EVALUATING THE BENEFITS WITH TECLEARE AMONG RESIDENTS IN NURSING HOMES IN TAIWAN

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OBJECTIVES: The skyrocketing cost of health care is a crucial issue in Taiwan. This study aimed to evaluate a demonstrative project launched in 2008 whether a telecare management program (T-Care) via internet-based medical tele-consulting and physiological monitoring and health education services, could reduce medical utilization by patients with chronic cardiovascular disease or diabetes mellitus.

METHODS: Study subjects were 102 patients residing in two nursing homes located in Keelung City and Taipei County, Taiwan. These residents received telecare management services from a district hospital in Taipei County during 2008. National Health Insurance (NHI) Claims data in 2007 and 2008 were gathered on medical utilization. The pre- and post-intervention effects were examined by comparing monthly utilization on inpatient care, outpatient care, emergency room care using Two-Part models. Unscheduled medical services were defined as utilization of emergency care or inpatient care.

RESULTS: Significant decreases were found in the monthly probability of seeking any outpatient visit (92.1 vs. 85.6, P = 0.0035), but decreased in the monthly probability of seeking any emergency care or any inpatient care were not significant. For users of each type of care, decrease in number of monthly hospitalizations (1.13 vs. 1.10, P = 0.00987) and number of monthly emergency room visits (1.25 vs. 1.11, P = 0.0547) were found, but decreases in outpatient visits was not significant. Decreases in the total unscheduled NHI resource costs were found (14,548 vs. 14,403). The estimated total annual savings from unscheduled medical services for the study subjects were estimated to be NT$177,627 (1 US$ = 31.91 NT$ in 2008).

CONCLUSIONS: T-Care may reduce medical costs in patients residing in the nursing homes with reduced rates of readmission to the hospital. Larger clinical trials with larger sample size and controls are warranted to determine the benefits of the T-care.

THE IMPACT OF METABOLIC SYNDROME ON QUALITY OF LIFE AND RESOURCE USE IN CHINA AND THE UNITED STATES

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OBJECTIVES: The objective of this study was to better understand the health outcomes of patients with metabolic syndrome in the United States and China.

METHODS: This study utilized data from two large, cross-sectional, Internet-based surveys: the 2009 US and 2009 China National Health and Wellness Surveys (NHWS). Patients were defined as having metabolic syndrome if they met three of the following conditions: having a body mass index greater or equal to 30, a diagnosis of high cholesterol, hypertension, or diabetes. Patients who met these criteria were then compared with those who did not (controls) on health-related quality of life (physiological component scores of the SF-12v2), the number of emergency room (ER) visits in the last 6 months, and the number of hospitalizations in the last 6 months, controlling for demographics (country, age, gender, ethnicity, income, education) and patient characteristics (BMI and Charlson comorbidity index).

RESULTS: A total of 3,000 patients (13.6%) in the United States and 79 patients (0.0001%) in China were classified as having metabolic syndrome. After controlling for demographics and patient characteristics, those with metabolic syndrome reported significantly lower levels of PCS relative to controls (Mdiff = 43.4 vs. 48.0, P < 0.0001). This effect was maintained in the United States and China across both countries; controls patients reported significantly more ER visits than metabolic syndrome patients (β = 0.01, P = 0.02). However, this effect was largely due to the effect observed in the United States. Metabolic syndrome patients reported significantly more ER visits than controls in China (Mdiff = 1.42 vs. 0.41, P < 0.0001). CONCLUSIONS: While patients in the United States were more likely to have metabolic syndrome relative to China, quality of life effects were similar in the two countries and there was a significantly greater disparity in ER visits between metabolic syndrome patients and controls in China than the United States.

PATTERN OF LIPID MODIFYING AGENTS PRESCRIPTION AMONG CLUSTERS OF PHYSICIAN IN A THAI TEACHING HOSPITAL, FISCAL YEAR 2009

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OBJECTIVES: Lipid modifying agents (7.63% of total drug expenditure in 2009) were prescribed by several specialists in a Thai teaching hospital. Cluster analysis was applied to group prescribing physicians by drug costs. Pattern of prescription among clusters was studied.

METHODS: Data of drugs in Anatomical Therapeutic Chemical class C10 (lipid modifying agents) were retrieved from a hospital database, and unidentified physician records (1758 from 205,964) were deleted. Drug cost for each prescribing physician was the summation of C10 drug issued quantity multiplied by unit cost at selling price. Drug costs for each physician were then grouped by hierarchy among clusters; one family medicine doctor, one gynecologist in the first; two internists in the second; four internists, one family medicine doctor, one gynecologist in the third and the rest in the fourth cluster. Pattern of C10 drugs was 76.2% brand statins, 19.1% brand non-statin, 3.3% generic statins, and 1.4% non-statin. In the first cluster, 97.3% of the 13.3 million Baht was from brand statins. For the second cluster, 9.15 and 9.88 million Baht was each prescribed by two doctors with 65.7% from brand statins and 32.2% from brand non-statin.

RESULTS: The final result will be applied and modified before presentation.

ADHERENCE TO ANTIHYPERTENSION MEDICATIONS: A QUALITATIVE STUDY AMONG OUTPATIENTS VISITING PUBLIC HOSPITALS IN THE CITY OF QUETTA, PAKISTAN

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OBJECTIVES: The main aim of this study is to examine the perception of hypertensive patients toward adherence toward their medication in actual practices. DESIGN: Qualitative In Depth Interviews. SETTINGS: Hypertensive patients visiting public hospitals in Quetta City, Pakistan. METHODS: A qualitative approach was used. A purposeful sample of patients with known diagnosis of hypertension attending public hospitals in Quetta City, Pakistan were interviewed using a semi-structured interview guide. All the interviews were transcribed verbatim and were thematically analyzed.

RESULTS: Thematic content analysis yielded five major themes: 1) perceived benefits and risk of drugs; 2) physician attitude and general behavior; 3) perception toward traditional remedies; 4) general ideology toward drugs; and 5) believes toward hyper tension and its control. A number of patients had specific and consistent reservations regarding drug use in general regardless to the nature of disease or condition. Drug usage and adherence was connected to patients’ beliefs and attitudes and experiences that have an impact on decision-making and medication adherence. In general, adherence to medication seems to be poor and need to be enhanced. Beside that knowledge toward hypertension causes and treatment is also very poor among patients interviewed and this need to be addressed for a successful treatment outcome.

HEALTH-RELATED QUALITY OF LIFE AFTER PERCUTANEOUS CORONARY INTERVENTION IN PATIENTS WITH ACUTE CORONARY SYNDROMES

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OBJECTIVES: This study sought to investigate the health status outcomes (health-related quality of life and utility weights) after percutaneous coronary intervention (PCI) in patients with acute coronary syndromes (ACS). METHODS: This was a prospective observational study targeted for the patients underwent PCI with ACS in 48 tertiary hospitals. We assessed the ACS-specific health status (with the use of the Seattle Angina Questionnaire [SAQ]) and the general health status (with the use of the EuroQol Visual Analogual Scale [EQ-VAS] and EuroQol 5-Dimensional Classification [EQ-5D]) within 1 week after PCI. RESULTS: A total number of 349 patients were included; average 63.4 aged, 67.3% male, 82.2% non-ST-segment-elevation ACS (NSTE ACS). The mean (±SD) SAQ scores (which range from 0 to 100, with higher scores indicating better health status) were 78 ± 23 for physical limitations, 41 ± 30 for angina stability, 70 ± 24 for angina frequency, 77 ± 14 for treatment satisfaction, and 48 ± 19 for quality of life. Analyzing by diagnosis class, NSTE ACS patients had the significant lower scores in all SAQ domains than STE ACS. The other health status outcomes, mean (±SD) EQ-VAS scores (which range from 0 to 100) were 70 ± 19 and mean (±SD) EQ-5D scores (which mean utility weights, and range from 0 to 1) were 0.80 ± 0.28. In utility weights, NSTE ACS patients (0.78 ± 0.29) also revealed the lower scores than STE ACS (0.87 ± 0.23). The utility weights of female (0.82 ± 0.28) is lower than those of male (0.82 ± 0.28), and older patients showed lower utility weights (<55 aged: 0.89 ± 0.24, 55~64: 0.81 ± 0.26, 65~74: 0.76 ± 0.31, 0.71 ± 0.26). CONCLUSIONS: The health status of patients of disease-specific measure and general measure showed similar tendency. Further follow up survey is needed to explore the health-related quality of life among ACS patients underwent PCI.COMMENT: The results were described based on the interim results of KOREAN MUSTANG study; The final result will be applied and modified before presentation.
PERCEPTION OF PATIENTS ON WARFARIN THERAPY TOWARD PHARMACIST-MANAGED ANTICOAGULATION SERVICE IN AMBULATORY CARE SETTINGS IN SINGAPORE

OBJECTIVES: Patient perception has been shown to affect the success of pharmacist-managed clinics such as the anticoagulation clinic (ACC). However, such findings are yet to be elucidated in Singapore. The primary objective of this study was to assess patients’ perceptions and acceptance of pharmacist-managed ACC in the primary care settings in Singapore. The secondary objective was to identify factors that may affect patient satisfaction and knowledge on warfarin therapy. METHODS: This was a cross-sectional, quality assurance, telephone survey conducted from September to December 2009. All patients referred to the pharmacists-managed ACC from nine primary care institutions for at least one visit were included, and those with hearing difficulties were excluded. The questionnaire was administered mainly in English, Chinese or Malay, and consisted of three sections: 1) patient demographics, 2) a 20-item, five-point Likert scale patient satisfaction questions, and 3) a five-item warfarin knowledge questions. RESULTS: A total of 149 (39.9%) surveys were eligible for analysis. The majority (64.6%) of respondents categorized into Friendly Explanation and Managing Therapy education level and age were not associated with patient satisfaction. Age (p = 0.03) and education level (p = 0.01) were negatively and positively correlated with warfarin knowledge, respectively. CONCLUSIONS: Overall, patients found the ACC pharmacist to be friendly and were satisfied with the management of the service. Patient demographics did not affect patient satisfaction. Age and education level, however, showed to affect warfarin knowledge.

THE IMPACT OF SWITCHING PATIENTS TO ROSUVASTATIN ON HEALTH-CARE EXPENDITURE AND PREVENTION OF CARDIOVASCULAR DISEASE: A COHORT STUDY

OBJECTIVES: To assess the impact on the health-care expenditure and prevention of hospitalization of cardiovascular disease (CVD) for beneficiaries of Taiwan’s National Health Insurance (NHI) scheme who received rosuvastatin (RSV) become available in NHI’s benefit package in May, 2005. METHODS: Using NHI’s claim data of a nationally representative random sample (consisting of 1 million of eligible beneficiaries) from 2004–2008, we classified patients > 20 years of age who received other statins before May 2005 and switched to RSV during May 2005 to April 2006 into switch group (N = 1,040). Other patients who received statins therapy except RSV before May 2005 and throughout 2008 were classified into control group. Using propensity score (PS), we selected match group (N = 1,039) from control group (N = 18,432) based on age, gender, prior ambulatory care expenditure, and comorbidities related to the probability of switching. The date of first claim for prescribing RSV or other statins after May 2005 was the index date. Cumulative health expenditure after 1, 2, and 3 years from index date were compared between switch group and match group. Cox regression model controlling for age, sex, and comorbidities was applied to investigate the relative risk of hospitalization for CVD between two groups. RESULTS: Patients who switched to RSV are significantly consumed more ambulatory care resources after 1-, 2-, and 3-year of switching ($348, $680, and $1050 more, respectively). Before PS matching, the average relative risk of hospitalization for CVD in switch group is significantly higher than control group (RR = 1.18, 95% CI = 1.12–1.27). After PS matching, the relative risk is still higher than match group (RR = 1.18, 95% CI = 0.881,58), but with less significance. CONCLUSIONS: RSV may be more cost-effective in lowering low-density lipoprotein cholesterol, but when taking the prevention of CVD hospitalization into account, the cost-effectiveness of declining is much higher than the cost of declining 1 mmHg SBP. The incremental cost-effectiveness analysis (ICEA) showed that incremental cost for declining 1 mmHg SBP and DBP in management group is less than that in control group (0.43 Yuan vs. 83 Yuan). CONCLUSIONS: DMap can improve the cost-effectiveness and quality of care in community hypertension intervention. The characteristics of DMap is to promote patient self-management on hypertension by using participatory approach. Patients change their lifestyles (diet, smoking, physical exercise and compliance of medicines) so as to control their blood pressure. Finally, after 1-year best practice, DMap has been scale up to all districts in Shanghais since 2009.