



Generic Medicines in Medical Treatment for Ageing Populations

Prof. Steven Simoens



Ageing populations

Two sources of pressure:

1. Growing number of elderly in Europe:

- Percentage of people aged 65+ years: 17% (2008) → 30% (2060)
- Number of people aged 65+ years: 85 million (2008) → 152 million (2060)
- Number of people aged 80+ years: 22 million (2008) → 61 million (2060)

2. Introduction of new, more expensive medicines



This demographic change is driver of health care costs

- Elderly are largest per-capita users of medicines due to multiple chronic diseases
 - Italy (2008): elderly (65+) accounted for 60% of drug expenditure
 - Italy (2008): per capita spending of person 75+ is 12 times higher than for person aged 25-34 years
 - England (2007): elderly (60+) accounted for 59% of dispensed medicines at cost of £4.4 billion per year
 - US (1987): 36% of elderly had 3 or more chronic diseases
- Co-ordination of polypharmacy can be challenging
- Higher number of medicines increases risk of medicine interactions and adverse events



Origins of increased medicines use in elderly

1. Increased utilisation of prescription medicines
2. Increased prices for existing prescription medicines
3. Switch from older, less expensive medicines to newer, more expensive medicines



Characteristics of medical treatment in the elderly

- Polypharmacy prescribed by multiple physicians
- Suboptimal or inappropriate medicine use
- Medication errors and adverse events
- Non-compliance with medical treatment
 - Non-compliance rates of 25%-75%
 - Non-compliance increases health care costs (ambulatory visits, A&E visit, hospitalisation) and reduces effectiveness and health outcomes



Elderly and affordability of medical treatment

- Many elderly who cannot afford medicines simply do not take them
- This causes complications, increases health care costs and reduces health outcomes
- Making medicines affordable by promoting generic medicines use can enhance compliance with medical treatment and be cost-effective



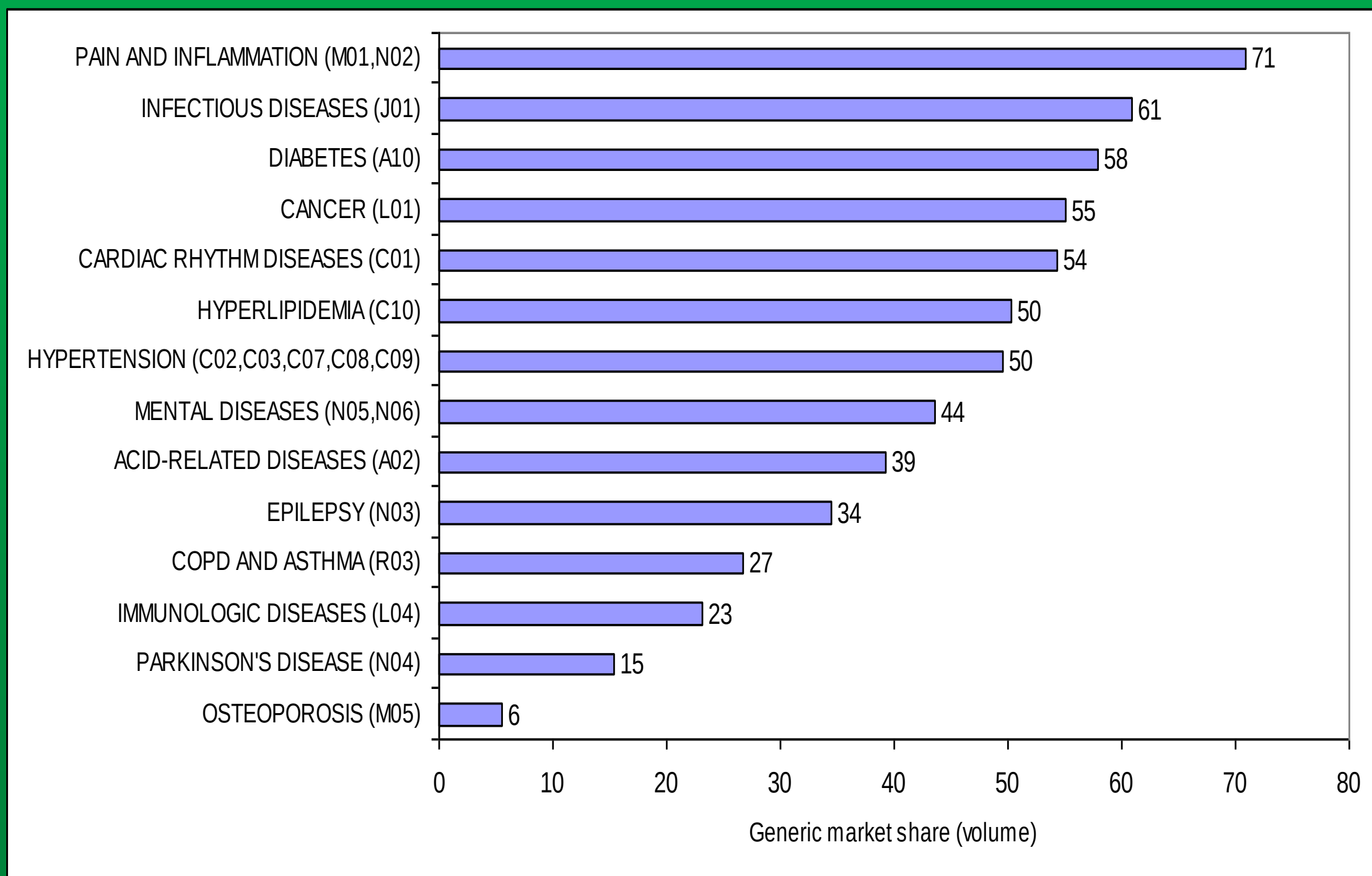
Generic medicines and compliance

- US Medicare Part D three-tier benefit program:
 - Lowest co-payment for generic medicines
 - Middle co-payment for preferred branded medicines
 - Highest co-payment for non-preferred branded medicines
- Patients receiving generics filled 13% more prescriptions in next year than patients receiving non-preferred branded medicines
- Generic medicine use increased compliance with medical treatment





Generic treatment for common diseases affecting elderly in 2009



Source:
IMS Health





Savings from increasing generic market share for the elderly (2009)

	Total expenditure (million €)	Savings (million €)		
		5% increase in generic market share	10% increase in generic market share	20% increase in generic market share
CANCER (L01)	11,082	1,008	2,015	4,030
PAIN AND INFLAMMATION (M01,N02)	11,109	857	1,715	3,430
HYPERTENSION (C02,C03,C07,C08,C09)	13,340	656	1,312	2,625
MENTAL DISEASES (N05,N06)	9,689	394	788	1,575
COPD AND ASTHMA (R03)	7,388	281	563	1,125
INFECTIOUS DISEASES (J01)	6,980	275	551	1,101
IMMUNOLOGIC DISEASES (L04)	3,800	183	365	730
EPILEPSY (N03)	2,849	105	210	419
DIABETES (A10)	5,492	99	197	395
ACID-RELATED DISEASES (A02)	5,481	50	100	200
HYPERLIPIDEMIA (C10)	6,452	49	97	194
PARKINSON'S DISEASE (N04)	1,410	33	67	133
CARDIAC RHYTHM DISEASES (C01)	1,594	20	41	81
TOTAL	86,666	4,010	8,020	16,040

Source:
IMS Health



Generic medicine use in the elderly: patient characteristics

- Younger people have more positive beliefs about generic medicines than elderly
- Elderly with low health literacy mistrust generic medicines
- Elderly are less likely to use generic medicines

Iosifescu. Patient Edu Couns 2008;73:377-383

Vrijens. KCE report 126A (2010)



Generic medicine use in the elderly: patient and physician characteristics

- Reference-pricing system (RPS) aids generic medicines due to patient co-payment for branded medicines priced above reference price
- Additional co-payments in Belgian RPS:
 - Cardiovascular medicines (34%) (Kesselheim. JAMA 2008;300:2514-26)
 - CNS medicines (19%)
 - Musculoskeletal medicines (17%)
- Patients with a global medical dossier are more likely to use generic medicines
- Physician characteristics (age, gender, medical speciality) have biggest influence on branded-generic choice



Policy options

- Electronic prescribing systems that provide physicians and patients with information about drug costs and formularies
- Financial incentives to ask for generic medicines
 - Reference-pricing systems
 - Lower co-payment for generic medicines
 - Physician drug budgets
- Physician and patient education about generic medicines





Correspondence

Steven Simoens

Research Centre for Pharmaceutical Care and Pharmacoeconomics
Katholieke Universiteit Leuven

Onderwijs en Navorsing 2, PO Box 521
Herestraat 49
3000 Leuven
Belgium

Email: steven.simoens@pharm.kuleuven.be

Url: http://pharm.kuleuven.be/pharma_care/index.htm

