PHS75
IMPACT OF APPOINTMENT-BASED MEDICATION SYNCHRONIZATION ON EXISTING USERS OF CHRONIC MEDICATIONS
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OBJECTIVES: To examine the 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 non-persistence rates. ABMS was compared to other community pharmacy models. RESULTS: Adherence was measured using patient-reported pill count. The fourth group received adherence packaging and refill synchronization. The third group received 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 (28.57%), and commercial insurance (64.29%). Adherence ranged from 29% to 100% among all participants. All four groups showed significantly higher adherence than controls using the appointment-based model, with the hybrid model showing the greatest increase. CONCLUSIONS: Adherence was significantly greater with the appointment-based model of care compared to other community pharmacy models. A global weighted adherence measure was calculated for the 47 patients that received all three evaluations. RESULTS: According to the SMAQ, 51% of patients were adherent, 23% were intermittently adherent, and 26% were non-adherent. Rates of adherence were similar when calculated using the simplified medication adherence questionnaire. Non-adherence was most closely associated with illness severity and non-compliance with medication therapy management (MTM) intervention. CONCLUSIONS: Adherence was greater with the appointment-based model of care compared to usual standard care. The appointment-based model of care was associated with significant improvements in adherence and persistence for patients who were existing users of chronic medications for at least six months.

PHS76
THREE METHODS TO ASSESS ADHERENCE TO HIV ANTIRETROVIRAL TREATMENT IN A CHILEAN HEALTHCARE SETTING
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OBJECTIVES: Adherence to antiretroviral therapy (ART) is a main concern in the control of HIV and is associated with treatment success or failure. The aim of this study was to determine adherence to ART using three methods and to identify factors related with non-adherence. METHODS: The study included 225 HIV patients under treatment at Regional Hospital in Concepción, Chile. Adherence was measured through two indirect methods: (1) the simplified medication adherence questionnaire (SMAQ), a survey including four questions with dichotomous answers, one question with a categorical answer, and one question with an open answer; and (2) a pharmacy dispensation register (FDR), which measures adherence through a ratio defined as number of days for which the supply of medication dispensed was prescribed divided by days between prescription fills; and through one direct method: (3) measuring viral load and CD4+ cell count. These methods were compared and a global weighted adherence measure was calculated for the 47 patients that received all three evaluations. RESULTS: According to the SMAQ, 51% of patients were adherent, 23% were intermittently adherent, and 26% were non-adherent. Rates of adherence were similar when calculated using the simplified medication adherence questionnaire. Non-adherence was most closely associated with illness severity and non-compliance with medication therapy management (MTM) intervention. CONCLUSIONS: Adherence was greater with the appointment-based model of care compared to usual standard care. The appointment-based model of care was associated with significant improvements in adherence and persistence for patients who were existing users of chronic medications for at least six months.

PHS77
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 the 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. A total of 40 patients in Arancu, Chile, participated in the study. Interviews were performed at three different intervention phases: before, six months, and one year. CONCLUSIONS: The study incorporated a tailored pharmacotherapeutic intervention program that included written and oral information regarding pathological mechanisms, dietary views, significant decreases were observed for Hba1c (p-value < 0.001), and systolic blood pressure (p-value < 0.001). The intervention was associated with significant improvements in 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 follow-up 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). CONCLUSIONS: A pharmacist-led patient education program was associated with significant improvements in adherence and knowledge and implemented for patients with chronic conditions, such as T2DM and hypertension, has had a positive impact on therapeutic outcomes.

PHS78
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 published by Agency for Health Care Research and Quality (AHRQ) was adapted and translated into Arabic using Brisling’s back translation model. The work of Al-Muhtaseb was followed to produce a natural Arabic text. Validation was carried out by 24 experts (Physicians, Pharmacists, Nurses, Patients). Results: DA module provided with patient’s views, significant decreases were observed for Hba1c (p-value < 0.001), and systolic blood pressure (p-value < 0.001). The intervention was associated with significant improvements in 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 follow-up 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). CONCLUSIONS: A pharmacist-led patient education program was associated with significant improvements in adherence and knowledge and implemented for patients with chronic conditions, such as T2DM and hypertension, has had a positive impact on therapeutic outcomes.

PHS79
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 interviewed at baseline and control phase. The quality of life of patients was assessed using 19 domain Audit of Diabetes Dependent Quality of Life (ADDQoL) questionnaires and medication adherence was assessed using Brief Medication Questionnaire (BMQ). BMQ and ADDQoL questionnaires were administered at baseline and subsequent four follow-ups each of one month duration. Test group patients administered with structured patient education by using various counselling aids on monthly basis and controlled group patients were administered with usual care. RESULTS: The study reveals that there is a highest impact of patient education on working life, physical activity, financial condition and their freedom to eat and drink followed by other quality of life domains in diabetic patients. The mean fasting blood sugar and post prandial blood sugar values of each phase were correlated and was