE USE & POLICY STUDIES – Consumer Role in Health Care

PHP1
SELF-MEDICATION WITH ANTIBIOTICS IN SANA'A CITY

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OBJECTIVES: The purpose of this study was to determine the prevalence of antibiotic use during self-medication in Sana'a City and its associated risk factors. **METHODS:** A cross-sectional descriptive study was carried out among customers of 10 community pharmacies that represent all the districts in Sana'a City. A self-administered questionnaire containing open-ended and closed-ended questions was developed and used for this study. Descriptive statistics and bivariate analysis were used to identify the factors associated with antibiotic use during self-medication. Ethical approval was obtained. **RESULTS:** 400 consumers participated in this study, out of which 231 (57.8%) were males and 169 (42.2%) were females. The mean age of the respondents was 28.6 ± 7.7 (range 18-65 years). The prevalence of self-medicating with antibiotic was 79.1 % (58.2% males and 41.8% females). Only half of the respondents (49.5%) reported to be aware of bacterial resistance due to irrational use of antibiotics. The most common reasons for the use of antibiotics were common cough, cold, diarrhoea and fever. The high consultation fee of physicians, lack of access to health care, long waiting time at clinics and lack of insurance were cited to be the reasons for resulting in self-medication. The dispensers at the community pharmacies were the most sought personnel for recommending a particular antibiotic and followed by family members, personal choices, previous prescriptions and friends. No association was found between factors like age, gender, marital status, educational status, employment, monthly income or knowledge regarding bacterial resistance and self-medication with antibiotics. **CONCLUSIONS:** Self-medication with antibiotics was found to be high among consumers in Sana'a City. There is an urgent need to increase awareness and education among consumers regarding the dangers of self-medication. Concerted effort from the regulatory affairs and health authority in Yemen are needed to control excessive use of antibiotics without prescriptions.

PHP2
SCHOOLS' PERSPECTIVE ON PROMOTING RATIONAL USE OF ANTIBIOTICS IN NEW DELHI, INDIA – A QUALITATIVE STUDY

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OBJECTIVES: At community level, inappropriate antibiotic usage effected through factors like misinformed notions on antibiotics and self-medication are major