PROJECTING CHANGES IN TOTAL DAYS OF THERAPY (DOT) IN PATIENTS HOSPITALIZED FOR ACUTE BACTERIAL SKIN AND SKIN STRUCTURE INFECTION (ABSSSI)

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OBJECTIVES: Most patients admitted to hospital for ABSSSI complete antibacterial therapy following discharge. This study examined the potential impact of tedizolid versus linezolid on antibacterial DOT, based on real-world inpatient use of linezolid in patients hospitalized for ABSSSI, and two pivotal phase 3 studies of patients with ABSSSI that demonstrated comparable efficacy and safety between a 6-day course of tedizolid (once-daily) and a 10-day course of linezolid (twice-daily).

METHODS: Duration of in-hospital therapy for ABSSSI was based on analyses of an electronic database containing comprehensive clinical records on ~38 million inpatient admissions in the United States. The rate of tuberculous therapy in TB is not only costly but also causing a significant economic burden in the order of USD616 million/year as reported by World Health Organization (WHO) in 2014. This study aimed to evaluate the economic impact of TB control in Malaysia using a dynamic transmission model.

RESULTS: Despite all the control efforts, Malaysia has yet to effectively reduce the TB incidence rate. Table 2 monitors the TB control rate in Malaysia. The TB incidence rate has been reduced from 126 cases per 100,000 population in 1990 to 36 cases per 100,000 population in 2015. This reduction was achieved through a multidisciplinary approach involving the Ministry of Health, community-based organizations, and the general public.

CONCLUSIONS: A large part of the drugs purchased within the guaranteed volume of free medical aid in the Republic of Kazakhstan consist from basic beta-lactam antibiotics. The list were presented the outdated drugs (gentamicin), which is not recommended for use. Predominant drug are drugs from domestic pharmaceutical companies.

EVALUATION OF ECONOMIC IMPACT OF TUBERCULOSIS CONTROL IN MALAYSIA USING DYNAMIC TRANSMISSION MODEL

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THE STUDY OF HEALTHCARE UTILIZATION AMONG HIV-INFECTED POPULATION: AN ANALYSIS OF THE MEDICAL EXPENDITURE PANEL SURVEY

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OBJECTIVES: The objective of this study is to examine the decisive factors associated with the utilization of antiretroviral therapy (ART) among a Human Immunodeficiency Virus (HIV) infected population utilizing Andersen’s Behavioral Model. METHODS: This study is a retrospective data analysis of individuals infected with HIV in panels 14 to 16 of the Medical Expenditure Panel Survey in years 2009 to 2012. A logistic regression model was conducted to evaluate the association between ART usage and the factors nested in Andersen's Behavioral Model, which includes predisposing, enabling, and need components. RESULTS: For predisposing characteristics, patients taking ART were slightly older (age: 46.14±0.98) than patients not taking ART (age: 43.34±0.91). Being a male and African American was highly associated with the use of ART, as compared to being a female or white (P value: <0.0001, 0.0019). People living in the Northeast were more likely to take ART than individuals living in other parts in the United States (P value: 0.0012). Among enabling components, difficulty in receiving medical care and having non-public insurance coverage were associated with not taking ART (P value: 0.0851, 0.0013). Having private insurance coverage was positively correlated with nonuse of ART (odds ratio: 0.190; 95% CI: 0.131-0.277). Having public insurance or no insurance was negatively associated with ART use (P value: 0.00003). However, family income was not associated with the use of ART among the HIV-infected population. With respect to the health status of the need component, using ART was associated with reported improved health status and with those noting difficulty in receiving medical care, but the association was not statistically significant.

CONCLUSIONS: Predisposing and enabling factors were found to be significantly associated with ART usage; however, need factors were not found to be significant. More research is needed to improve the healthcare utilization inequality among minority populations.

ANALYSIS OF PURCHASE OF ANTIBACTERIAL DRUGS WITHIN THE GUARANTEED VOLUME OF FREE MEDICAL AID IN THE REPUBLIC OF KAZAKHSTAN

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OBJECTIVES: Study of drug coverage in the Republic of Kazakhstan as one of the most important components of medical care and an important measure of government support of citizens. METHODS: The List of drugs for purchase in 2014 by Single Distributor “SK-Pharmacy” was analyzed. The percentage of antimicrobial drugs for certain groups of antibiotics and synthetic antibacterial agents of different chemical structure was studied. The analysis of drugs from domestic and foreign drug manufacturers was performed. RESULTS: Among all antibacterial drugs a big part consisted from antibiotics - 71%, synthetic chemotherapeutic drugs amounted to 29%. The share of antibiotics in each therapy group varied from 10% to 90%. In general, the share of 2nd generation cephalosporins was 40%, 3rd generation cephalosporins - 30%, penicillins - 20%, and monobactams - 10%. The share of semisynthetic aminoglycosides following drugs were bought: amikacin, kanamycin, streptomycin, gentamicin. Synthetic antibacterial drugs of different chemical structures were represented mainly by fluoroquinolones (66.67%): moxifloxacin, ofloxacin, norfloxacin, pefloxacin, ciprofloxacin. The half (50%) of procured medicines are products of domestic pharmaceutical companies. The main importers of antimicrobial medicines are: India (25.8%), Russia (16%), China (9.7%), Ukraine (8%), France (6.5%), and manufacturers from other countries consisted 32%. CONCLUSIONS: A large part of the drugs purchased within the guaranteed volume of free medical aid in the Republic of Kazakhstan consist from basic beta-lactam antibiotics. The list were presented the outdated drugs (gentamicin), which is not recommended for use. Predominant drug are drugs from domestic pharmaceutical companies.

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