POTENTIAL DRUG-RELATED PROBLEMS IN THE TIME OF COVID-19

Abstract number:
4CPS-384

J Barceló-Vidal, N Carballo, M de Antonio-Cuscó, X Fernández-Sala, D Echeverría-Esnal, P Acín, C López-Mula, L Comella-Anaya, E González-Colominas, S Luque, O Ferrández

Hospital del Mar, Parc de Salut Mar, Pharmacy Department. Barcelona, Spain.

BACKGROUND AND IMPORTANCE

Drug-related problems (DRP) are common among hospitalized patients. During the COVID-19 pandemic, number of inpatients has arisen and pattern of drug use has varied, that could lead to a higher number of potential DRP.

AIM AND OBJECTIVES

To describe identified DRP in patients admitted at COVID-19 wards during the COVID-19 pandemic peak.

MATERIAL AND METHODS

Retrospective observational study performed in a tertiary university hospital from 21st March–30th April 2020. Patients included: admitted patients in a COVID-19 ward and presenting a DRP (excluding Emergency Department and Critical Care Units). Computerized Physician Order Entry (CPOE) operates for all hospital beds. Medical prescriptions were revised daily by clinical pharmacists. When a potential DRP was detected, an annotation with a recommendation was made at the patients' medical record. DRP were classified according to the Pharmaceutical Care Network Europe classification.

Data collected: demographic, involved drug class (anatomical chemical therapeutic (ATC)), DRP detected, degree of recommendation acceptance.

RESULTS

Total patients with DRP: 291(23.3%). Identified DRP: 393(1.4 DRP/patient). A 58.3% were men and the median age was 63(15.7).

Table 1

PRM		
Wrong dosage	Overdose	90(22.9)
	Underdose	38(9.7)
Out of protocol		78(19.8)
Interactions	Adverse event potentiation	34(8.7)
	Induction/inhibition	15(3.8)
	Bioavailability alteration	12(3.1)
Prescription error by incorrect use of CPOE		41(16.1)
Renal impairment		25(6.4)
Indication	Inexistent drug	16(4.1)
	Unnecessary drug	9(2.3)
Others		35(8.9)
Recommendation		
Acceptance rate	Accepted	284(72.2)
	Non-accepted	60(15.2)
	Non-evaluable	49(12.5)
Drug involved		
P	Hydroxychloroquine	90(22.9)
J	Ceftriaxone	65(16.5)
	Azithromycin	27(6.9)
	Lopinavir/Ritonavir	6(1.5)
	Dolutegravir	1(0.02)
	Others	14(3.6)
A	Calcifediol	34(8.6)
	Vitamin B	2(0.5)
	Saccharomyces boulardii	9(2.3)
	Calcium carbonate	4(1.0)
	Potasium	4(1.0)
H	Dexamethasone	25(6.4)
	Methylprednisolone	4(1.0)
B	Enoxaparin	15(3.8)
	AAS	2(0.05)
	Apixaban	2(0.05)
	Acenocumarol	1(0.02)
R	Respiratory system	13(3.3)
C	Lipid modifying agents	10(2.5)
	Diuretics	7(1.8)
N	Psychoanaleptics	7(1.8)
V	Various	8(2.0)
Others		43(10.9)

CONCLUSION AND RELEVANCE

- Almost one fourth of all patients had a DRP, presenting an incidence of 1.4 DRP/patient, higher than reported in previous series.
- 83% of evaluable recommendations were accepted. One third of the recommendations were derived from a wrong dosage, and 15% from drug-interactions.
- Hydroxychloroquine was the most frequently involved drug, probably because the limited experience and wide spectrum of interactions, followed by antimicrobials as ceftriaxone and azithromycin, highly used in respiratory tract infections.

Hospital del Mar

Parc de Salut MAR Barcelona