Adherence and persistence of optimal medical therapy after myocardial infarction in a low to middle income country

Authors:
M Villalobos-Pedroza1, AP Flores-Batres1, E Rivera-Pedrote1, AA Brindis-Aranda1, A Jara-Nevarez1, P Gonzalez-Medina1, M Manzo-Guzman1, D Araiza-Granaygordobil1, MA Arias-Mendoza1, 1National Institute of Cardiology - Mexico City - Mexico

Topic(s):
Postinfarction Period

Background:
Adherence to medical therapy after myocardial infarction (MI) is a crucial part of patient care and indispensable for reaching clinical goals, however, data from low to middle income countries (LMIC) regarding adherence and persistence of optimal medical treatment (OMT) is scarce.

Purpose:
To evaluate adherence and persistence to OMT after acute coronary syndrome (ACS) in a cohort of patients with ST elevation myocardial infarction (STEMI) in a low to middle income country.

Methods:
We conducted a survey study evaluating adherence and persistence of OMT after 6 months of the index event in patients with STEMI. Patients were surveyed via phone call using the simplified medication adherence questionnaire (SMAQ) tool, which has been previously validated (both in English and Spanish) as a clinical tool to evaluate adherence to medication. We evaluated persistence of OMT as well. A secure electronic database was constructed to capture information, regarding adherence and persistence, and other clinically relevant variables.

Study population:
The study included consecutive patients aged 18-99 years old with the diagnosis of STEMI form Mexico City’s STEMI Network, who received either pharmacoinvasive strategy (PIS) or Primary Percutaneous Coronary Intervention (pPCI) during the first 12 hours from symptom onset. This population is derived from the PHASE-Mx study (ClinicalTrials.gov Identifier: NCT03974581), which results have been previously published.

Results:
A total of 602 patients were initially screened; among these, 158 patients (26.2%) were lost to contact, 5 patients (n=0.008%) refused to answer and 65 patients (10.7%) died during follow up. The final analytic sample consisted of 375 patients; among them, 192 (51.2%) received primary PCI and 183 (48.8%) received pharmacoinvasive strategy. Mean age was 58 ± 10 years old and most of the patients were male (90.1%). Hypertension (44.8%) and diabetes (32.0%) were common. Mean follow-up time after index STEMI was 650 (IQR: 416-832) days. After SMAQ evaluation, only 26.1% of the patients were considered to be adherent to their medications (>95% compliance), as shown in the Table 1. Persistence of OMT after STEMI included: ASA (84.6%), P2Y12i (71.5%), statin (83.6%), ACEI/ARB (77.1%) and beta blocker (63.7%) (Table 2).

Conclusions:
In patients with STEMI in a low to middle income country, persistence and adherence to OMT were low. Actions to improve adherence to therapy after mayor cardiovascular events are needed. Risk factors associated to poor adherence included diabetes (OR 0.46), age (OR 0.76) and atrial fibrillation (OR 0.42).
Adherence and persistence of optimal medical therapy after myocardial infarction in a low to middle income country

Authors: M Villalobos-Pedroza, AP Flores-Batres, E Rivera-Pedrote, AA Brindis-Aranda, A Jara-Nevarez, P Gonzalez-Medina, M Manzo-Guzman, D Araiza-Garaygordobil, MA Arias-Mendoza

National Institute of Cardiology - Mexico City - Mexico

Topic(s): Postinfarction Period

Background: Adherence to medical therapy after myocardial infarction (MI) is a crucial part of patient care and indispensable for reaching clinical goals, however, data from low to middle income countries (LMIC) regarding adherence and persistence of optimal medical treatment (OMT) is scarce.

Purpose: To evaluate adherence and persistence to OMT after acute coronary syndrome (ACS) in a cohort of patients with ST elevation myocardial infarction (STEMI) in a low to middle income country.

Methods: We conducted a survey study evaluating adherence and persistence of OMT after 6 months of the index event in patients with STEMI. Patients were surveyed via phone call using the simplified medication adherence questionnaire (SMAQ) tool, which has been previously validated (both in English and Spanish) as a clinical tool to evaluate adherence to medication. We evaluated persistence of OMT as well. A secure electronic database was constructed to capture information, regarding adherence and persistence, and other clinically relevant variables.

Study population: The study included consecutive patients aged 18-99 years old with the diagnosis of STEMI from Mexico City's STEMI Network, who received either pharmacoinvasive strategy (PIS) or Primary Percutaneous Coronary Intervention (pPCI) during the first 12 hours from symptom onset. This population is derived from the PHASE-Mx study (ClinicalTrials.gov Identifier: NCT03974581), which results have been previously published.

Results: A total of 602 patients were initially screened; among these, 158 patients (26.2%) were lost to contact, 5 patients (n=0.008%) refused to answer and 65 patients (10.7%) died during follow up. The final analytic sample consisted of 375 patients; among them, 192 (51.2%) received primary PCI and 183 (48.8%) received pharmacoinvasive strategy. Mean age was 58 ± 10 years old and most of the patients were male (90.1%). Hypertension (44.8%) and diabetes (32.0%) were common. Mean follow-up time after index STEMI was 650 (IQR: 416-832) days. After SMAQ evaluation, only 26.1% of the patients were considered to be adherent to their medications (>95% compliance), as shown in the Table 1. Persistence of OMT after STEMI included: ASA (84.6%), P2Y12i (71.5%), statin (83.6%), ACEI/ARB (77.1%) and beta blocker (62.7%).

Conclusions: In patients with STEMI in a low to middle income country, persistence and adherence to OMT were low. Actions to improve adherence to therapy after major cardiovascular events are needed. Risk factors associated to poor adherence included diabetes (OR 0.46), age (OR 0.76) and atrial fibrillation (OR 0.42).

Patients currently taking OMT, included: ASA (84.6%), P2Y12i (71.5%), statin (83.6%), ACEI/ARB (77.1%) and beta blocker (62.7%).