OBJECTIVES: To examine the difference in the adherence of patients with metabolic syndrome to medication synchronization (ABMS) program of care compared to other chronic medication care models. METHODS: Prospective, randomized-control trial designed 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 rinses. The third group received ABMS 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 (64.2%). Adherence ranged from 29% to 100% among all patients. The hybrid MTM model results indicated significantly higher medication adherence over time was seen in the hybrid model group, from 23.6% to 81.6%. CONCLUSIONS: These preliminary results show that the hybrid model group has the highest positively impact medication adherence. This is an ongoing study. Further results are needed to fully analyze the benefit of the hybrid pharmacy practice model of care.

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; 90% were adherent according to FDR. 95% were adherent according to the direct method. Weighted adherence was 21%. Main causes of non-adherence were: delay in medication refill (43%), lack of information regarding ART (43%); food interactions (65%) and adverse reactions (35%). Patients were more adherent to treatment with the combination of two nucleoside reverse transcriptase inhibitors and one non-nucleoside reverse transcriptase inhibitor (33%) than with the same combination plus protease inhibitor (12%). CONCLUSIONS: Adherence to HIV treatment was lower than expected for this stage of the same. The Global weighted adherence was significantly less than the individual adherence percentages, each method alone is not sufficient to obtain a reliable determination of adherence. An evaluation of the impact of non-adherence behavior on the Chilean national HIV program is recommended.

OBJECTIVES: The aims of this study were (1) to determine the change in patients’ knowledge about their 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 in the city of Aanao, Aconcagua, Chile. Each participant interviewed three times over a period of six months. The study incorporated a tailored pharmacotherapeutic intervention plan that included written and oral information regarding pathophysiology, diet, 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 values 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 study, 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 interviews, significant decreases were observed for HbA1c (p-value < 0.001), and systolic blood pressure (p-value < 0.001). Diastolic blood pressure (p-value < 0.001) and (3) systolic blood pressure (17 mmHg, p-value < 0.001). CONCLUSIONS: A pharmacotherapeutic 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.

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 to Arabic using Brilings’s back translation method. The work of Al-Muhaseeb was followed to produce a natural Arabic text. Validation was carried out by 24 experts (Physicians, Pharmacists, and Depression Patients). Patient Decision Aid Standards (IPDAS) 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 IPDAS. 83% of experts report that DA provide information about options in sufficient detail for decision making, 68% present probable outcomes of an unbiased and understandable way, 85% clarifying and expressing patients values and preferences, 60% provide structure guidance in deliberation and communication with a total of 81% for the whole content criteria. Secondly, the developed process has 63% positive feedback. Particularly, 83% agreed that the information are present in balanced manner, 60% developed patients’ appreciation of evidence data, 69% for using plain language but less than half of the experts agreed with the disclosing conflicts of interest. Finally, the sum of expected effectiveness criteria got a very high percentage (85%). In addition, experts provided constructive feedback using some modifications on the language and layout of the DA. CONCLUSIONS: Up to our knowledge we developed and validated the first Arabic DA based on IPDAS criteria for depressed patients. Future research needed to assess the effectiveness of this DA on depressed patient involvement in SDM.

OBJECTIVES: 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

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