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ORIGINAL ARTICLE

Prescription and consumption of solid oral drugs dispensed as unitary doses in a third level hospital



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Abstract *Background:* The knowledge about the pattern of prescription and consumption of solid oral drugs dispensed as unitary doses (UD) in Mexico is sparing. *Purpose:* The aim of this study was to describe the pattern of prescription and consumption of solid oral drugs dispensed as unitary doses (UD) in a third level private hospital of Mexico. A retrospective study of a 60-month period (from 2007 to 2011) was carried out to know the pattern of drugs dispensed as UD in a third level hospital. *Results:* Among the principal drugs consumed were analgesic, antihypertensive, antibiotic, anti-inflammatory, antiepileptic, and diuretics. The dispensation of drugs per year was as follows: 181 drugs with 85,167 UD in 2007; 199 with 90,519 UD in 2008; 193 with 101,479 UD in 2009; 195 with 100,798 UD in 2010; and 198 with 103,913 UD in 2011. *Conclusion:* The findings confirmed that prescription and consumption of unitary doses in the hospitalization service increased, and revealed the extensive use of analgesics as the principal prescribed drug in this kind of hospital.

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1. Introduction

The dispensation of drugs as oral unitary doses is a scientifically designed and tested system that improves the safety of the patient and therapeutic quality in hospitals (Juárez Olguín et al., 2004; Montojo, 2001). In each stage of the process, an independent evaluation to substantially reduce errors was carried out. The careful preparation and complete identification of unitary doses (drugs, doses, lot, pharmacological activities, expiration date, bar code, and patient's name) in the process of drug use contributes in reducing adverse events related with accurate use of the drug (Blasco et al., 2001; Calderón et al., 2012).

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Table 1 Unitary doses of oral single medicaments prescribed and consumed in a Mexican Hospital from 2007 to 2011.

Generic name	Pharmacological activity	Period (years)				
		2007	2008	2009	2010	2011
Acetylsalicylic acid 100mg	Antiagregant	1231	99	236	186	2387
Acetylsalicylic acid 500mg	Analgesic	155	1561	2153	2440	110
Nalidixic acid/Fenazopiridin 500/50mg	Analgesic/antibacterial	526	491	657	637	407
Valproic acid 250mg	Anticonvulsant	123	78			
Acenocumarin 4mg	Anticoagulant	540	485	561	552	497
Aciclovir 200mg	Antitherapeutic	137	25	50	25	110
Aciclovir 400mg	Antitherapeutic	294	162	239	140	105
Folic acid 5mg	Folate deficiency	196	125	155	50	277
Albendazol 200mg	Antiparasitic	16	48	84	44	98
Alfuzosin	Benign prostatic hyperplasia				14	38
Aloglutamol	Antiacid		58	33	100	70
Alopurinol 100mg	Antigout	116	224	208	301	120
Alopurinol 300mg	Antigout	233		179	270	150
Ambroxol 30mg	Mucolitic		50	125	40	70
Ambroxol	Mucolitic			7	18	
Amiodarone 200mg	Antiarrhythmic			846	1106	779
Amlodipine 5mg	Antihypertensive	981	925	803	1374	1553
Amoxicillin 500mg	Antibiotic	44				
Amoxicillin/clavulanic acid 500mg	Antibiotic	132	85	200	150	90
Amoxicillin/clavulanic acid 875mg	Antibiotic	119	196	162	219	139
Ampicillin 250mg	Antibiotic		11			
Atenolol 50mg	Antihypertensive	397	445	660	768	776
Atenolol/Chlorthalidon 50/12.5mg	Antihypertensive/diuretic	54	28	28	28	56
Atorvastatin 10mg	Hypocholesterolemic	408	483	754	534	359
Atorvastatin 80mg	Hypocholesterolemic				358	990
Azathioprine	Immunoregulator		25	172	94	74
Benzonata 100mg	Antitusive	233	397	378	368	472
Biperidine 2mg	Antiparkinson	90	148	117	94	150
Pinaverium bromide 100mg	Antispasmodic	259	301	150	162	84
Bumetanide	Diuretic	112	299	316	269	200
Butilhyoscine	Antispasmodic	326	255	495	458	535
Butilhyoscine/Metamizole	Antispasmodic/analgesic	430	593	500	372	468
Cabergoline	Lactation suppression		7	44	63	52
Candesartan 8mg	Antihypertensive	204	304	344	297	292
Captopril 25mg	Antihypertensive	1322	1552	1852	2139	1821
Carbamacepine 200mg	Anticonvulsant	350	355	21	188	291
Carbamacepine LC 200mg	Anticonvulsant			350	120	60
Calcium carbonate 500mg	Antiacid		119	111	71	69
Carvedilol 25mg	Vasodilator	56	145	154	122	56
Cephalexin 500mg	Antibiotic	1502	2109	1614	1866	1565
Caffeine/Ergotamine	Antimigraine	202	239	571	72	
Cetirizine 10mg	Antihistaminic	127	133	149	311	288
Cetirizine/pseudoephedrine 5/120mg	Antihistaminic	45				
Celecoxib 200mg	Osteoarthritic				190	275
Cinitapride 1mg	Gastrokinetic	1204	835	2022	1369	1153
Ciprofloxacin 250mg	Antibiotic	175	174	203	60	96
Ciprofloxacin 500mg	Antibiotic	981	1220	1162	986	991
Cisapride 10mg	Gastrokinetic	174	199	234	180	300
Cisapride 5mg	Gastrokinetic	258	174	337	120	30
Clarithromycine 250mg	Antibiotic macrolide	69	103	78	85	177
Clarithromycine HP 500mg	Antibiotic macrolide	213	261	146	83	84
Clarithromycine OD. 500mg	Antibiotic macrolide	48	38	42	85	312
Clindamycine 300mg	Antibiotic	306	129			
Lysine clonixinate 125mg	Analgesic	321	452	614	795	1085
Lysine clonixinate 250mg	Analgesic	234	472	603	844	736
Lysine clonixinate/Pargeverine 125/10mg	Analgesic/antispasmodic		44			635
Clopidogrel 75mg	Plaquetary antiagregant	1266	1680	2141	2240	2098
Chlorphenamine 25mg	Antihistaminic	174	255	186	80	140
Chloropyramine 25mg	Antihistaminic	141	167	177	180	140
Dicycloverine 10mg	Antiflatulency	263	150	168	90	90
Diclofenac 46.5mg	Anti-inflammatory/analgesic	76	127	116	72	72

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