

# Medicines Use in Central Eastern Europe: An Empirical Investigation Into Socioeconomic Determinants in Eight Countries



Sabine Vogler<sup>1</sup>, August Österle<sup>2</sup> and [Susanne Mayer](#)<sup>3</sup>

<sup>1</sup> WHO Collaborating Centre for Pricing and Reimbursement Policies, Department of Health Economics, Austrian Public Health Institute, Vienna, Austria

<sup>2</sup> Institute for Social Policy, Department of Socioeconomics, Vienna University of Economics and Business, Vienna, Austria

<sup>3</sup> Department of Health Economics, Centre for Public Health, Medical University of Vienna, Vienna, Austria; [susanne.mayer@meduniwien.ac.at](mailto:susanne.mayer@meduniwien.ac.at)

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# C o n f l i c t   o f   i n t e r e s t d i s c l o s u r e

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# M o t i v a t i o n

Access to medicines as an essential human right,  
but ...

- limited evidence on medicine consumption in general
- mostly focussed on Western economies and prescribed medicine use
- little emphasis on the identification of underlying (institutional) factors

# R e s e a r c h a i m s

I. From a **user perspective**: to analyse whether **socioeconomic determinants influence medicine use**, i.e. both use of prescribed medicines and non-prescribed medicines, in **eight Central and Eastern European countries (CEECs)**:

- Bulgaria (BG), 2008
- Czech Republic (CZ), 2008
- Hungary (HU), 2009
- Latvia (LV), 2008
- Poland (PL), 2009
- Romania (RO), 2008
- Slovenia (SI), 2007
- Slovakia (SK), 2009



II. From a **policy perspective**: to investigate to what extent observed inequalities can potentially be **explained by pharmaceutical policies**

# B a c k g r o u n d

## Institutional

- Health system transformation in CEECs
- Considerable variation in pharmaceutical expenditure

## Theoretical

- Work following [Andersen's behavioural model \(1968\)](#): predictive factors determining the use of health care
- [WHO \(2004\)](#) bringing policy at the centre: a framework for collective action towards equitable access to essential medicines

# M e t h o d s

## Research Aim I

- **Logistic regression analyses** on socioeconomic determinants of medicine use based on the first wave of the European Health Interview Survey (EHIS; 8 countries) for 2007 to 2009

⇒ Results I

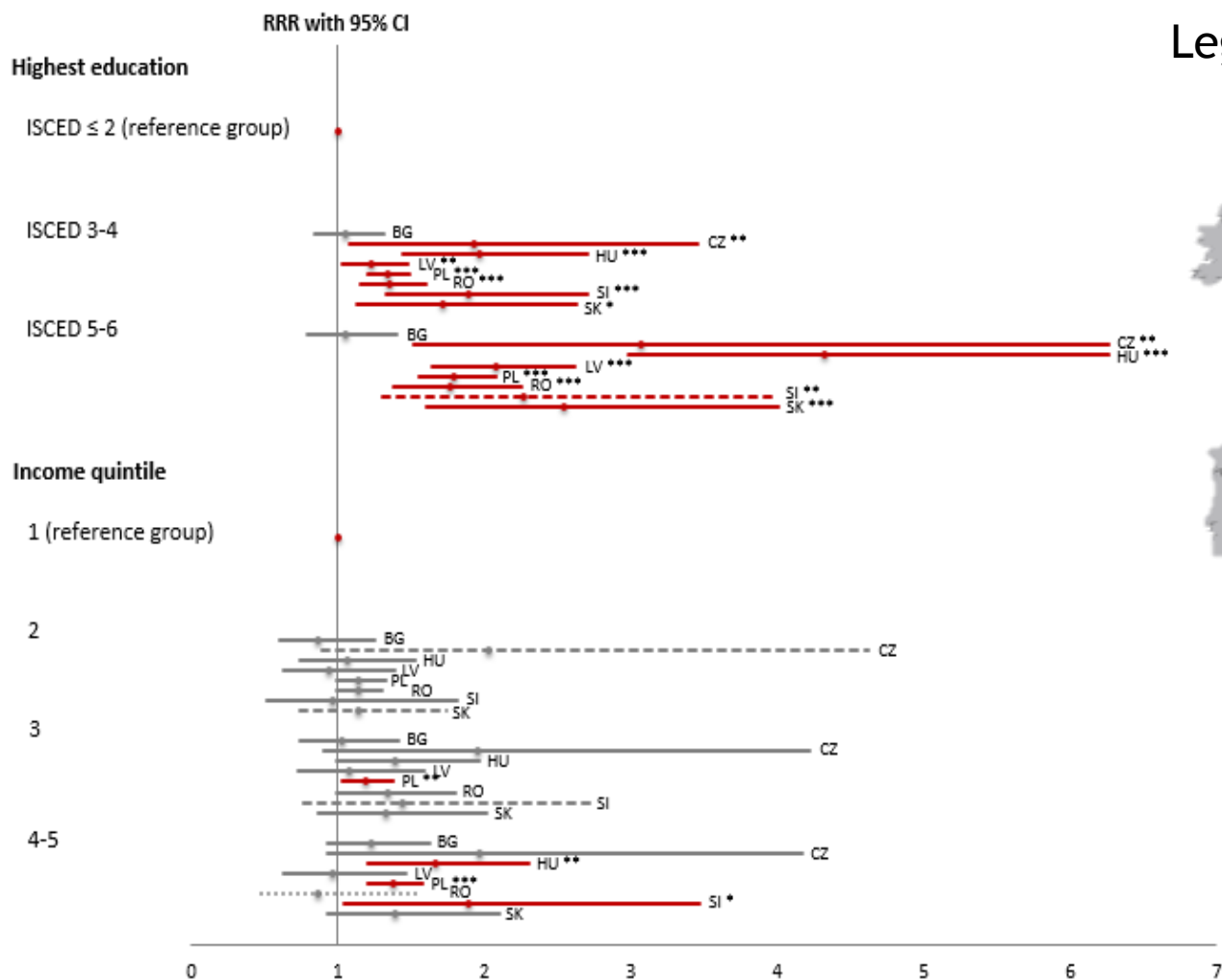
## Research Aim II

- **Pharmaceutical policy analysis** with a view to medicine use:
  - 1) sustainable funding
  - 2) affordability
  - 3) availability
  - 4) rational use of medicines

⇒ Results II

# Results I

## Non-prescribed medicine use



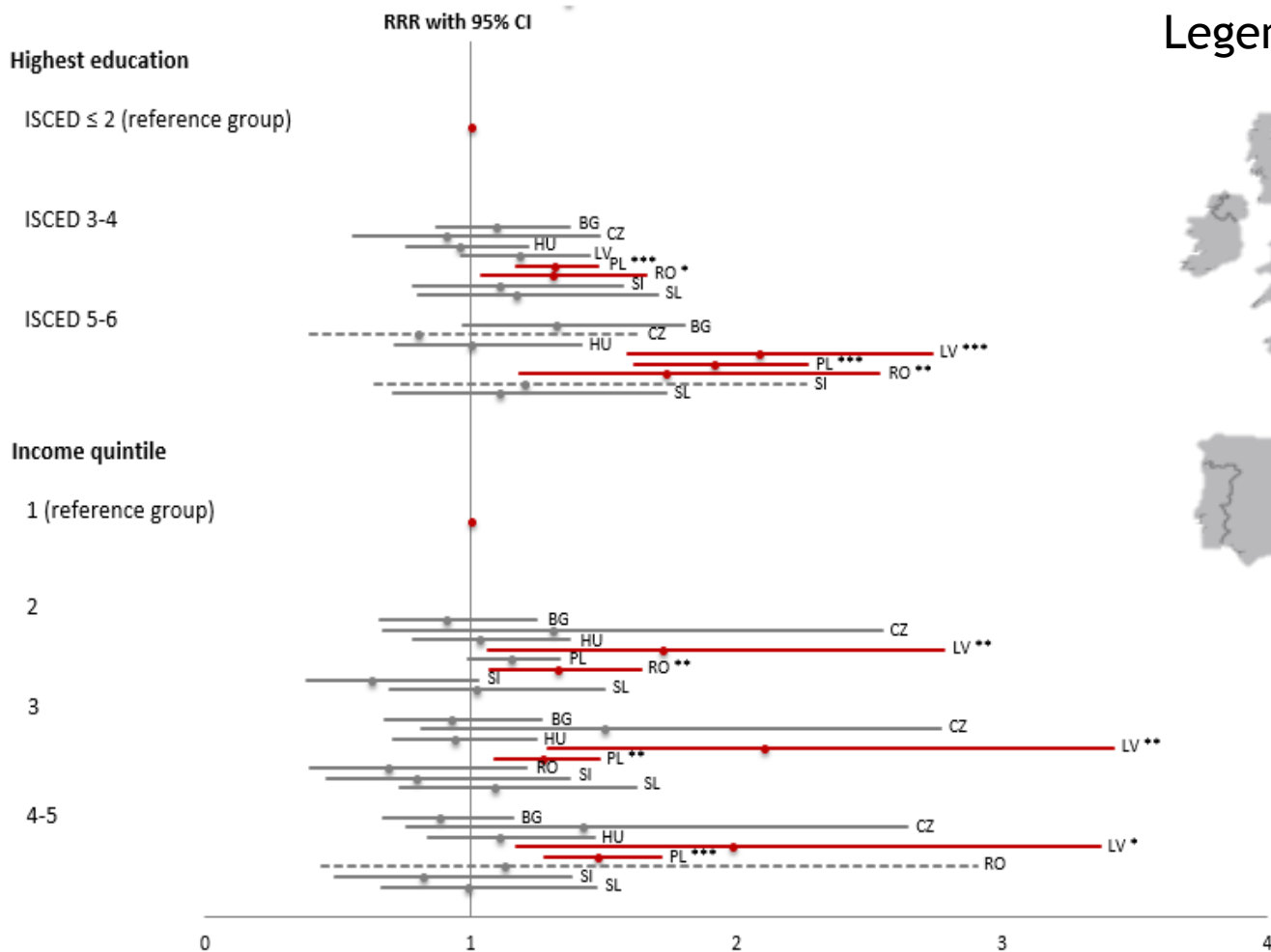
Legend: **pro** well-off gradient



Note: **outtake** based on multinomial, multivariate logistic regression analysis (separately) for the 8 CEECs; **controlling** for employment status, age, gender, chronic conditions, self-assessed health.

# Results I

## Prescribed medicine use



Legend: **pro** well-off gradient



Note: **outtake** based on multinomial, multivariate logistic regression analysis (separately) for the 8 CEECs; **controlling** for employment status, age, gender, chronic conditions, self-assessed health.



# R e s u l t s I

## Limitations

- Analysis based on self-reported information (EHIS)
  - **But:** several quality assurance processes and household survey as acknowledged standard tool in this context according to WHO
- Prescribed medicine use based on GP visit, specialist visit or inpatient visit?
- Analysis referring to different years (2007-2009) and different sample sizes

# R e s u l t s I I

## P h a r m a c e u t i c a l p o l i c y

### A few selected results ...

- large share of **private pharmaceutical spending** (BG, LV, PL)
  - full out-of-pocket payments for self-medication
  - (percentage) co-payments and prescription fees
  - increasing share of private pharmaceutical expenditure (cost-containment, global financial crisis)
- comparably **low investment**
  - low health expenditure per capita
  - low pharmaceutical expenditure per capita
- fewer medicines, but higher **pharmacy density** (except SI)
  - OTC medicines sale outside pharmacies (except LV, PL, SK)
  - intra-country disparities (BG, CZ, PL, RO)

# C o n c l u s i o n

## Research aim I: Inequalities in medicine use?

- Pro-rich socioeconomic gradient in medicine use
  - yes: non-prescribed medicine use
  - partly: prescribed medicine use (LV, PL, RO)

## Research aim II: Role of pharmaceutical policy?

- Pharmaceutical policy as a major co-determinant of inequalities  $\Rightarrow$  and an effective tool to reduce them
- Major issues in CEECs:
  - co-payments (reduction, exemption)
  - rational selection, pricing and reimbursement, prescription

# Many thanks!

**Dr Sabine Vogler**

WHO Collaborating Centre for  
Pricing and Reimbursement  
Policies, Department of Health  
Economics, Austrian Public Health  
Institute, Vienna, Austria

[sabine.vogler@goeg.at](mailto:sabine.vogler@goeg.at)

**Prof August Österle**

Institute for Social Policy,  
Department of Socioeconomics,  
Vienna University of Economics  
and Business,  
Vienna, Austria

[august.oesterle@wu.ac.at](mailto:august.oesterle@wu.ac.at)

**Dr Susanne Mayer**

Department of Health Economics,  
Centre for Public Health,  
Medical University of Vienna,  
Vienna, Austria

[susanne.mayer@meduniwien.ac.at](mailto:susanne.mayer@meduniwien.ac.at)