PSH76

IMPACT OF APPOINTMENT-BASED MEDICATION SYNCHRONIZATION ON EXISTING USERS OF CHRONIC MEDICATIONS
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OBJECTIVES: To determine adherence and persistence of existing users of chronic medications enrolled in a pharmacy chain’s appointment-based medication synchronization (ABMS) program, with patients who are not enrolled in the program for the duration of one year. METHODS: A retrospective cohort study compared patients receiving ABMS with matched controls receiving usual standard care. ABMS consisted of an appointment to synchronize the patient’s medications to be dispensed on a single appointment day every month, a call to the patient prior to the appointment day to address any prescription changes and to remind the patient, and a patient visit to the pharmacy to pick up the medication. Outcomes measured were 1-year adherence rates using proportion of days covered (PDC) and 1-year persistence. RESULTS: For this study, it aims to record of patients taking one of six chronic medication classes during the period of December 1, 2011 to February 28, 2014. ABMS patients were matched with controls on prior adherence behavior, medication class, age, gender, and geographic region. RESULTS: Mean PDC scores ranged from 0.73 to 0.91 for ABMS patients, and from 0.70 to 0.71 for controls depending on the medication class. The percentage of adherent individuals (i.e., PDC > 0.8) was 55% to 84% for ABMS participants and 37% to 62% for controls. Odds of adherence were 2.3 to 3.6 times greater with ABMS patients (33% to 44%) with hazard ratios of non-persistence being 0.39 to 0.67 for individuals in the program. Compared to controls, study patients had a 33% to 61% lower likelihood of non-persistence, depending on the medication class. DEXA: ABMS program with patients who are not enrolled in the appointment-based pharmacy setting was associated with significant improvements in adherence and persistence for patients who were existing users of chronic medications for at least six months.

PSH75

EXAMINING THE IMPACT OF A HYBRID CLINICAL PHARMACY PRACTICE MODEL ON ATTENTION TO MEDICATION ADVICE IN PATIENTS WITH METABOLIC SYNDROME
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OBJECTIVES: To examine the difference in the adherence of patients with metabolic syndrome to a hybrid model of care compared to other chronic pharmacy models. METHODS: Prospective, randomized-control trial design conducted through an integrated delivery network in Northwest Ohio. Patients required to have Paramount health insurance, type 2 diabetes, hypertension, hyperlipidemia, prescribed at least five oral medications, and prescribed an oral medication for each disease state. Patients randomly assigned to one of four groups. The first group received standard pill bottles. The second group received adherence packaging and refill synchronization. The third group received conventional pill bottles and medication therapy management (MTM) using an appointment-based model. The fourth group received the hybrid model, including adherence packaging, refill synchronization, and MTM using the appointment-based model. Adherence was measured using patient-reported pill count. RESULTS: The sample (n = 26) was predominantly female, average age 61 years. Types of insurance included Medicaid (14%), Medicare (28.5%), and commercial insurance (64.29%). Adherence ranged from 29% to 100% among all age groups. The adherence rates for each treatment group was as follows: controls (61% to 74%) more often than ABMS patients (33% to 44%) with hazard ratios of non-persistence being 0.39 to 0.67 for individuals in the program. Compared to controls, study patients had a 33% to 61% lower likelihood of non-persistence, depending on the medication class. Conclusion: ABMS program with patients who are not enrolled in the appointment-based pharmacy setting was associated with significant improvements in adherence and persistence for patients who were existing users of chronic medications for at least six months.

PSH77

PHARMACOTHERAPY OPTIMIZATION PLAN FOR PATIENTS WITH TYPE-2 DIABETES MELLITUS (T2DM) AND HYPERTENSION IN A CHILEAN HEALTHCARE SETTING: IMPACT AND OUTCOMES
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OBJECTIVES: The aims of this study were (1) to determine the change in patients’ knowledge about disease and treatment, (2) to assess the percent change in values of glycated hemoglobin (HbA1c) and change in blood pressure in mmHg, and (3) to evaluate adherence status, measured through pill counts. METHODS: A prospective study was conducted using patients with a diagnosis of both T2DM and hypertension at Arauco hospital in Arauco, Chile. A total of 130 patients were interviewed over a period of six months. The study incorporated a tailored pharmacotherapeutic intervention plan that included written and oral information regarding pathophysiology and treatment. To determine treatment adherence, a pill count method was performed during each interview. Change in patient adherence and knowledge of the diseases and treatments was assessed using the Fisher exact test. The difference in HbA1c and blood pressure between the initial and final assessment was evaluated using Student’s t-test. Analyses were performed using SPSS version 17. RESULTS: A total of 50 patients were selected, of whom 33 (66%) were female. At the beginning of the program, 30% of patients were found to be adherent. At the end of the study, this number had increased to 46% (p-value < 0.001). 10% of patients had full knowledge of their disease at baseline. At the end of the study, this number had increased to 66% (p-value < 0.001). After the completion of the intervention, significant decreases were observed for HbA1c (p-value < 0.001), and systolic blood pressure (p-value < 0.001). The percentage of patients with systolic blood pressure < 140 mmHg increased from 40.6% to 63.7% (p-value < 0.003) and systolic blood pressure (17 mmHg, p-value < 0.001). CONCLUSIONS: A pharmacotherapy optimization plan based on improved patient adherence and knowledge and implemented for patients with chronic conditions, such as T2DM and hypertension, has had a positive impact on therapeutic outcomes.

PSH78

DEVELOPMENT AND VALIDATION OF PATIENT DECISION AID REGARDING ANTIDEPRESSANT MEDICATIONS
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OBJECTIVES: The aim of the study is to develop and validate a decision aid (DA) for Arabic depressed patients. METHODS: A six-page DA booklet developed by Agency for Health Care Research and Quality (AHRQ) was adapted and translated to Arabic using Brinsing’s back translation method. The work of Al-Muhtaseb was followed to produce a natural Arabic text. Validation was carried out by 24 experts (Physicians, Pharmacists, Nurses). Patient Decision Aid Standards (PDAS) Criteria Checklist was used to examine the DA structure and content. RESULTS: Experts strongly agree that the DA will increase patient’s recognition, knowledge and understanding of their condition and options, based on PDAS. 83% of experts report that DA provide information about options in sufficient detail for decision making, 68% present probabilities of outcomes is an unbiased and understandable way, 85% clarifying and expressing patients values and preferences, 65% desired level of treatment effectiveness was defined and 68% of patients found the DA helpful. CONCLUSIONS: To our knowledge we developed and validated the first Arabic DA based on PDAS criteria for depressed patients. Future research needed to assess the effectiveness of this DA on depressed patient involvement in SDM.

PSH79

IMPACT OF STRUCTURED PATIENT EDUCATION ON QUALITY OF LIFE OF SOUTH INDIAN DIABETICS
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OBJECTIVES: The normal life of patients is seriously affected by Diabetes Mellitus (DM). According to Diabetes Atlas it is estimated that 61.3 million people live with diabetes in India (2011 estimates) and 77.2 million pre-diabetics. The objective of this study was to evaluate the impact of clinical pharmacist intervention by counselling on medication adherence and quality of life of diabetic patients. METHODS: The study sample was extracted from a reputed diabetic clinic of Warangal, India over a period of six months. About 175 patients diagnosed with diabetes were recruited and were randomized into test (n = 90) and control (n = 85) groups. Values of glycated hemoglobin (HbA1c) and change in blood pressure in mmHg; from the beginning of the program, 30% of patients were found to be adherent. At the end of the study, this number had increased to 46% (p-value < 0.001). 10% of patients had full knowledge of their disease at baseline. At the end of the study, this number had increased to 66% (p-value < 0.001). After the completion of the intervention, significant decreases were observed for HbA1c (p-value < 0.001), and systolic blood pressure (p-value < 0.001). The percentage of patients with systolic blood pressure < 140 mmHg increased from 40.6% to 63.7% (p-value < 0.003) and systolic blood pressure (17 mmHg, p-value < 0.001). CONCLUSIONS: A pharmacotherapy optimization plan based on improved patient adherence and knowl- edge and implemented for patients with chronic conditions, such as T2DM and hypertension, has had a positive impact on therapeutic outcomes.