

# Trends in the prevalence of smoking in Russia during the transition to a market economy

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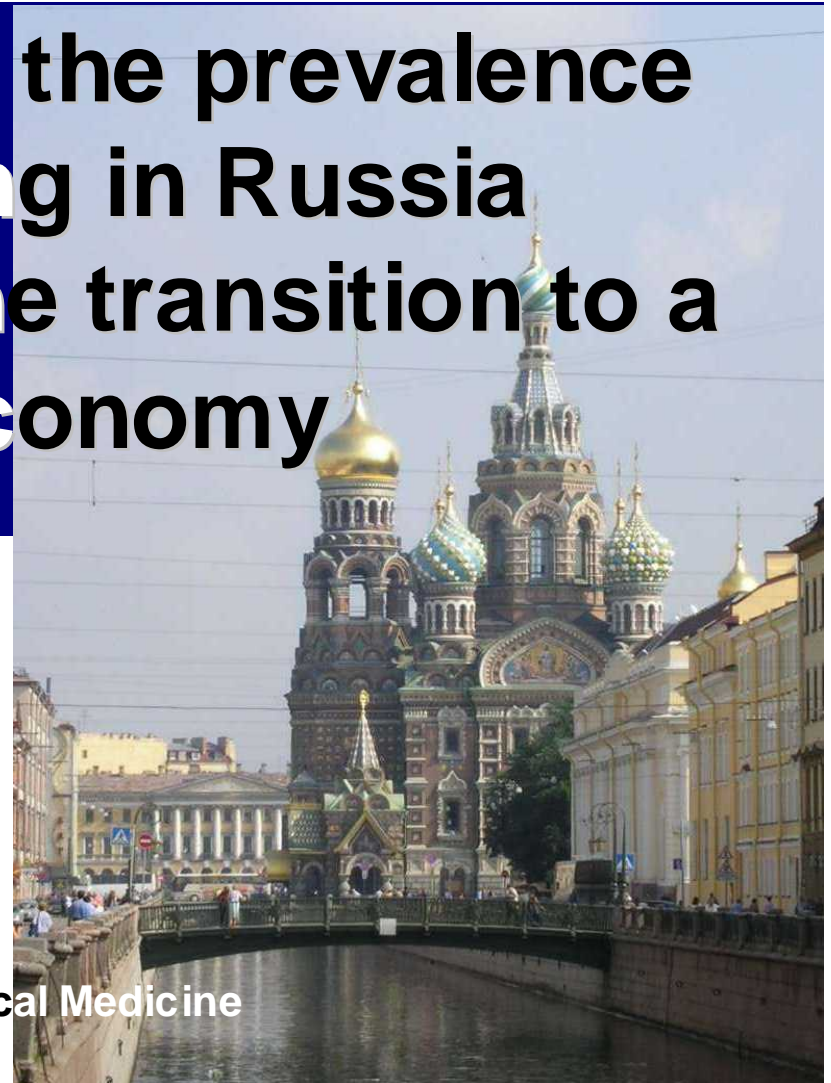
**Martin Bobak<sup>2</sup>**

**Anna Gilmore<sup>1</sup>**

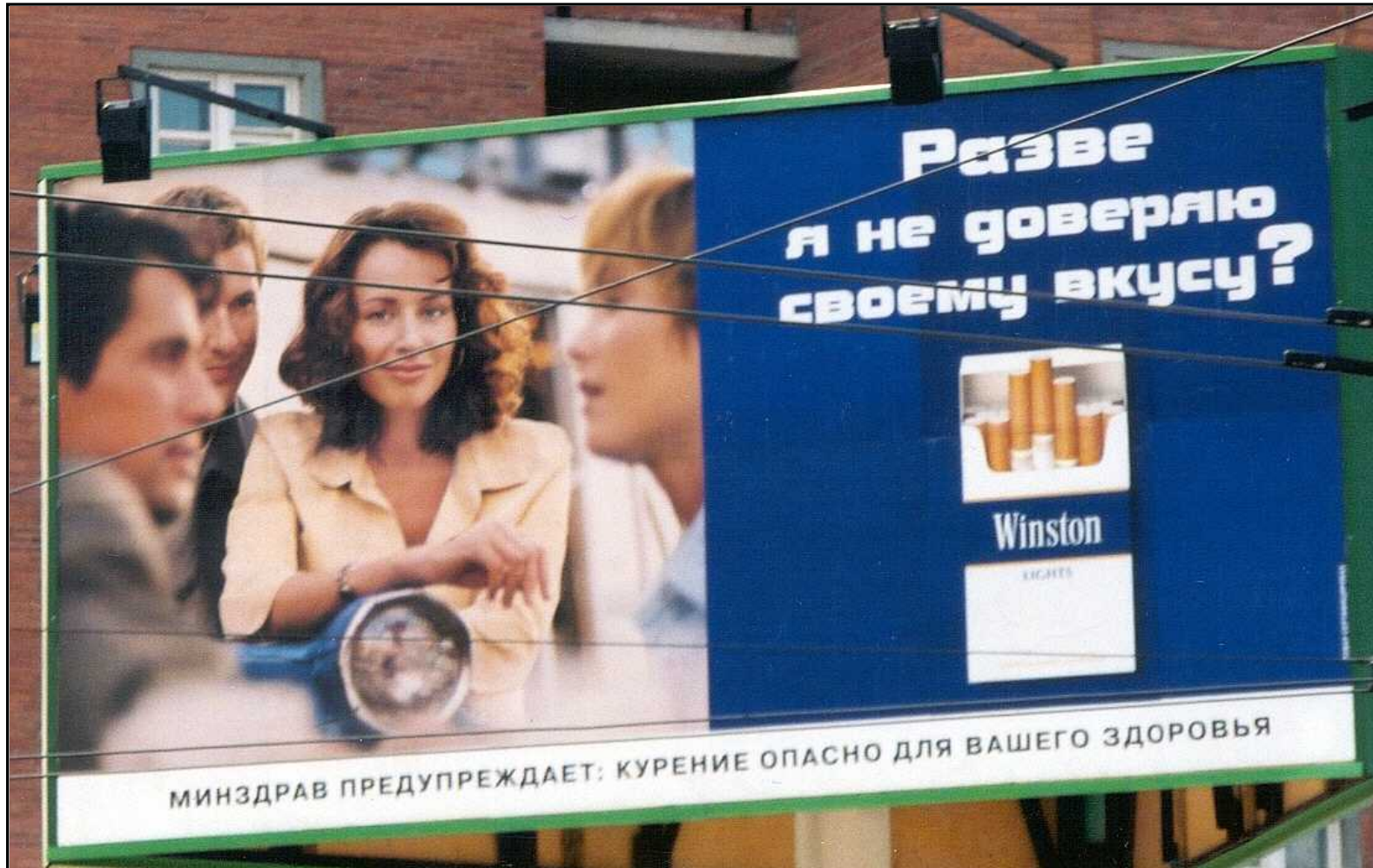
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# Background





# Smoking in Russia

- Men –high prevalence for many decades
- Women – traditionally low rates; increase amongst younger women since the transition
- Accumulated burden of tobacco related deaths amongst the highest in the world:
  - Smoking accounts for nearly half of male deaths, and 4% of female deaths




# Transnational tobacco companies (TTCs) in Russia since 1991

- Privatisation of state tobacco companies
- Heavy investment by TTCs
- Aggressive marketing, targeted at
  - Women
  - Urban dwellers (then extending to other areas)
- Weakened legislation
- Major increase in cigarette sales



# Aim

- To use longitudinal data to examine trends in smoking in post transition Russia
- To assess whether these trends are consistent with the activities of transnational tobacco companies.



# Hypotheses (based on the actions of the privatised tobacco companies)

## ■ Women

- Increase in smoking
- Rural prevalence rising towards urban levels

## ■ Men

- Little change in prevalence
- Increasing educational inequalities

## ■ All

- Lowering of age of smoking uptake

# Methods





# Methods

- Russia Longitudinal Monitoring survey – household panel survey
- Phase 2 (1994-2003)
  - 38 centres across Russia; Moscow St P included; other sampling centres have rural and urban areas
- Phase 1 (1992-1993)
- Respondents aged 18 and over included





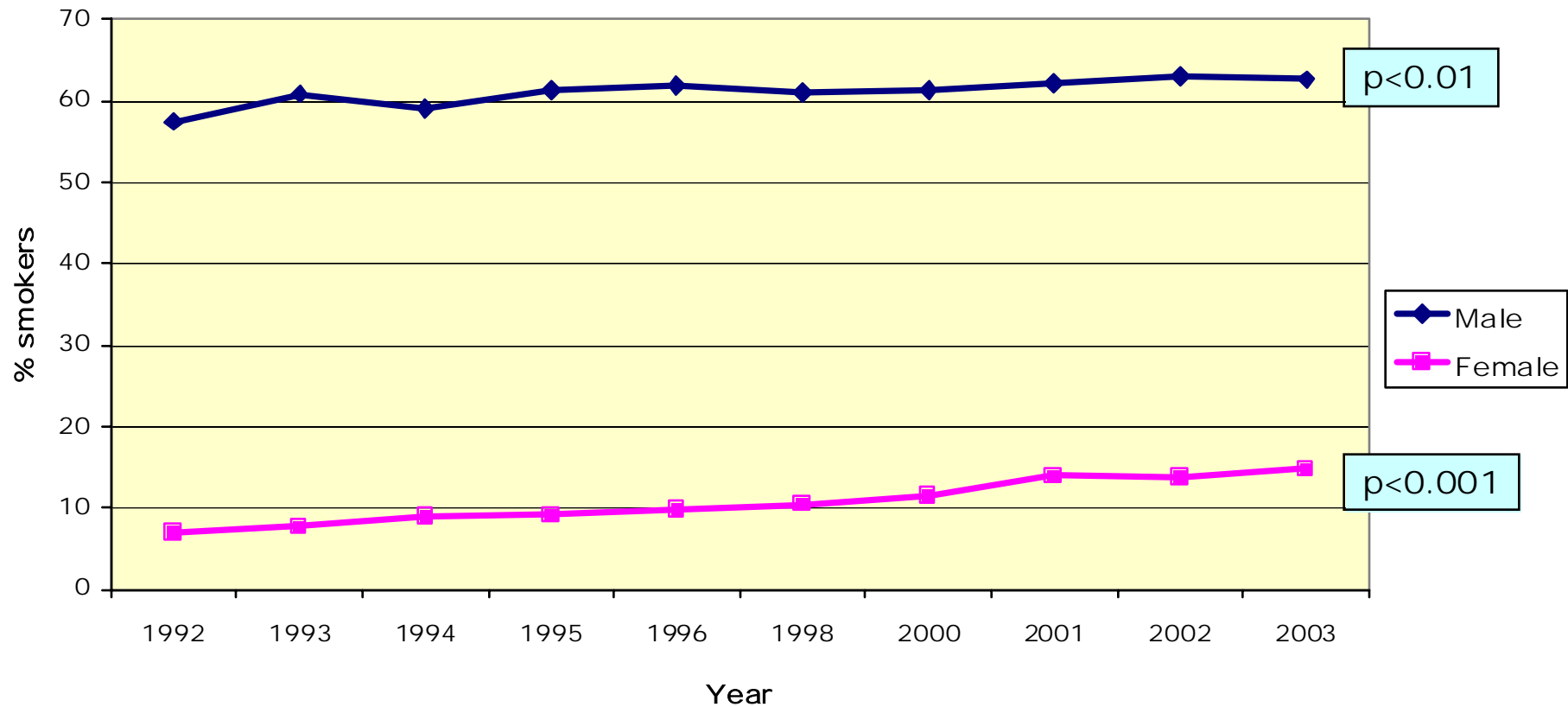
# Analyses

- Prevalence of current smoking in each round,
  - “Do you smoke?” (1992 : “have you ever smoked”, if yes “do you smoke now”.)
  - Age standardised to 1994 round, separately by gender
- Further analyses by
  - 10 year age band
  - Education. 3 categories (collapsed): Complete higher; complete secondary (technical, general or combined); incomplete secondary or primary. (Phase 2: 1994-)
  - Area of residence: Moscow and St Petersburg; other urban; rural. (Phase 2: 1994-)
- Age of first smoking (current smokers only)
  - “Remember, please, at what age did you start smoking? How old were you then?”

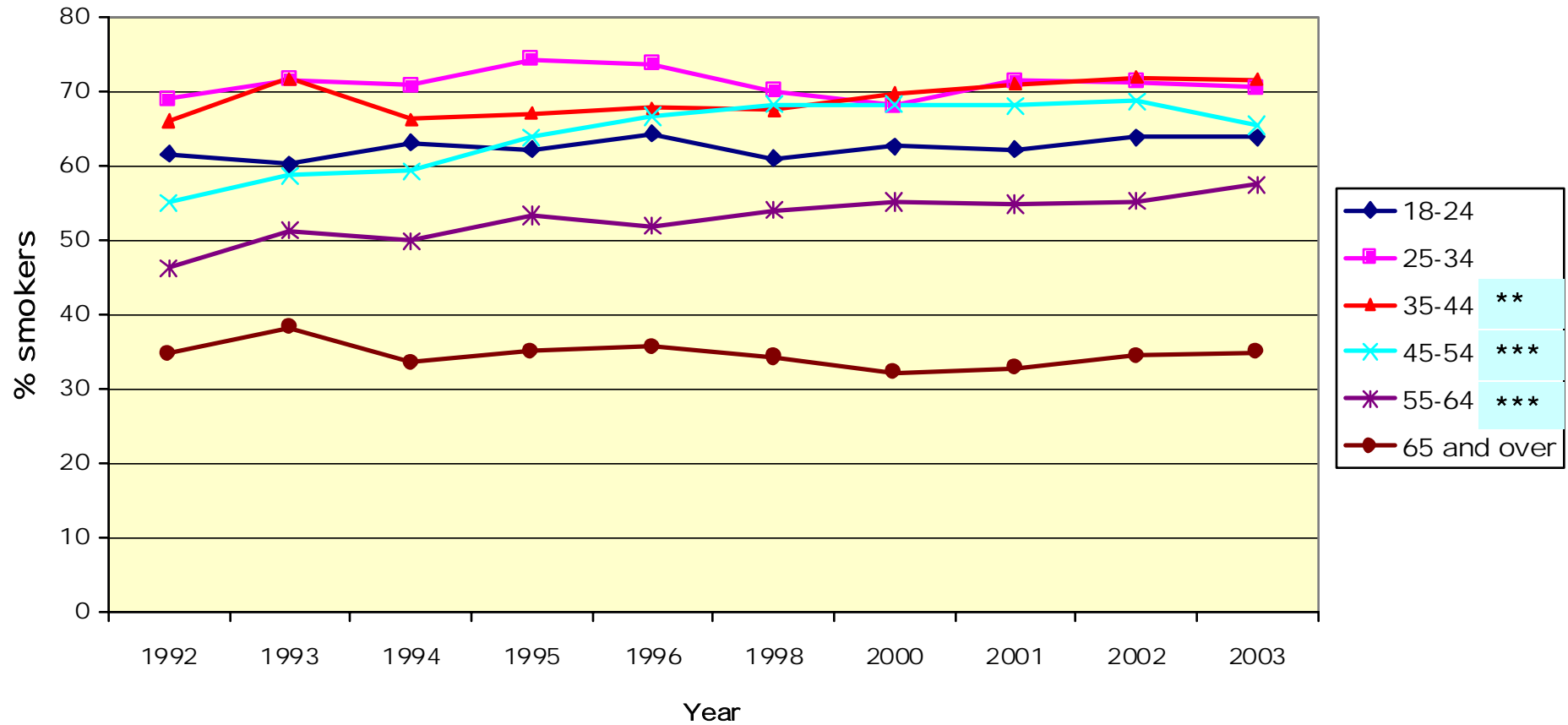
# Results



# Smoking prevalence in Russia 1992-2003 (RLMS)

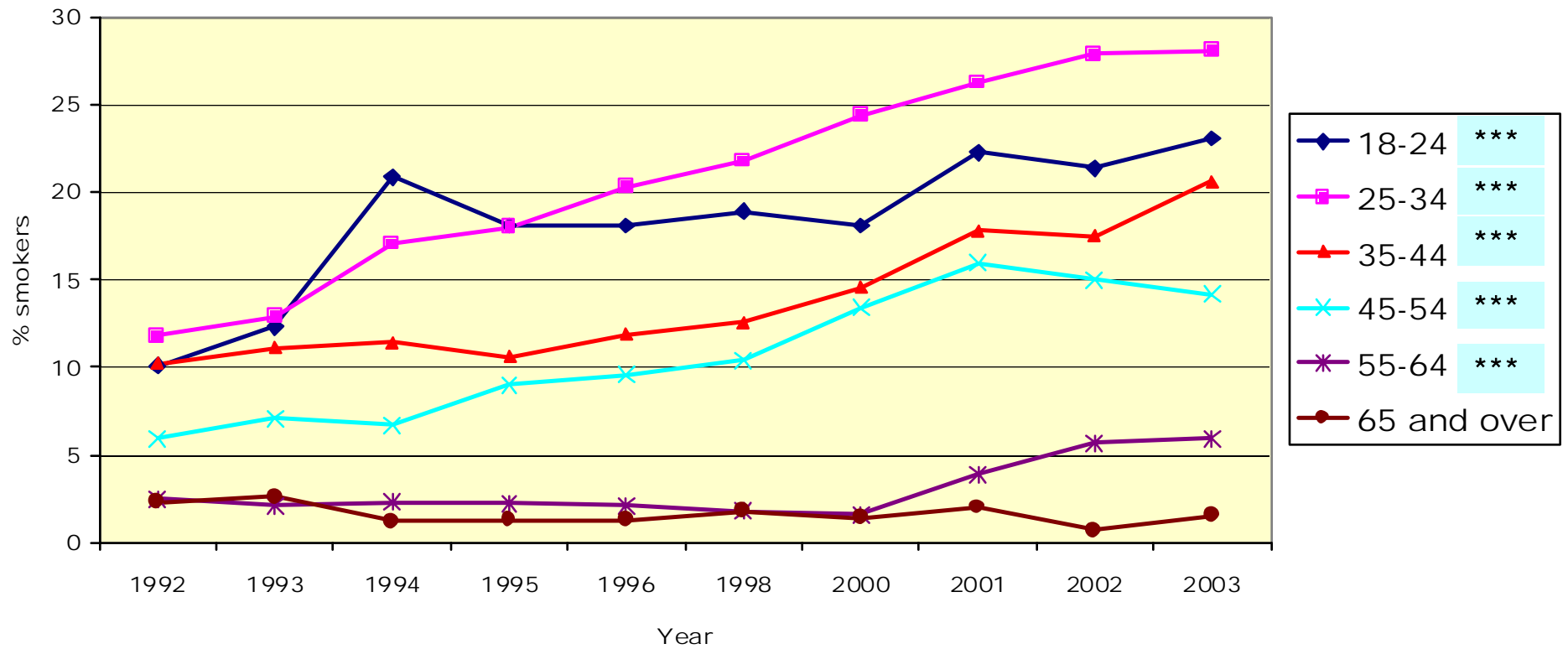


# Smoking prevalence in men in Russia 1992-2003 (RLMS)



\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

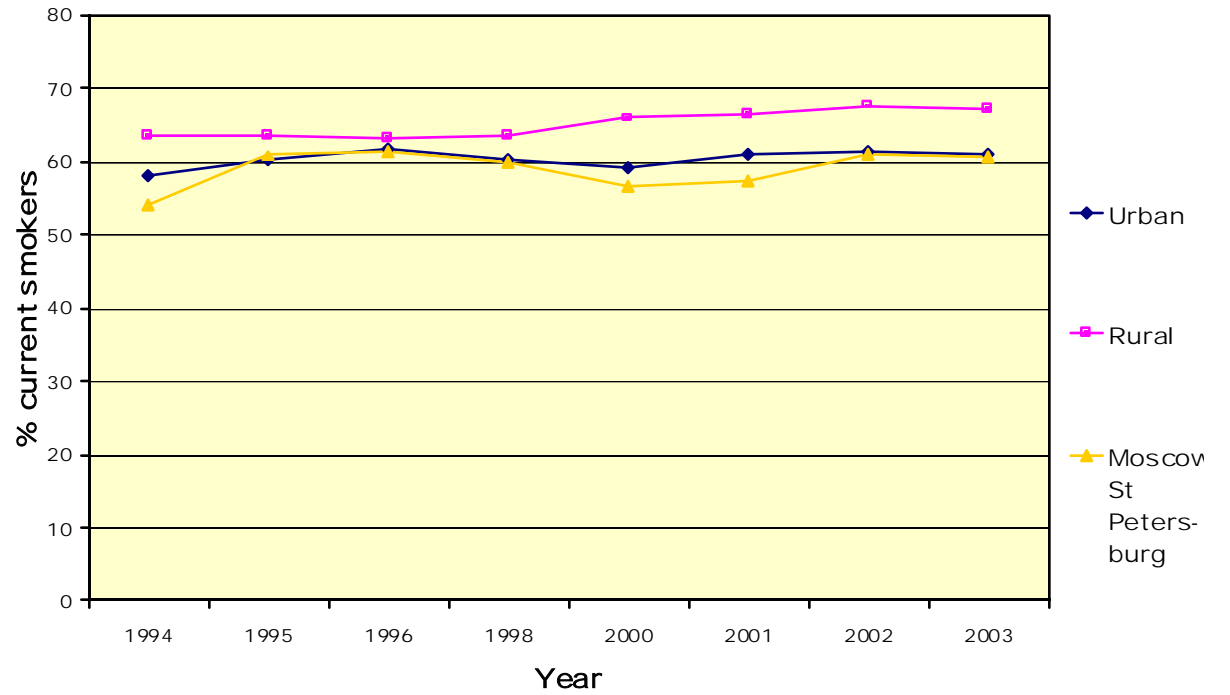
# Smoking prevalence in women in Russia 1992-2003 (RLMS)



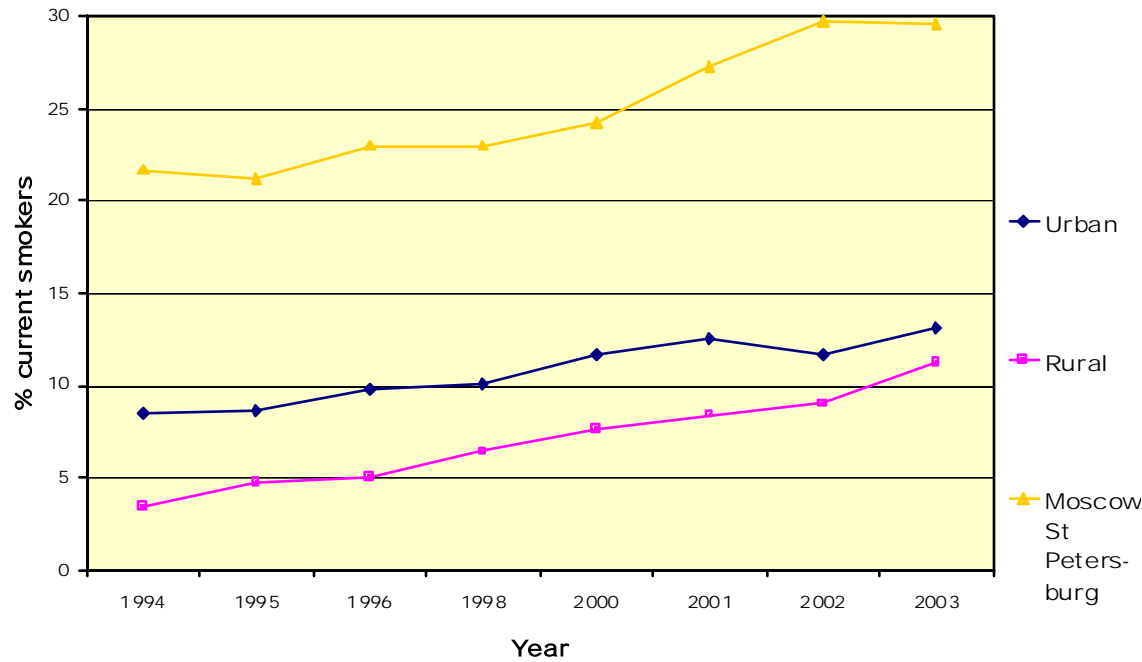
\*\*\* p < 0.001



## Males



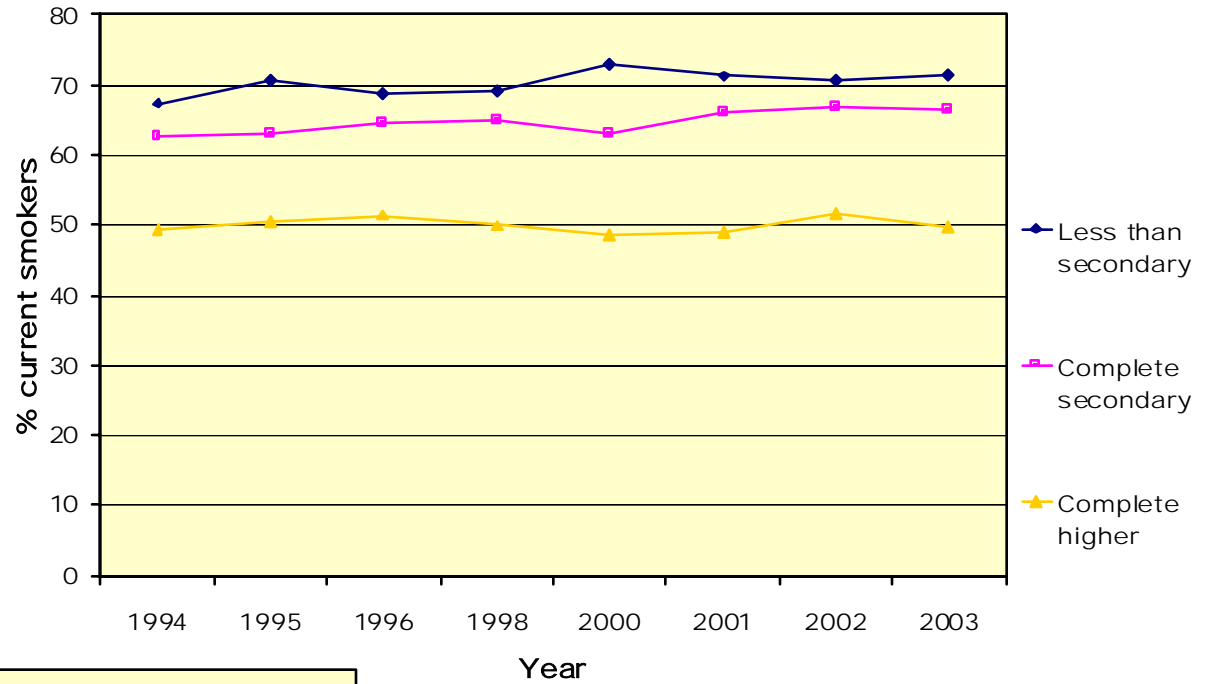
## Females



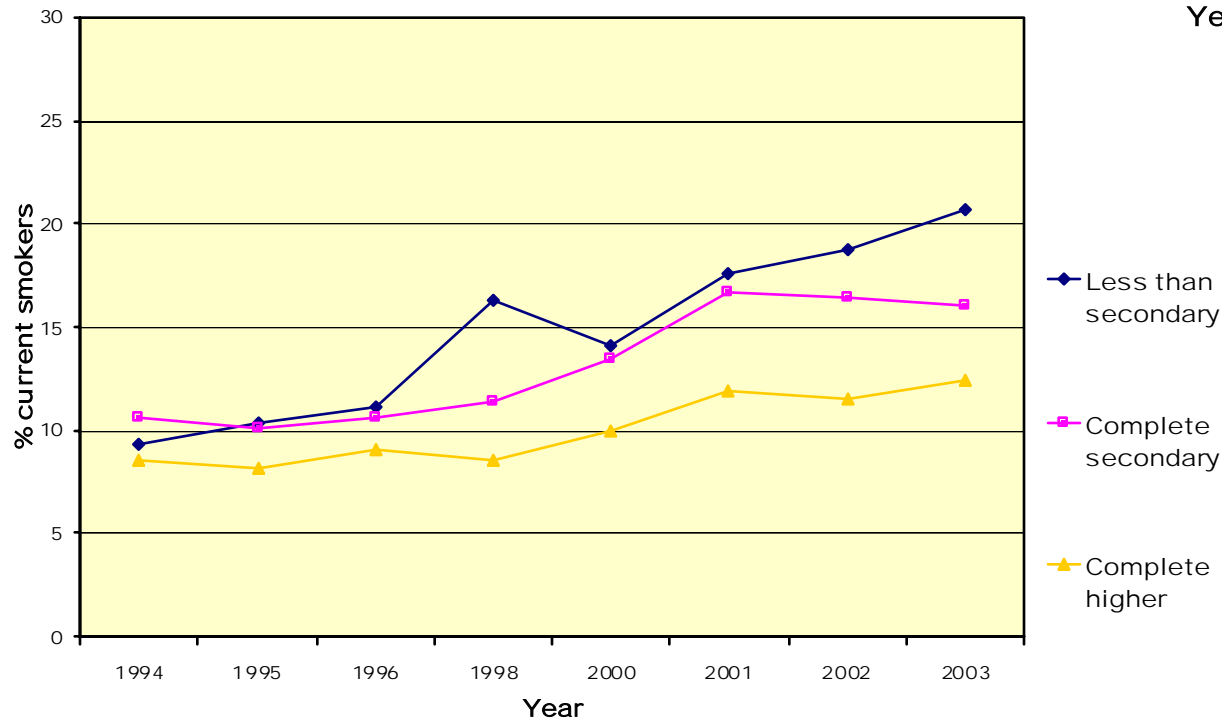
# Residence and smoking



Males

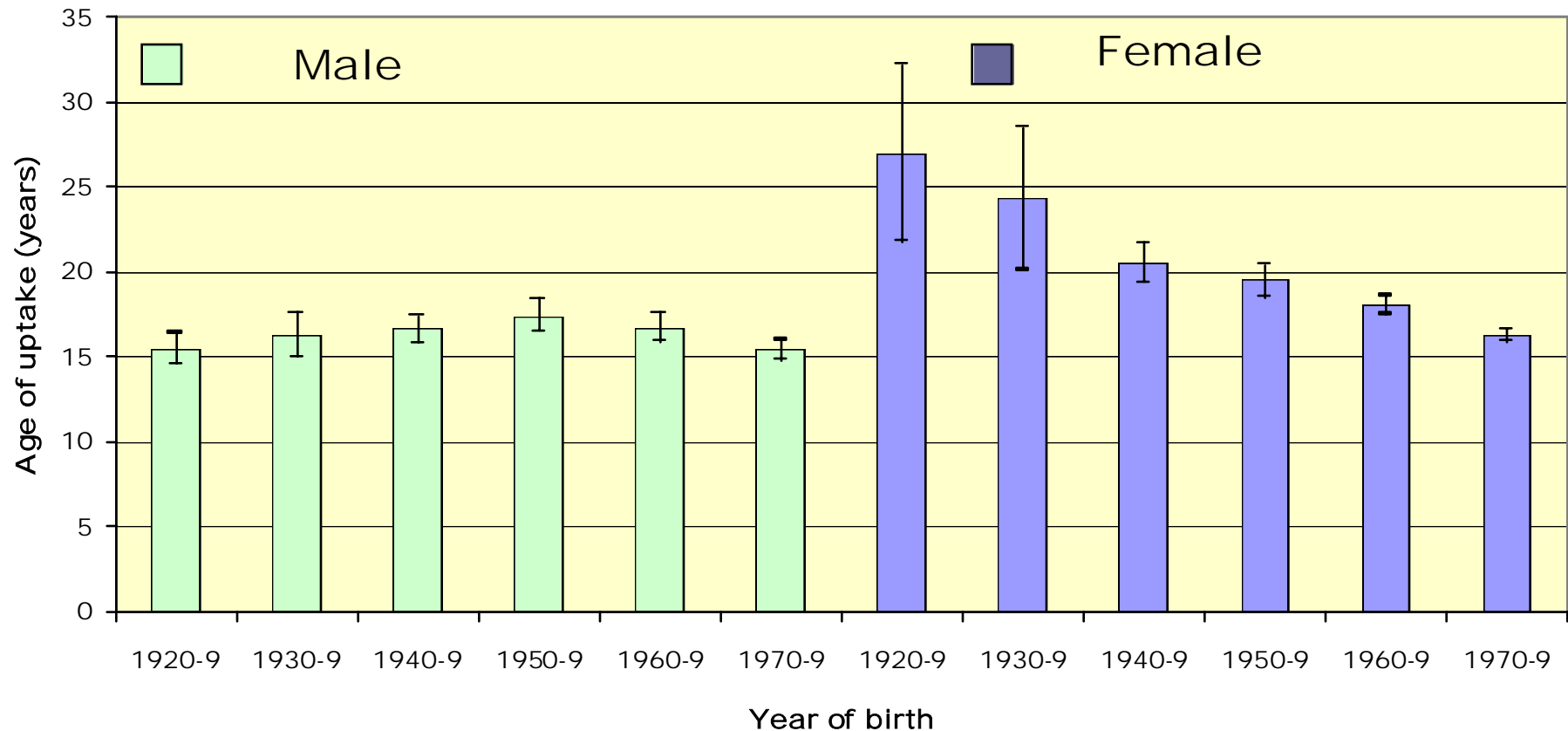


Females



Education  
and  
smoking

## Age of smoking uptake by birth cohort (2003 data)





# Discussion and conclusions





# Gender differences

## ■ Males

- High prevalence of male smoking, similar to other studies (*McKee, Bobak TC 1998; Gilmore AJPH, 2004, Bobak TC 2006*)
- Further small but significant increase

## ■ Females

- Doubling of prevalence 1992-2003
- First time such an increase shown unequivocally
- Still much lower than men
- Rates comparable to other surveys (*1998; Gilmore AJPH, 2004, Bobak TC 2006*)



# Sociodemographic findings

## ■ Education

- Greatest rise in the least educated (both sexes), shown in women for the first time.
- Educational differences in men consistent with previous findings  
*(McKee, Bobak TC 1998; Gilmore AJPH, 2004, Bobak TC 2006)*
- Widening educational gradient in women shown for the first time

## ■ Geography

- Urban predominance of female smoking well-established *(AJPH, 2004, Bobak TC 2006)*
- However, rising rural rates shown here for the first time
- Rate of increase in women more marked in rural areas, although total prevalence still higher in urban areas.

## ■ Age of first smoking

- Age of first smoking lower in the younger female cohorts



# Hypotheses (based on TTCs' actions) - revisited

Women	Increase in smoking Rural prevalence rising towards urban levels	Yes Yes
Men	Little change in prevalence Increasing educational inequalities	Yes, some ↑ Weak
All	Lowering of age of smoking uptake	Yes (women only)



# TTCs

- Changes in smoking in transitional Russia are consistent with known patterns of TTC activity (our hypotheses were mostly confirmed).
- TTCs have gone to considerable lengths to undermine tobacco control in FSU, and their efforts have apparently been successful
- Could the findings from this study apply to other FSU countries?
- Future lessons for countries with state-run tobacco industries

# Further reading

- Perlman, F., Bobak, M., Gilmore, A., McKee, M. **Trends in the prevalence of smoking in Russia during the transition to a market economy.**
- Tob. Control, Oct 2007; 16: 299 - 305.



<http://tobaccocontrol.bmj.com/cgi/content/full/16/5/299>