

targeted interventions to improve prescribing practices and patient safety.

PHP12

MEDICINE PRICES, AVAILABILITY AND AFFORDABILITY IN RAJASTHAN, INDIA

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OBJECTIVES: High prices and poor availability of medicines are major barriers to better health in poor countries. In India, more than 80% of health care expenditure is “out-of-pocket”. The study was undertaken to assess medicines prices and the availability of essential medicines in Rajasthan State, India. **METHODS:** Price and availability data for 36 medicines were measured using a methodology developed by WHO and Health Action International (HAI). For each medicine, data was collected for the Innovator Brand (IB), Most Sold Generic (MSG), and Lowest Priced Generic (LPG). In each of four randomly selected regions, five public facilities, five private retail and five co-operative pharmacies were surveyed. Prices were compared to an international reference benchmark (expressed as Median Price Ratios-MPR). **RESULTS:** In the public sector, generic medicines were purchased and provided free of charge to various categories of people. Procurement prices were reasonable (median MPR 0.96) but the median availability was only 40%. In the private sector, the median MPR for IB, MSG and LPG was 2.81, 2.72 and 1.83 respectively. The median availability was 0% for IBs, 82.5% for MSGs and 95% for LPGs. Prices in the co-operative sector were similar to the private pharmacies, but the availability was lower. In the private sector, the MPR for three medicines (LPG) were 8 to 26 times higher than the government procurement prices, indicating very high margins for wholesalers and retailers. **CONCLUSIONS:** As the availability of medicines in the public sector is low, people have to purchase medicines in the private sector, many of which are high in price. This baseline survey shows that the Indian government needs to implement policies to increase the availability of medicines in the public sector and reduce prices in the private sector.

PHP13

ENHANCING THE SAFETY OF OTC MEDICATION USE FOR HISPANIC CONSUMERS WITH BILINGUAL LABELS

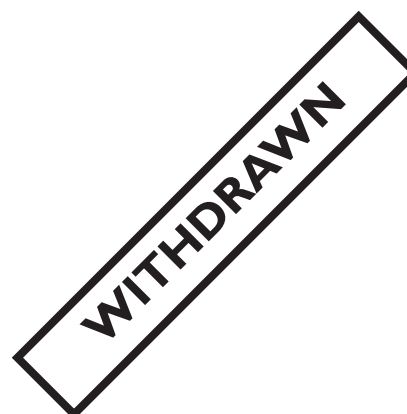
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OBJECTIVE: Hispanic consumers who do not speak English may have difficulty in interpreting information provided on Over-the-Counter (OTC) medication labels. This study developed bilingual Product Information Labels (PILs) for OTCs and compared them to existing OTC labels. **METHODS:** The study had a randomized-within subjects design. Three hundred and thirty-six consumers, from pharmacy stores in Houston, TX, participated in the study. Participants were selected randomly and they viewed, in a random order, each label format for acetaminophen, ibuprofen and aspirin. Each label was followed by a questionnaire for participants. Consumers were divided into three language categories, namely, only English-speaking, only Spanish-speaking and bilinguals. Variables measured on the questionnaire were ease of use, product knowledge, attitude towards product label, product evaluation and purchase intention. Data were coded and analyzed using the SAS statistical

package (Version 9.0). Descriptive and comparative statistics were computed for each variable as well as for all label formats. **RESULTS:** Means obtained for PILs were significantly different from those obtained for old and new formats ($p < 0.05$) for all consumer categories. A majority of participants were very certain that they understood the information on PILs (68.15%) and were very satisfied (74.11%) that they understood this information shown on the package label. Moreover, about 85% of participants who used the Spanish language information on PILs found it very useful. **CONCLUSIONS:** Bilingual PILs, as compared existing label formats, are an effective means of providing information to all Hispanic consumers. These results may help the FDA in developing policies to enhance the safety of OTC medication used for the large Hispanic population in the USA.

PHP14



PHP15

THE CORRELATION OF SATISFACTION OF MEDICARE BENEFICIARIES WITH ACCESS AND QUALITY OF CARE

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OBJECTIVES: Donabedian described client satisfaction as “the ultimate validator” of quality in health care. Identify items in the Medicare Current Beneficiary Survey (MCBS)—2002 as measured by satisfaction regarding health care access that correlate with satisfaction with quality of care. This is the first step in developing a new model that relates health care access to health care quality as measured by consumer/patient satisfaction. **METHODS:** Access items from the survey were measured by a 4-point satisfaction scale: 1 = very satisfied to 4 = very dissatisfied. Only responses on the 1 to 4 scale were used; all other responses or non-responses were considered as missing data. The missing data then were imputed employing the EM algorithm; complete cases were used in the analysis (N = 16,087). A linear regression model by weighted least squares using the one-year cross-sectional weights from the MCBS is done using items in the survey, measured by satisfaction, that correspond to Penchansky and Thomas’ five dimensions of health care access—accessibility, acceptability, accommodation, affordability, and availability—and are regressed on the dependent variable MCQUALITY (satisfaction with medical care received in last year). **RESULTS:** The regression model identified sixteen of 20 eligible items that significantly correlated ($p < 0.05$) to satisfaction with quality of care in the Medicare population of 2002. **CONCLUSIONS:** Health care access and quality of care as measured by satisfaction have significant correlation in the Medicare population.

PHPI6

THE IMPACT OF THE PHARMACY AND THERAPEUTICS COMMITTEE ON THE PATIENTS’ ACCESS TO PRESCRIPTION DRUGS IN THE SAUDI MINISTRY OF HEALTH: EXPLORATORY AND COMPARISON STUDY

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The Saudi Arabian Ministry of Health (MOH) controls the utilization of the free pharmacy benefit program (PBP) by having a closed universal formulary and ensures the effectiveness of the PBP by instituting a pharmacy & therapeutics (P&T) committee in each hospital. **OBJECTIVES:** To test the relationship among the levels of development P&T committees and patients’ access rates to prescription drugs. **METHODS:** A cross-sectional descriptive survey design was conducted in the first phase and covered 127 MOH pharmacy managers at non-specialized hospitals. The survey gathered information about: hospital, pharmacy, and P&T committee characteristics. The survey results were used to classify the MOH hospitals according to the levels of development of the P&T committee. In the second phase, the prescription audit phase, hospitals deliberately were selected based on the hospitals’ P&T committee levels of development. From each hospital, 150 patient records were systematically sampled and patient’s access rate was calculated for each patient. Analysis of variance (ANOVA) was used to test the existence of a significant difference in the access rates across the levels of development of P&T committee. **RESULTS:** Of 127 MOH hospitals, 81 (63.7%) hospitals were valid for the analysis. Of 81 hospitals, 13, 24, 39, 5 hospitals have undeveloped, poorly, partially, and developed P&T committees, respectively. A total of 6885 prescription drugs were prescribed for 2850 patients in 19 audited hospitals. The overall rate for patients’ access was 97.3%. The ANOVA tests for the existence of a significant difference of access rates across the levels of development of P&T committee showed mixed results. **CONCLUSIONS:** The positive relationship between the levels of development of P&T commit-

tee and patient’s access to prescription drugs was not conclusive. However, the finding might be due to lack of enough data and controls of other confounding variables rather than inexistence of the relationship.

PHPI7

IMPACT OF CO-PAY DIFFERENTIAL ON GENERIC PRESCRIPTIONS FILLED THROUGH 90-DAY RETAIL CHANNEL

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OBJECTIVES: A newly developed 90-day retail-dispensing program allows members to obtain 90-day supplies of maintenance medications through a retail pharmacy stores at a discount co-payment. The objective of this study is to investigate if there is any relationship between generic utilization observed in prescriptions dispensed through this channel and members’ co-pay difference between brand and generic medications. **METHODS:** The analysis was conducted using pharmacy claim data obtained from a pharmacy benefit management organization. Clients included in the analysis were those who implemented the 90-day retail program from January 2004 to July 2004 and also allowed its members to obtain prescriptions through both 90-day mail and 30-day retail channels. The relationship between generic utilization and co-pay structure was assessed using multiple regression analysis. The dependent variable was proportion of generic prescription claims dispensed through 90-day retail channel. The independent variables were ratio of brand to generic cost, the absolute co-pay amount difference between brand and generic medications, age, gender, and prior generic utilization of 90-day mail as well as 30-day retail program. **RESULTS:** A total of 25 clients were included in the analysis. In 90-day retail program, the generic utilization ranged from 21.5% to 77.5%, ratio of brand to generic cost varied from 1.9 to 6.2, and absolute co-pay amount difference between brand and generic medications varied from \$11.2 to \$101.5. A linear, positive relationship was observed between generic utilization and ratio of brand to generic cost ($P < 0.05$). Previous 90-day mail generic utilization was also found to have positive impact on the 90-day retail generic utilization ($P < 0.05$). **CONCLUSIONS:** Study results indicate an increase in co-pay difference between brand and generic medications do have a positive impact on 90-day retail generic utilization. Further investigation is needed to test the relationship between co-pay structure and generic utilization among different channels.

PHPI8

IMPACT OF STEPS (SAFE, THERAPEUTIC AND ECONOMIC PHARMACEUTICAL SELECTION) MODEL ON PRESCRIBING COSTS OF STATINS

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OBJECTIVE: STEPS is a structured model for the selection of drugs for formulary inclusion. The aim of this study was to use the STEPS model in the selection of statin products for use within a health board in Northern Ireland. **METHODS:** The STEPS model involved three phases in sequence: an evidence based pharmacotherapeutic evaluation of all available statin drug entities in the UK, a separate safety/risk assessment analysis of product lines of drug entities which exceeded the pharmacotherapeutic threshold and finally a budget impact analysis. A