ADVERSE EVENTS ASSOCIATED WITH HIGH-ALERT MEDICATIONS DETECTED BY TRIGGER METHODOLOGY IN PATIENTS WITH CHRONIC ILLNESSES

UGCI
UNIDAD DE GESTIÓN CLÍNICA INTERNIVELES
FARMACIA PONIENTE

Unión Europea
Fondo Europeo de Desarrollo Regional
"Una manera de hacer Europa"

Toscano Guzmán, MD[1], Galvan Banqueri, M[2], Guisado Gil, AB[3], Garin Escriva, N[4], Martínez Sotelo, J[5], Otero López, MJ[6], Delgado Silveira, E[7], Saavedra Quiros, V[8], Calvin Lamas,M[9], Perez Encinas,M[10].

[1]D.S. Poniente de Almería. UGCI Farmacia Poniente. Almeria. [2]AGS Sur de Sevilla. UGC Farmacia. Sevilla. [3]H.U. Virgen del Rocío. UGC Farmacia. Sevilla. [4]H. de la Santa Creu y Sant Pau. UGC Farmacia. Barcelona. [5]H. Comarcal de Inca. UGC Farmacia. Mallorca. [6]H.U. de Salamanca. UGC Farmacia, Salamanca. [7]H. Ramón y Cajal. UGC Farmacia. Madrid.[8]H.U. Puerta del Hierro. UGC Farmacia. Majadahonda-Madrid. [9]C.U. A Coruña. UGC Farmacia. A Coruña. [10]H.U Fundación Alcorcón. UGC Farmacia. Madrid.(Spain)

BACKGROUND

The WHO recommends implementing measures to reduce adverse drugs events (ADEs) in patients with polypharmacy who are receiving treatment with high alert drugs. In Spain, we have access to a list of high-alert medications for patients with chronic diseases (HAMC list) . Recently, a panel of experts had selected a set of triggers specifically for detecting ADEs in elderly patients with multi-morbidity TRIGGER-CHRON.

PURPOSE

To evaluate the effectiveness of the TRIGGER-CHRON (TC) for identifying ADEs that are caused by drugs included in the HAMC list, in chronic, multi-morbidity elderly patients (CMEP).

MATERIALS AND METHODS

Retrospective, observational, multicenter study (12 Spanish hospital)

Chronic patients with multimorbidity > 65 years.
Length of stay > 48 h in Internal Medicine or Geriatric hospital units

RANDOMIZED

5 patients weekly (period : 12 weeks)

TRIGGER-CHRON
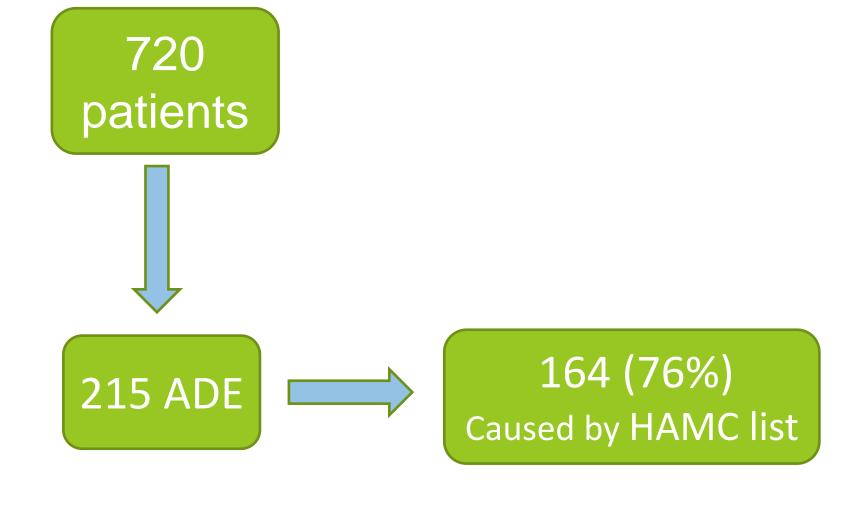
Medical record review→ to identify ADEs

ADEs were analyzed, and the medications involved were registered.
ADEs caused by drugs included in the HAMC list were recorded.

TC includes the following triggers:
- 11 care module.
- 10 antidotes/treatment.
- 11 medication concentrations.
- 18 abnormal laboratory values.
- 1 emergency department.

RESULTS

720 patients

↓

215 ADE → 164 (76%) Caused by HAMC list

Drug involved	ADE
Corticosteroids	38
Loop diuretics	30
Opioids	26
Oral anticoagulants	20
Antipsychotics	15
Spironolactone/ eplerenone	9
Antiplatelets	7
Benzodiazepines	7
Insulins	5
ß- adrenergic blockers	3
Oral hypoglycemic	2
Digoxin	1
Immunosuppressants	1
Non-steroidal anti-inflammatories drugs	1

CONCLUSIONS

The TC has allowed for detecting a large number of ADEs, more than 75% were caused by a drug included on the HAMC list. This would indicate the usefulness of this tool for determining ADEs at institutions and to monitor the impact of future interventions carried out.

FUNDING

23st Congress of the EAHP, Gothenburg, Sweden. 21-23th March 2018