room visits and hospital admissions. Logistic regressions were constructed to estimate the predictors for resource utilization, and a two-part multivariable analysis model was used to determine the total costs of treatment in the UK. **RESULTS:** Data on 731 patients receiving SMV with pegylated interferon and ribavirin (PegIFN/R) or PegIFN/R alone were included in the analysis. While MRU was similar between SMV and PegIFN/R groups, MRU-related costs were significantly lower in the SMV group, compared to the PegIFN/R group (P<0.05). High body mass index (P<0.05), severe fibrosis (P<0.05), shortened treatment duration from 48 to 24 weeks (P<0.05), anaemia and rash during treatment (P<0.001) were identified as predictors of hospitalisation and outpatient visits and as drivers of total costs. Univariate sensitivity analyses demonstrated that shortened treatment duration and lower occurrence of rash lead to large cost savings. **CONCLUSIONS:** This study identified both baseline and on-treatment antiviral therapy characteristics as drivers of MRU-related costs for HCV patients following antiviral therapy. The shortened treatment duration and reduction in adverse events due to simeprevir treatment lead to extra cost savings compared with PegIFN/R treatment. This suggests that there are potential patient management and cost-effectiveness implications associated with the choice of specific antiviral treatments.

PIN97

WHAT EXPLAINS WILLINGNESS TO PAY FOR AVOIDING MORBIDITY RISK DUE TO MALARIA? RESULTS FROM A GLOBAL META ANALYSIS

Kutluay YM[1], Brouwer R[1], TolRSJ [2]

[1]*Institute for Environmental Studies, Amsterdam, The Netherlands,* [2]*University of Sussex, Brighton, UK*

OBJECTIVES: Willingness-to-pay (WTP) to avoid morbidity is a widely-used measure of disease valuation. This paper aims to meta-analyze variation in mean-WTP of avoiding morbidity due to malaria. Benefits from avoiding incidences can be approximated for use in cost-benefit analyses (CBA). This study is an improvement over an earlier meta-analysis: Double-counting is avoided (exclusion of same study results), new studies and explanatory variables are added (e. g. malaria incidence rates). More sophisticated regression techniques are employed to deal with issues, such as heteroscedasticity (e. g. multiple observations from a single study). Furthermore, other mosquito-borne diseases (filariasis, trypanosomiasis and encephalitis) are included to test between-disease valuation differences. **METHODS:** A systematic literature review was conducted, resulting in a database of 61 studies, yielding 200 data points. A meta-regression model was estimated. Dependent variable is mean-WTP per treatment per year in 2012 USD (Purchasing Power Parity and inflation adjusted). The explanatory variables consists of (i) treatment characteristics (service, private/public goods etc.), (ii) methodological characteristics (revealed vs. stated preference, WTP elicitation method, etc.), and (iii) sample characteristics (age, gender, exposure etc.). **RESULTS:** Standardized mean-WTP range is 0.3 USD and 9000 USD. Data is censored: over 70% of mean-WTP includes zero-values. Preliminary comparisons show that valuation of malaria avoidance is influenced positively for altruistic interventions and negatively for rural samples. The latter is correlated with income- underlining the vulnerability of poorer people (due to higher exposure). Additionally, we find significantly higher WTP to avoid filariasis over malaria. The meta-regression model explains over 30 percent of observed variation between WTP values. Predictive power is tested using a jackknife resampling procedure. **CONCLUSIONS:** The preliminary results provide policy-makers important information on benefits to malaria interventions, with a special focus on rural areas. From a methodological perspective, meta-regression helps to improve the practice of benefit transfer, and generate improved predictions for CBA.

INFECTION – Patient-Reported Outcomes & Patient Preference Studies

PIN98

PERSISTENCE TO TREATMENT OF CHRONIC HEPATITIS B VIRUS (HBV) INFECTION: A STUDY BASED ON THE FRENCH IMS LIFELINK TREATMENT DYNAMICS (LTD) DATABASE

EL Mouaddin N[1], Grandfils N[1], Le Jeunne P[1], Beaupere B[2], Pol S[3]

[1]*IMS Health, PARIS LA DEFENSE, France,* [2]*St Michel de Picpus, PARIS, France,* [3]*Hôpital Cochin, PARIS, France*

OBJECTIVES: To assess and compare the compliance with anti-HBV antiviral oral drugs. **METHODS:** A pharmaco-epidemiological study, based on the IMS LifeLink™ Treatment Dynamics (LTD) database was used to investigate the frequency and the regularity of patients' deliveries on retail pharmacies for 18 months follow-up period between June 2012 and November 2013. Incident patients with no anti-HBV drug deliveries within the last 3 months were included in the cohort. For the follow-up period, patients with no anti-HBV deliveries in a retail pharmacy within 3 consecutive months were considered having stopped their treatment which can lead to an overestimation due to the double dispensing system of these drugs in France. Study investigated patients' demographic characteristics, persistence rates, medication possession ratio (MPR) and proportion of days covered (PDC) according to initial molecule. **RESULTS:** 793 patients (median age 50 years old) initiated a treatment against HBV (patient with both anti-HBV and HIV treatments were excluded); for the follow-up period, 5% of patients switched HBV treatment; 32% of patients stopped their treatment for the follow-up period. Patients who continued their treatment are compliant as MPR is respectively of 160% and 103% at 6 and 12 months while PDC values are 82% and 78%. No differences stood out among the different treatments, especially between Tenofovir and Entecavir (the two often prescribed HBV drugs). Moreover older patients tend to be more compliant than the youngest one. **CONCLUSIONS:** By using the IMS Lifelink longitudinal database this study highlights the fact that one third of patients treated with anti-HBV treatment stopped it within 18 months while these drugs are well tolerated. Therefore physicians' challenge consists consequently in motivating patients to continue their treatment even they feel asymptomatic.

PIN99

HAND HYGIENE COMPLIANCE OR THE INFLUENCING FACTORS OF EFFICIENCY IN THE SCOPE OF STUDENTS

Szebeni-Kovács G[1], Horváth-Hegyi K[2], Pakai A[3], Kalamár-Birinyi E[4], Boncz I[5], Fullér N[1], Müller Á[1], Oláh A[1]

[1]*University of Pécs, Pécs, Hungary,* [2]*University of Pécs, Szombathely, Hungary,* [3]*University of Pécs, Zalaegerszeg, Hungary,* [4]*County Hospital of Zalaegerszeg, Zalaegerszeg, Hungary,* [5]*Faculty of Health Sciences, University of Pécs, Pécs, Hungary*

OBJECTIVES: The prevalence of nosocomial infections is between 5-15%. Reduction of nosocomial infections, recognition in time and adequate treatment are all emphasised activities of patient security. The aim of this examination is to measure theoretical and practical knowledge of hand hygiene of nursing students in secondary education. **METHODS:** Cross-sectional qualitative and quantitative was made, with non-random, accidental samples in 2014 January with the participation of students in secondary nursing education (N=116) to whom the rules of sepsis, asepsis and antisepsis, and correct hand hygiene knowledge were taught according to the number of lessons in the curriculum. Self-made opened and closed questionnaires were applied, with a focus on the knowledge of hand hygiene. The technique and efficiency of hygienic hand disinfection was measured with an infrared lamp. χ^2-test, t-test, ANOVA were performed as a statistical method besides 95% probability ($p<0.05$). Data analysis was performed with SPSS 20.0 programs. **RESULTS:** The concept of disinfection was known correctly by 78% of the students, the exact terminology of nosocomial infection was known by 44%. Only 42 students thought that hands have the highest relevance in the transfer if infections. The preconditions of proper hand hygiene were indicated correctly by 11%. Examination with infrared lamp showed that 4 students implemented hand disinfection perfectly. The most common missed areas were: the back of the hand, phalanges, nails, thumb. **CONCLUSIONS:** Significant reduction of nosocomial infections may and must be reached, to which accurate theoretical and practical education of the students is required, and the acquirement has to be monitored continuously and strictly.

PIN100

DEVELOPMENT OF A SURVEY TO QUANTIFY PARENTS' PRIORITIES FOR VACCINATING CHILDREN AGAINST ROTAVIRUS

Hauber AB[1], Standaert B[2], Poulos C[1]

[1]*RTI Health Solutions, Research Triangle Park, NC, USA,* [2]*GlaxoSmithKline Vaccines, Wavre, Belgium*

OBJECTIVES: To identify and understand the importance of reasons mothers of young children would choose to vaccinate their child (ren) against rotavirus and the impact of vaccine features on vaccine choice and uptake. **METHODS:** Women with children 5 years of age or younger participated in a focus group and semi-structured interview to: (1) identify reasons they would choose to vaccinate their children against rotavirus independent of the clinical features or cost of the vaccine and (2) identify the clinical vaccine features that would influence their decision to vaccinate their children. A survey instrument was developed to elicit the relative importance of the reasons for vaccination. The survey also included a discrete-choice experiment (DCE) to elicit parents' preferences for clinical features of hypothetical vaccines and likely uptake of vaccines with different clinical features and cost. The survey instrument was used in 15 in-depth, face-to-face interviews and the findings were used to refine the list of reasons and the clinical vaccine features. **RESULTS:** Study participants identified 7 reasons influencing vaccination decisions – work disruptions, child-care disruptions, unplanned expenses, disruptions to routine, concern about child's discomfort, concern about child's health in the future, concern about spreading illness – and 6 clinical vaccine features influencing vaccine choice and uptake – number of illnesses prevented, severity of the illnesses prevented, duration of illnesses prevented by vaccine, location of vaccination (home or health care location), mode of administration (oral or injection), and age at which protection begins. Cost was also a relevant attribute in these decisions. The reasons for vaccination vary with the severity of illness. **CONCLUSIONS:** Deciding to vaccinate a child against rotavirus is the result of a decision process that is influenced by both the impact of rotavirus on the family, the severity of illness, and the clinical characteristics of the vaccine itself.

PIN101

CONFIRMATION OF THE FACTOR STRUCTURE OF THE PROQOL-HIV QUESTIONNAIRE TO ASSESS HEALTH-RELATED QUALITY OF LIFE IN PLWHA

Lalanne C[1], Duracinsky M[1], Marcellin F[2], Lert F[3], Chassany O[1], Carrieri PM[2], Dray-Spira R[3], Spire B[2]

[1]*Assistance Publique-Hopitaux de Paris, Paris, France,* [2]*INSERM, Marseille, France,* [3]*Inserm, Villejuif, France*

OBJECTIVES: To identify a parsimonious factor structure for the 43-item PROQOL-HIV questionnaire as an easy-to-use instrument for measuring health-related quality of life in clinical studies. **METHODS:** Using a representative sample of 3,022 HIV-infected patients from the Vespa2 French national survey, HRQL was summarized using the 8-dimension PROQOL-HIV questionnaire. Exploratory Factor Analysis (FA) was used to isolate 4 correlated factors. Dimensionality and internal consistency were checked using parallel analysis and Cronbach's alpha. A confirmatory FA was applied on the international validation sample (N=791, 8 countries). Summated scale scores were compared to individual scores computed from FA and partial credit models. **RESULTS:** The four dimensions down to: physical health and symptoms (11 items, α=0.931), health concerns and mental distress (10 items, α=0.908), social and intimate relationships (7 items, α=0.898), and treatment impact (10 items, α=0.936). Four items exhibited PROMAX rotated loadings < 0.4, three of which were found to cross-load on two factors. This four-factor solution suggests acceptable fit to the international validation sample (RMSEA=0.082, 90% CI [0.079; 0.084]; NNFI=0.880). Correlations between unweighted sum scale scores and factor or IRT scores were above 0.9 in most cases. **CONCLUSIONS:** PROQOL-HIV is the only specific scale taking into account patient's experience with treatment. This simplified scoring version will allow researchers and clinicians to better

monitor and to correlate HRQL improvements in patients undergoing different treatment strategies.

PIN102
IMPACT OF SIMEPREVIR VERSUS TELAPREVIR TRIPLE THERAPY FOR CHRONIC HCV INFECTION ON PATIENT-REPORTED OUTCOMES IN PRIOR NON-RESPONDERS TO PEGINTERFERON/RIBAVIRIN RESULTS FROM THE PHASE III ATTAIN STUDY
Scott J[1], Corbett C[2], Gilles L[2], Wan G[3], Sbarigia U[4], Jessner W[3]
[1]Janssen Global Services, LLC, High Wycombe, UK, [2]Janssen Research and Development, Beerse, Belgium, [3]Janssen Pharmaceutica NV, Beerse, Belgium, [4]Janssen Global Services, Beerse, Belgium
OBJECTIVES: In ATTAIN, a Phase III, randomised, head-to-head comparison study of simeprevir versus telaprevir, both with peginterferon/ribavirin (PR), in HCV genotype 1-infected prior null or partial PR responders, simeprevir exhibited better safety and tolerability. In this analysis, the impact on patient-reported outcomes (PRO) was analysed. **METHODS:** Patients received simeprevir (150mg QD) or telaprevir (750mg TID, 7-9hrs apart) +PR for 12wks followed by PR alone (36wks) in a double-blind, double-dummy design. PRO questionnaires, completed at baseline, throughout treatment and at follow-up, rated fatigue severity (FSS), depressive symptoms (CES-D), work and daily activities impairment (WPAI: Hepatitis-C), health-related quality of life (EQ-5D visual analogue scale), and skin symptoms (Skindex-16). During simeprevir/telaprevir treatment, between-treatment mean-value differences were calculated using area-under-the curve to Wk12 (AUC_{12}) for all measures except Skindex-16 where maximum (worst) scores during the first 12 wks were used. Subgroup analyses evaluated the impact of SVR12, age, fibrosis and treatment completion. **RESULTS:** Compared with normative studies, baseline PRO scores indicated greater fatigue, depressive symptoms and daily activities impairment. Mean PRO scores in both groups worsened during the first 12 weeks of treatment, remained stable through Week 48 and returned to values close to baseline at end of treatment. Clinically relevant between-treatment differences in FSS, CES-D, Skindex-16 and EQ-5D scores indicated less impairment with simeprevir than telaprevir. AUC_{12} between-treatment differences significantly favoured simeprevir for FSS ($p=0.003$), WPAI Activity Impairment ($p=0.022$), and EQ-5D ($p<0.001$). Mean Skindex-16 maximum total ($p=0.0087$) and subscale scores were significantly lower for simeprevir. Subgroup analyses showed less impairment with simeprevir versus telaprevir on most PRO scores in patients who failed treatment, were >45 years old or had advanced fibrosis. **CONCLUSIONS:** Simeprevir/PR resulted in less fatigue, depressive and skin-related symptoms and less impairment in daily activities than telaprevir/PR. These findings provide valuable information on the tolerability of these regimens from the patient perspective.

PIN103
SATISFACTION OF HIV PATIENTS WITH PHARMACY SERVICES IN SOUTH EASTERN NIGERIAN HOSPITALS
Ekwunife OI
Nnamdi Azikiwe University, Agulu Campus, Nigeria
OBJECTIVES: The greatest burden of the HIV infection is felt in sub-Saharan Africa. Nigeria is rated among the first three largest countries with HIV population. Pharmacists play an important role in the care of HIV patients especially by providing pharmaceutical care. Thus it is imperative to assess the experience and satisfaction of HIV patients with the pharmaceutical services they receive as this will ensure that quality care is rendered. The objective of this study was to assess HIV-infected patients' satisfaction with pharmacy services provided in South-Eastern Nigeria's HIV/AIDS clinics. A secondary aim was to repeat the validation process in order to confirm the initial validation of PSPS questionnaire. **METHODS:** The survey was conducted in 6 HIV/AIDS clinics in South-Eastern Nigeria. Multi-stage sampling technique was used to select the clinics. Re-validation techniques employed include factor analysis, reliability test, and construct validity. The level of satisfaction of the participants was determined. Variance in satisfaction score among the different demographic variables was also assessed. **RESULTS:** The response rate was 81.85%. The Cronbach alpha value was 0.84. The 16 items of PSPS questionnaire resolved into 4 factors as established by the initial validation exercise. Re-validation of the PSPS Questionnaire's construct revealed the same result obtained in the original validation as items that were related showed convergence while items that were not related showed divergence. With the exception of item 12, the average score obtained in the survey was high. Most of the average scores ranged from 4 to 5, signifying that responses ranged from agree to strongly agree. **CONCLUSIONS:** HIV patients were highly satisfied with services rendered by the pharmacists in South-Eastern HIV clinics in Nigeria and PSPS proved to be a reliable and valid instrument for measuring satisfaction of HIV patients with pharmacy services.

INFECTION – Health Care Use & Policy Studies

PIN104
KNOWLEDGE OF HIV STATUS OF ADOLESCENTS AND YOUNG ADULTS ATTENDING AN ADOLESCENT HIV CLINIC IN ACCRA, GHANA
Nuamah GB[1], Agyei-Baffour P[2]
[1]Korle Bu Teaching Hospital, Accra, Ghana, [2]Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana
OBJECTIVES: In Ghana it is estimated that 1.7% of HIV infections occur in young people aged 15-24. Despite this the representation of young people in our clinics is small. Adherence to treatment, appointment keeping and knowledge of HIV status remain a challenge. Disclosure has been shown to confer the following benefits. The study sought to assess the knowledge of HIV status of adolescents and young adults. **METHODS:** A baseline study was conducted to ascertain if adolescents and young adults knew their HIV status and also determine their knowledge on HIV in general with 34 participants. An adolescent club was established to engage with young people, provide better tailored care and support and to solve their peculiar challenges. Self-administered questionnaires were used and data were analyzed with SPSS version 16. **RESULTS:** The mean age was 16.9 ± SD 2.5 and 21 (62%) were mainly females and in school. Four were in primary school, 14 in junior secondary school, 12 in senior secondary and another 4 in tertiary institutions. Most (85%) were aware that young people their age could fall sick, 91% had heard of HIV, 70% knew someone with HIV and 45 % thought that adolescents were not at risk of HIV. Eighteen (52.9%) knew their HIV status, 17 (50%) were on antiretroviral and 32% of these admitted to missing Anti-Retroviral (ARVs) dose. **CONCLUSIONS:** Disclosure of HIV status to adolescents and young people is dependent on a complex mix of factors and most practitioners recommend an age and developmentally appropriate disclosure. The knowledge and awareness of HIV was 91%. There is also the need to support care givers to disclose HIV status and to support young people to adhere to ARVs for better outcomes. **KEYWORDS:** Knowledge; Disclosure Adolescents/Young Adults; HIV, Ghana.

PIN105
IMPLEMENTATION OF TECHNOLOGIES BASED ON THE EVIDENCE-BASED MEDICINE AND HTA IN THE MANAGEMENT OF HEPATITIS C
Lishchyshyna O, Melnyk Y, Migel O
The State Expert Center of the Ministry of Health of Ukraine, Kyiv, Ukraine
OBJECTIVES: The health care system of Ukraine is being transformed according to the modern world format. More and more doctors are aware of the need for the use of technologies based on evidence-based medicine, particularly in the management of hepatitis C. **METHODS:** In 2013 the multidisciplinary working group involving professionals and patients developed an adapted clinical guideline, based on HTAs and strategies of evidence-based medicine on the treatment of hepatitis C, and unified clinical protocol "Viral hepatitis C". **RESULTS:** The differences in the treatment of hepatitis C in Ukraine compared to the best international practice were revealed and considered while developing medical and technological documents for health care in hepatitis C. Doctors and the public were informed of modern evidence-based technologies concerning management of the hepatitis C. As a result, the multidisciplinary working group adapted these documents of best methodological quality. Introduction of these documents reorients doctors on a modern approach to the assessment of scientific medical information. The unified clinical protocol contains provisions for minimum acceptable quality of primary and specialized medical care and the algorithms of patient's identification. **CONCLUSIONS:** Provision of changes in the current medical practice is associated with the introduction of modern medical technologies based on evidence-based medicine. Ukraine has implemented the algorithm for the use of best practice: a multidisciplinary working group adapts clinical guidelines based on evidence → creates unified clinical protocols → each health institution develops local protocols, taking into account the resources of a health facility and interaction of these institutions.

PIN106
MODELLING THE RELATIONSHIP BETWEEN SUSTAINED VIROLOGIC RESPONSE AND TREATMENT UPTAKE RATES ON FUTURE PREVALENCE AND INCIDENCE OF HEPATITIS C IN THE UK
Bennett H[1], McEwan P[2], Ward T[1], Kalsekar A[3], Yuan Y[3]
[1]Health Economics and Outcomes Research Ltd, Monmouth, UK, [2]Health Economics and Outcomes Research Ltd, Cardiff, UK, [3]Bristol-Myers Squibb, Princeton, NJ, USA
OBJECTIVES: The prevalence of the hepatitis C virus (HCV) remains high amongst people who inject drugs (PWID) and accounts for the majority of newly acquired infections. This study aims to quantify the value of treatment amongst PWID with new direct acting antivirals (DAAs) at increased uptake rates, with respect to the avoidance of future infections and subsequent long-term complications of HCV. **METHODS:** A dynamic HCV transmission and disease progression model was developed, incorporating acute and chronic infection and their long-term complications (decompensated cirrhosis, cancer, liver transplant and mortality), with the potential for reinfection following treatment failure. The model was populated with prevalence and therapy data from a UK setting. Scenarios of current standard of care (SoC) treatment efficacy and uptake were compared to anticipated sustained virologic response (SVR) rates of 90–100% and increased uptake over varied horizons. **RESULTS:** SoC led to modest reductions in prevalence; >5% after 200 years. New treatments achieving 90% SVR could reduce prevalence below 5% within 60 years at current uptake rates or within 5 years if all patients are treated. Amongst 4,240 PWID, chronic HCV infections avoided as a result of increasing treatment uptake over the period 2015–2027 ranged from 20–580 and 34–912 with SoC and 90% SVR rates respectively. The reduction in downstream HCV infections due to increasing treatment uptake resulted in an approximate discounted gain of 300 life-years (from avoiding reduced life expectancy from HCV infection) and a gain of 1,700 QALYs (from avoiding the disutility of HCV infection and related complications), with a projected £5.4 million cost saving. **CONCLUSIONS:** While improved SVR profiles led to reductions in modelled prevalence, increased treatment uptake was the key driver of future infections avoided. Increased treatment among PWID, with new more efficacious therapies, could significantly change the future dynamics, cost and health burden of HCV-related disease.

PIN107
PRESCRIPTION PRACTICES FOR UNCOMPLICATED MALARIA AT TWO PUBLIC HEALTH FACILITIES IN NIGERIA; A DESCRIPTIVE, COMPARATIVE STUDY
Ezenduka CC[1], Okonta J[2], Esimone CO[1]
[1]Nnamdi Azikiwe University, Awka, Nigeria, [2]University of Nigeria, Nsukka, Nigeria
OBJECTIVES: Poor adherence to treatment guidelines undermines the goals of malaria treatment with implications for worsening malaria burden. This study analyzed the diagnostic and prescription practices for uncomplicated malaria at two levels of public health facilities in Nigeria, to assess the current state of compliance to policy. **METHODS:** Retrospective audit of patients' records for uncomplicated malaria was carried out at a primary/secondary and tertiary health facilities. Demographics, diagnostic information, medication and cost data were extracted. Data from the two facilities were analyzed and compared for similarities and