Monitoring social inequalities in health

Epi 2008 – Porto Alegre

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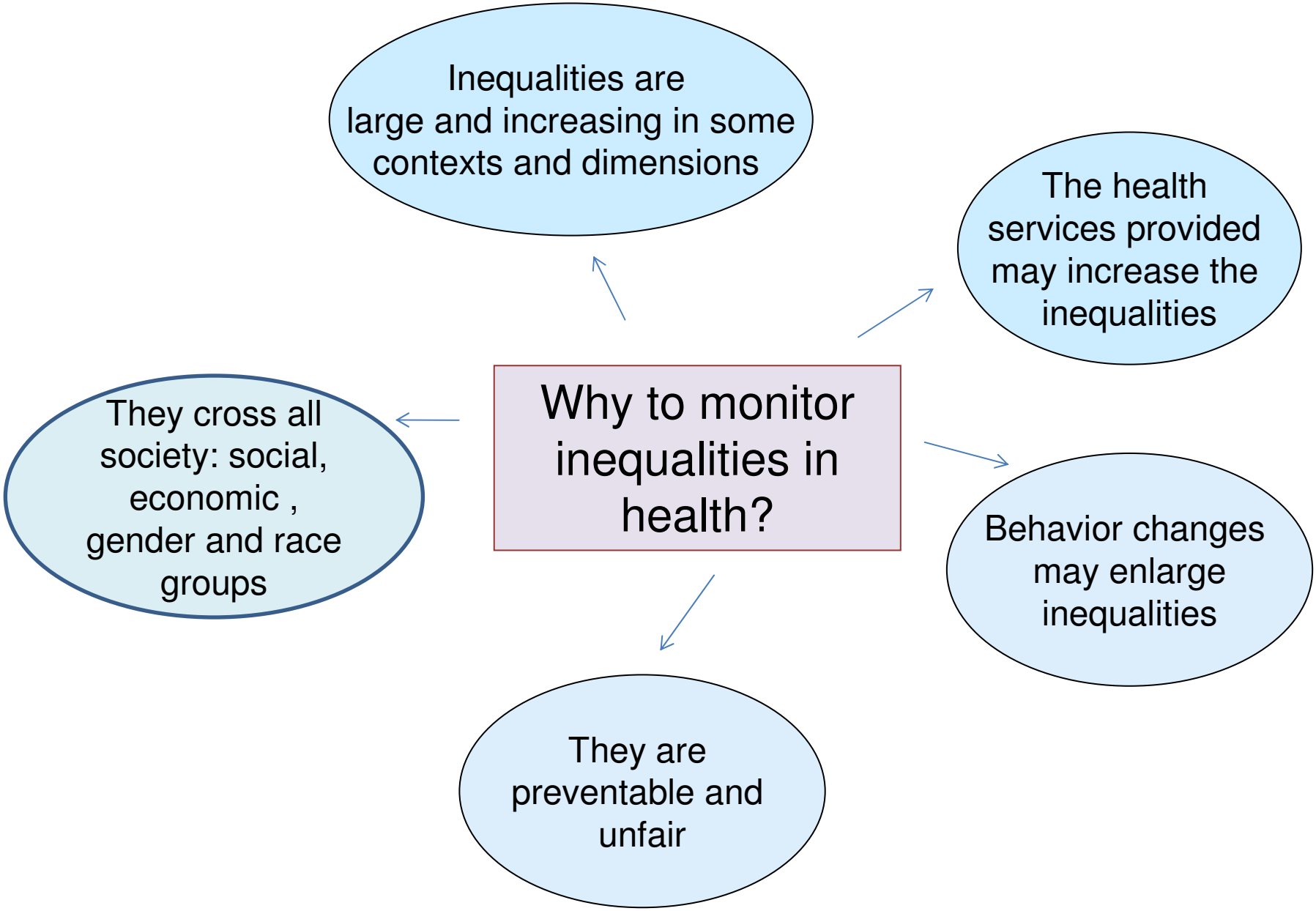
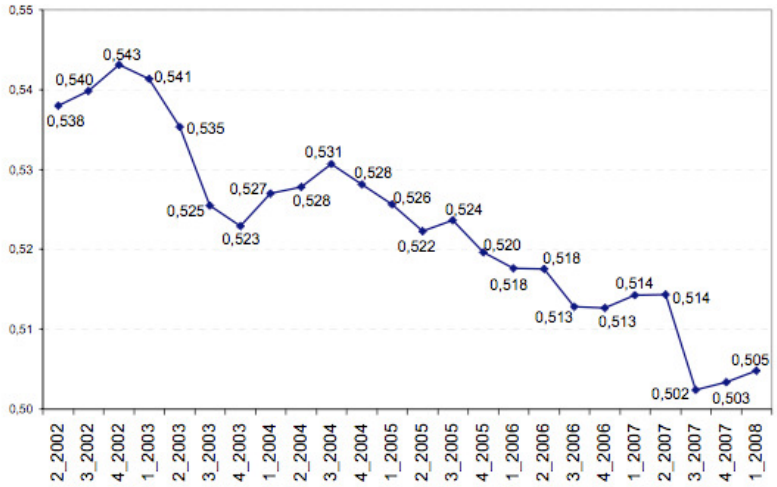
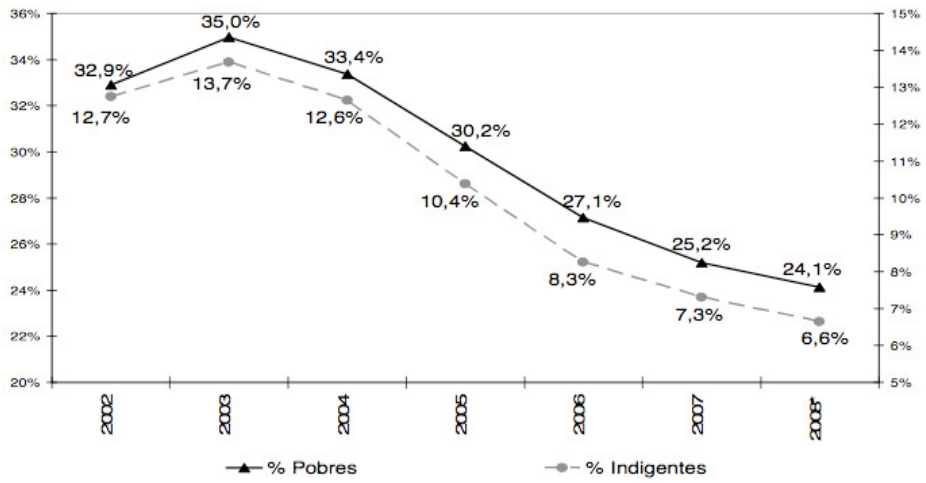

Why to monitor inequalities in health?
Inequalities are large and increasing in some contexts and dimensions
The health services provided may increase the inequalities
Behavior changes may enlarge inequalities
They are preventable and unfair
They cross all society: social, economic , gender and race groups

Gini Index among labor force – Brazil 2002-2008



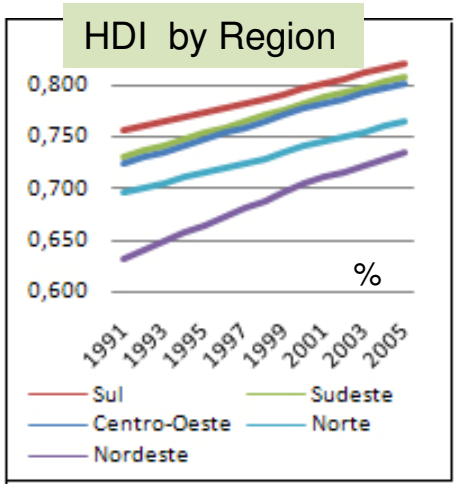
Fonte: Pesquisa Mensal de Emprego/IBGE. (Elaboração própria.) IPEA

Poor and indigent: 6 metropolitan regions, 2002-08



(*) Estimtiva.
Fonte: IBGE. Pesquisa Mensal de Emprego. (Elaboração própria.) IPEA

Improvement on economic and social indicators in Brazil



Fonte:PNUD - Fundação João Pinheiro

PNAD 2007

Improvement on economic and social indicators in Brazil

↓ Illiteracy to 10%

↑ % of homes with sewage disposal to 51,3%

↑ Houses with:

- Refrigerator: 91,4%
- Television: 94,8%
- Computer: 27,0%
- Internet access: 20,4%

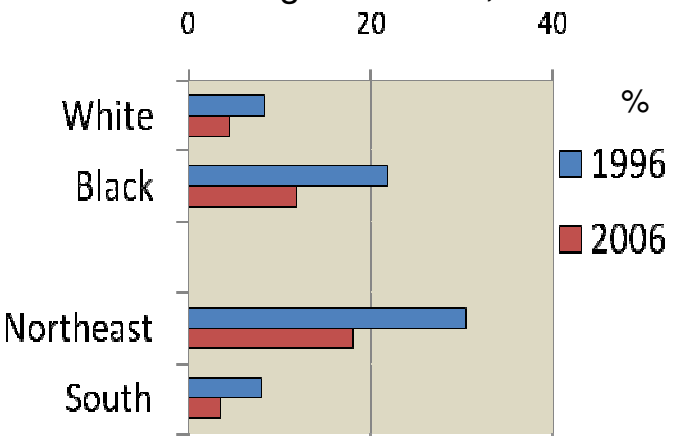
Persistence of inequalities:

Brazil: one of the 10 countries with higher income concentration

2007:
10 % poorer: 1,1% of income
10% richer 43,2% of income

Fotos: Tomas May

Percent of indigents. Brasil, 1996-2006



Fonte: Ipea-Unifem -SPM- IBGE

Monitoring inequalities in health

Mortality and Life Expectancy

Surviving – Letality

Morbidity

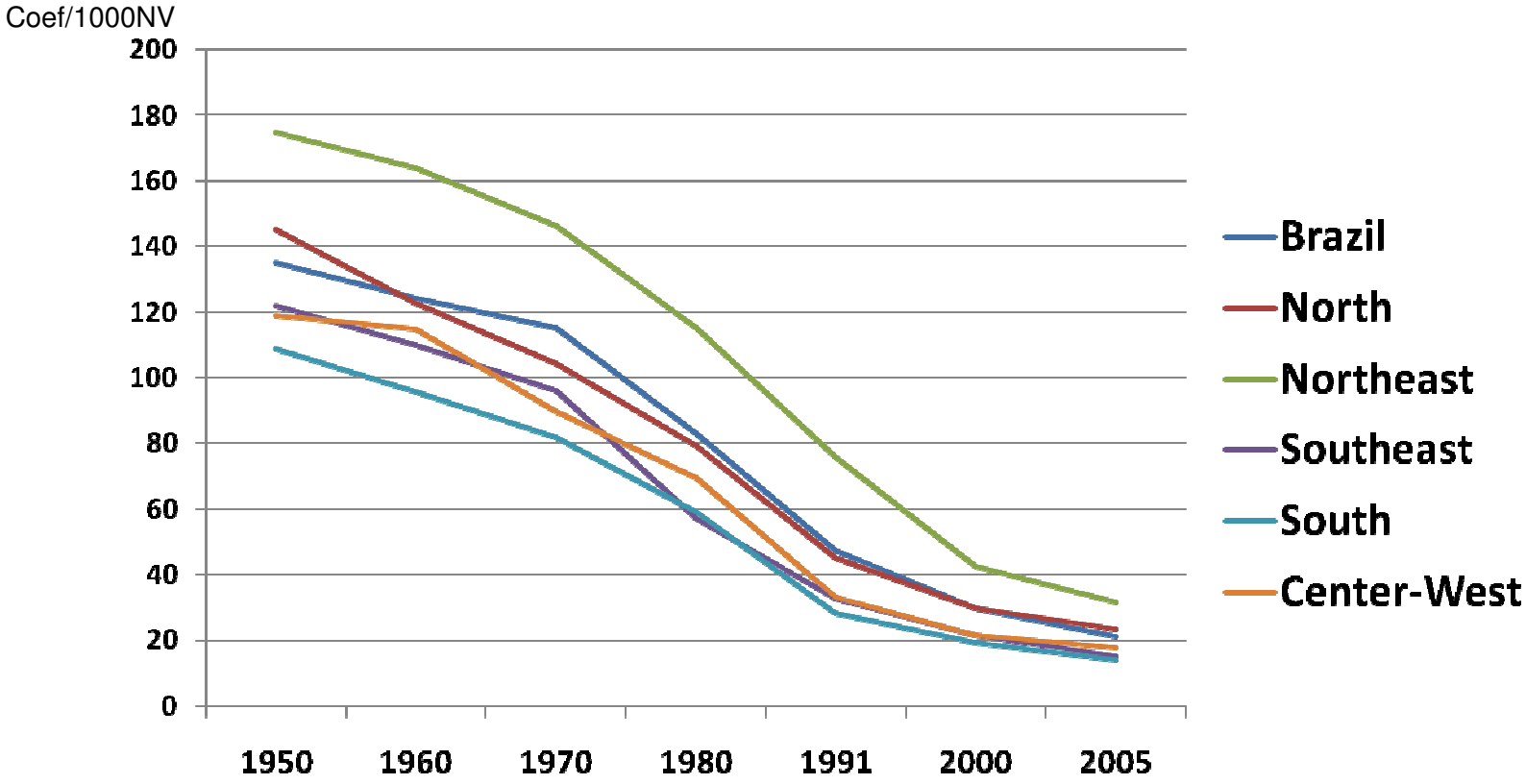
Self-evaluation on health and quality of life

The use of health services

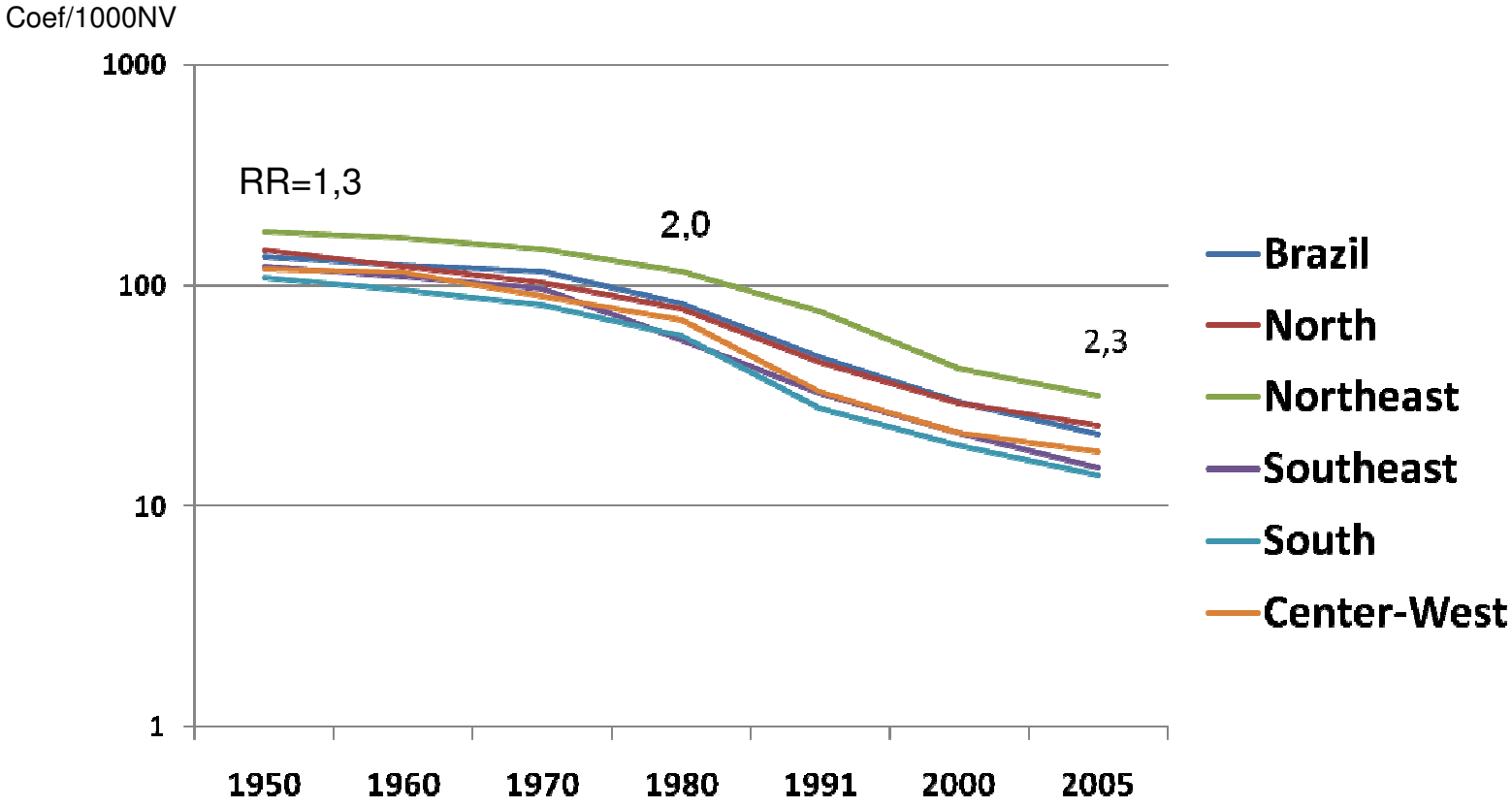
Monitoring Mortality:

The most vulnerable demographic groups

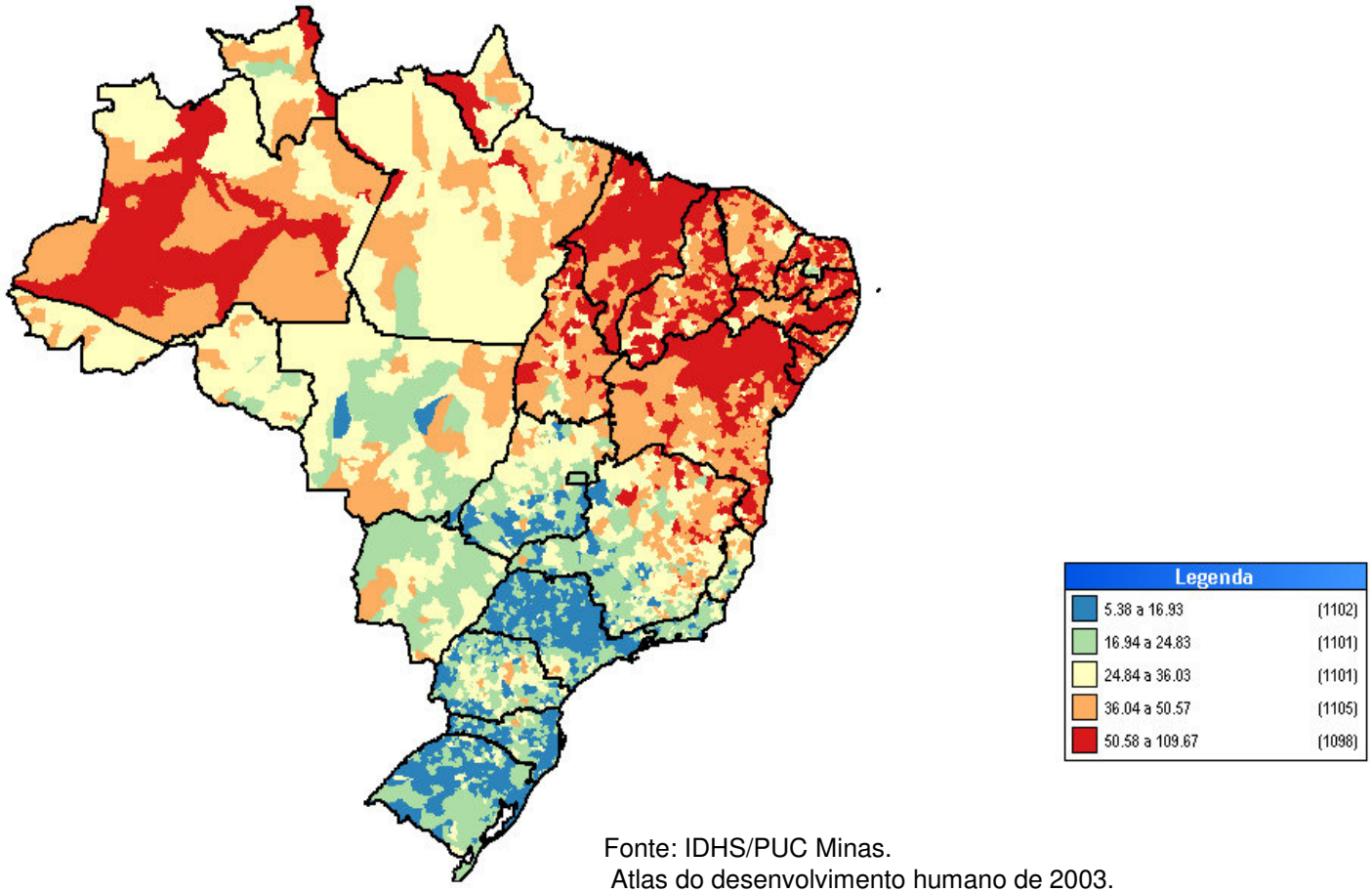
Infant Mortality in Brazil
1950 - 2005



Infant Mortality in Brazil
1950 - 2005



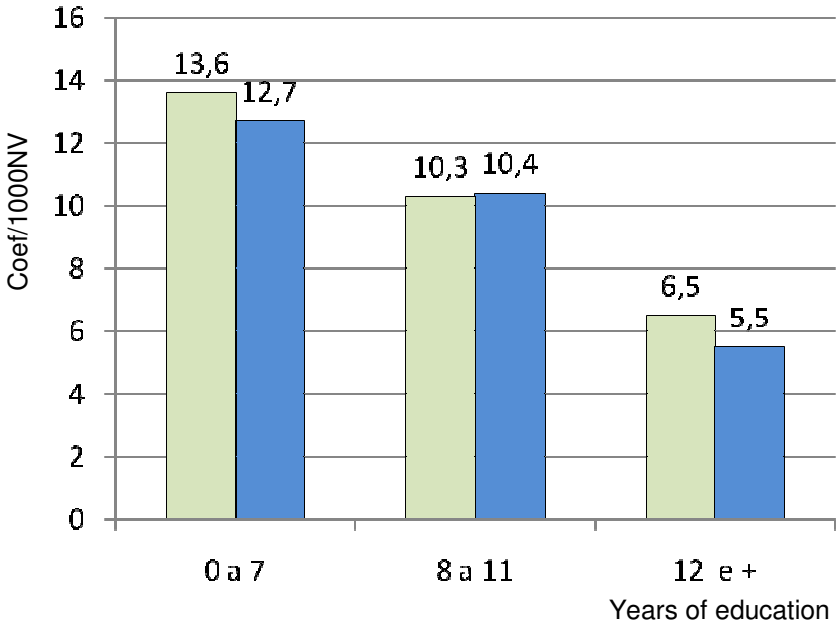
Infant Mortality in Brazilian municipalities - 2000.

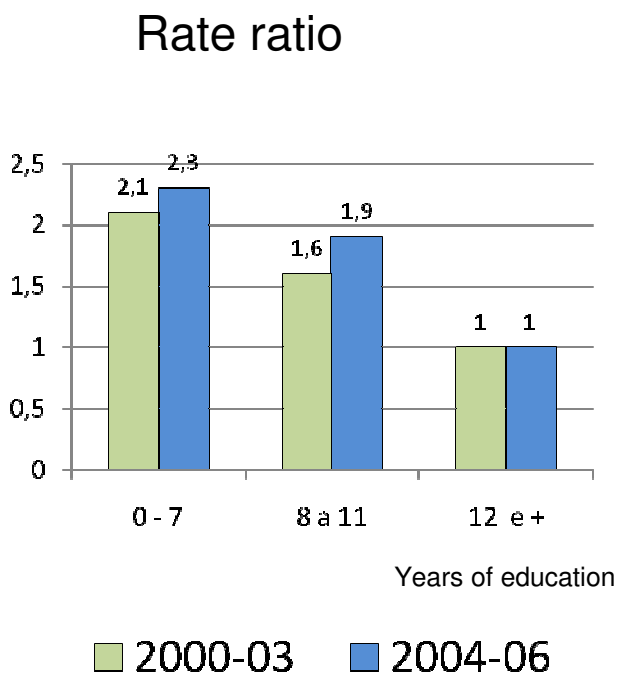


Fonte: IDHS/PUC Minas.
Atlas do desenvolvimento humano de 2003.

Infant mortality according to maternal schooling

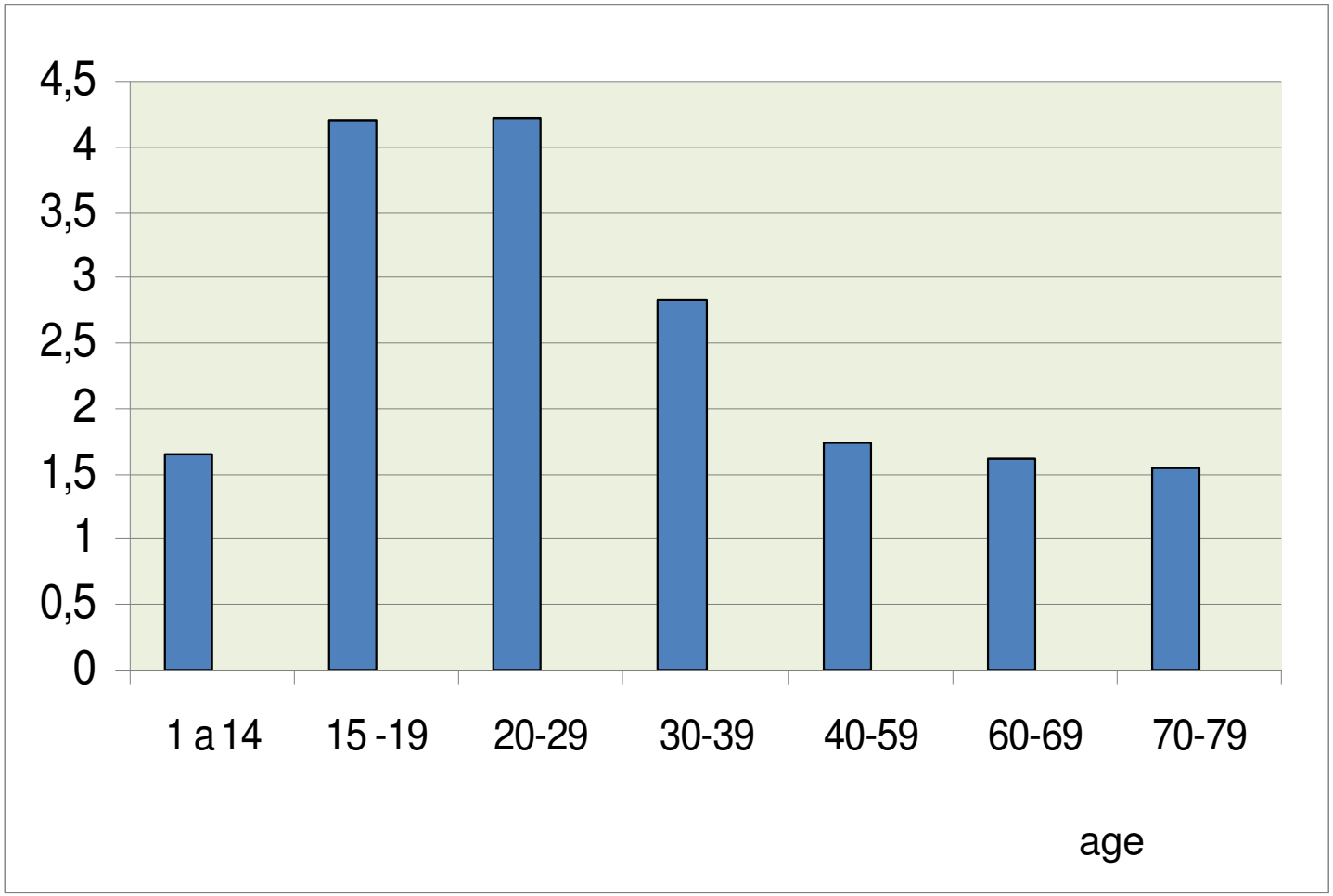
Campinas, SP, 2000-2006.





Relation between mortality rates of the worst and the best SEL according to age groups.

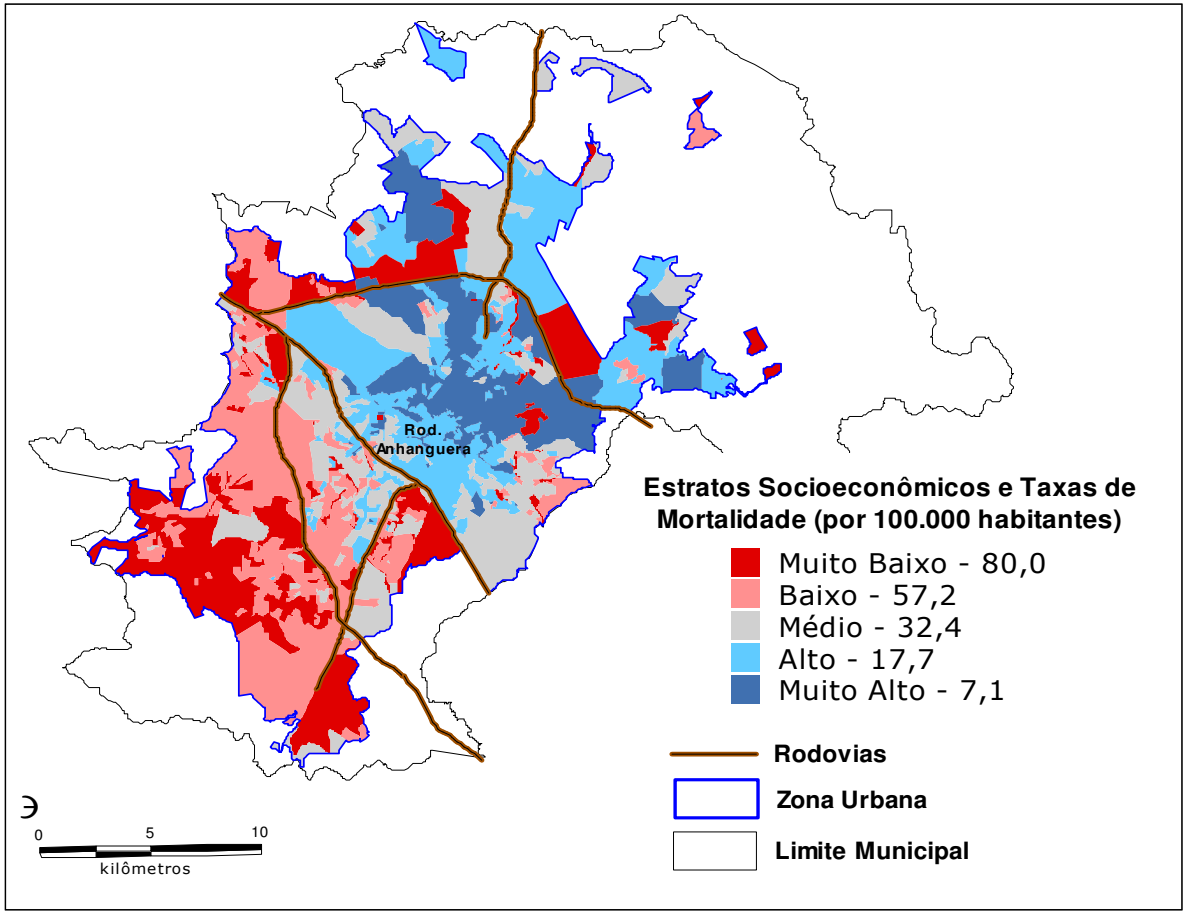
Campinas, SP, 2000-2001.



Violent deaths

The homicide epidemy

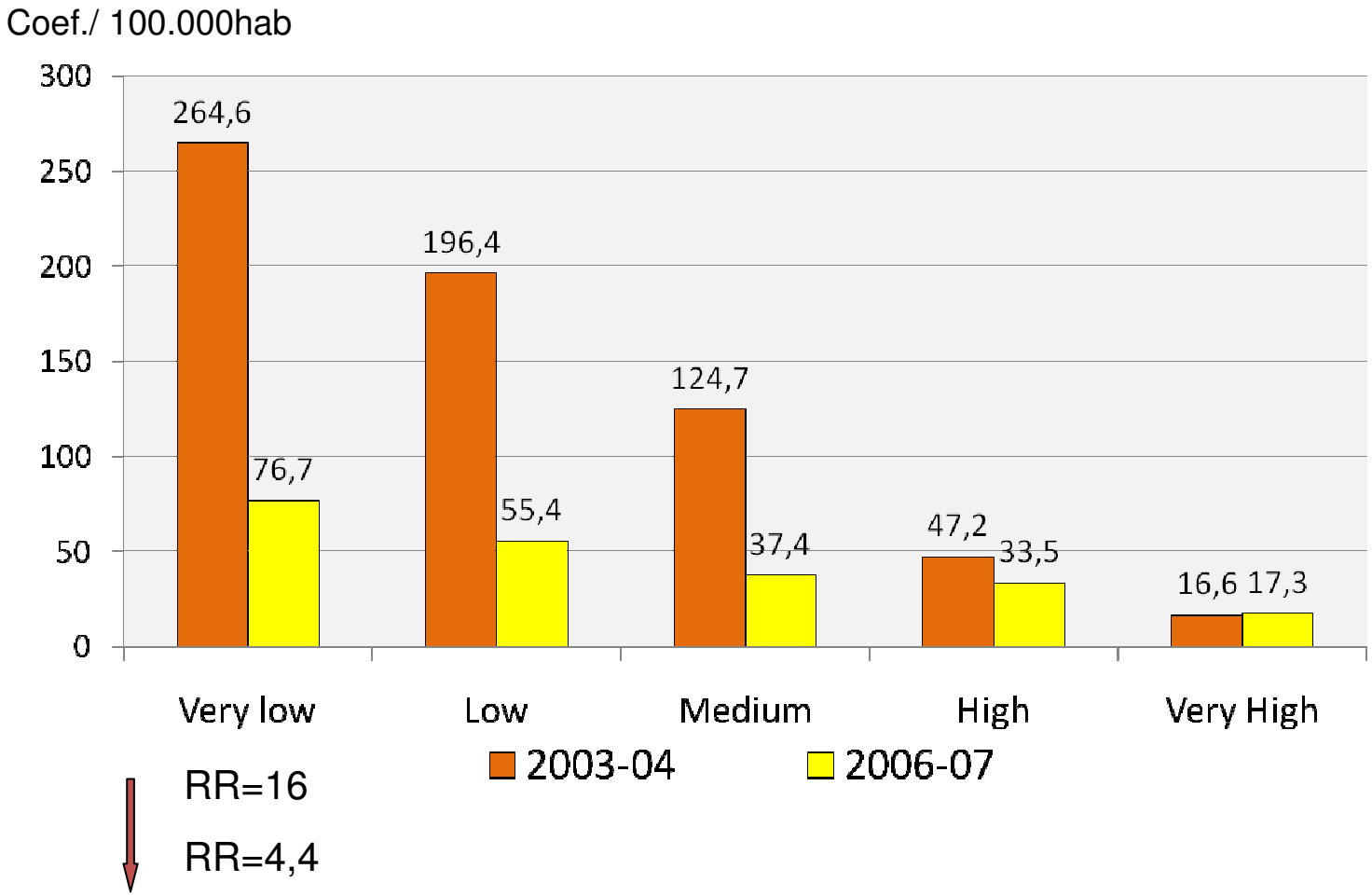
Map 1 – Homicide rates according to SEL of urban census tracts (*). Campinas, 2003-2004.



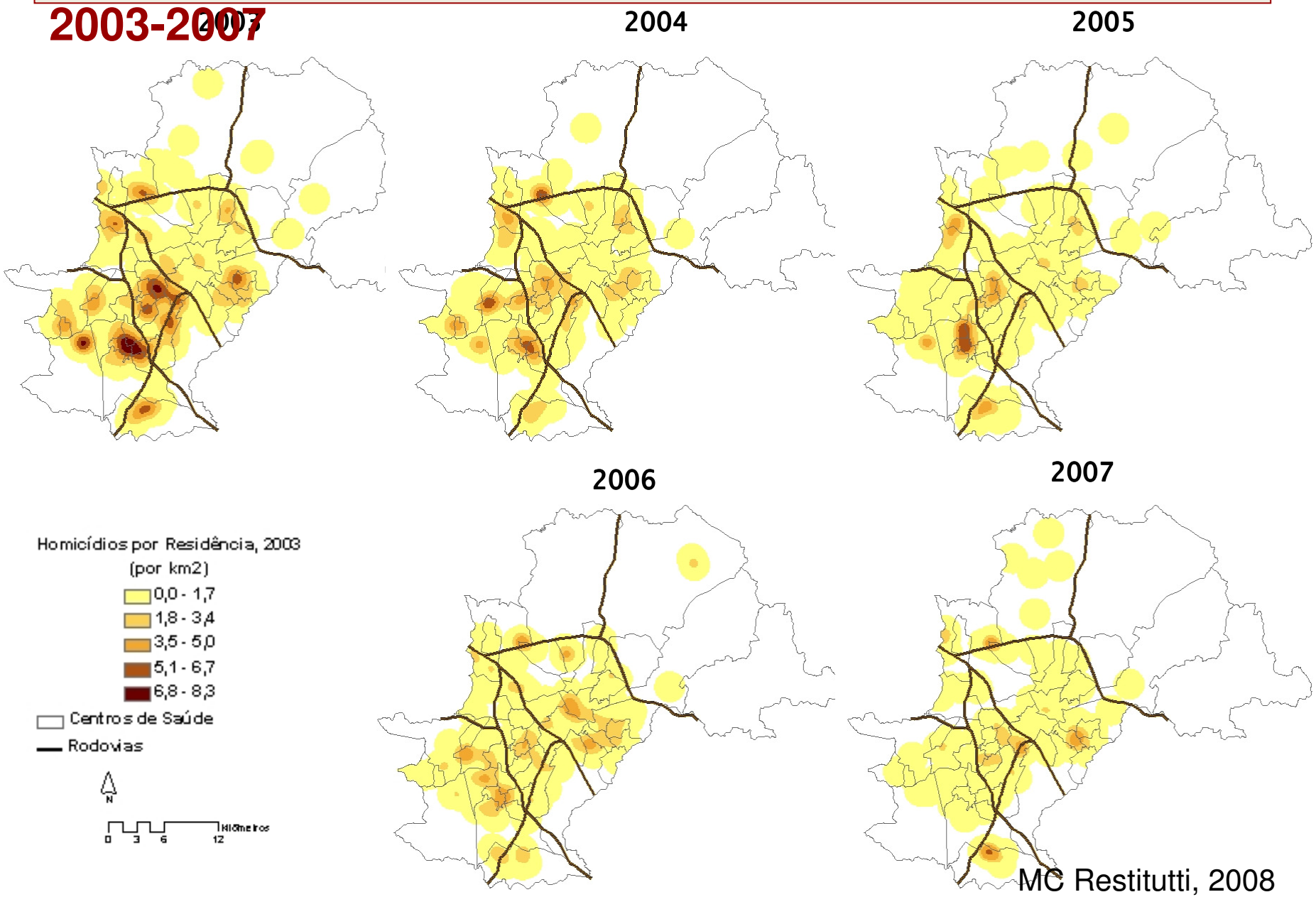
(*) The urban census tracts (Census 2000) of Campinas were grouped into 5 strata according to the percent of family head with 12 or more years of schooling.
Sources : SMS-Campinas. CCAS/DMPS/FCM-UNICAMP.

MC Restitutti, 2008

Homicides according to SEL of census tracts. Men, 15 - 39 years. Campinas, 2003-04 e 2006-07.

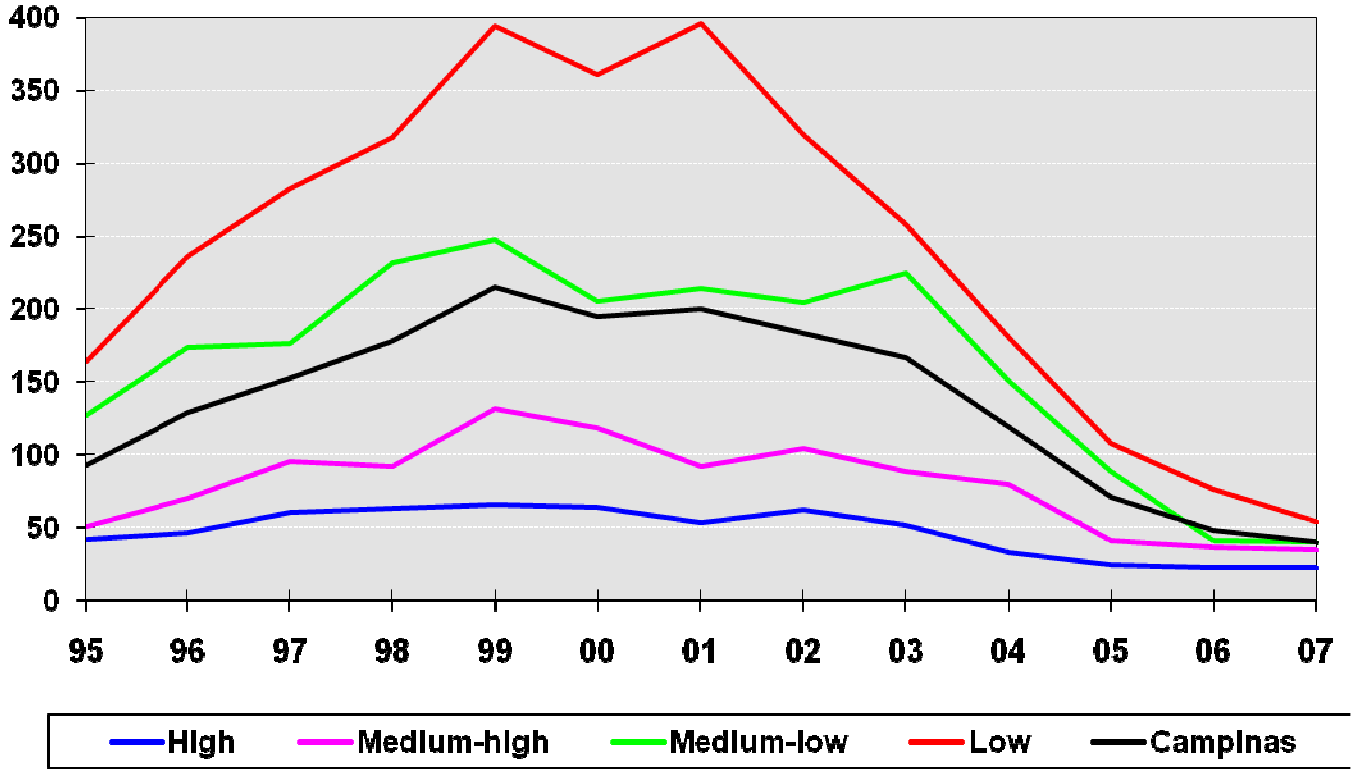


Homicides according to home places. Campinas, SP, 2003-2007

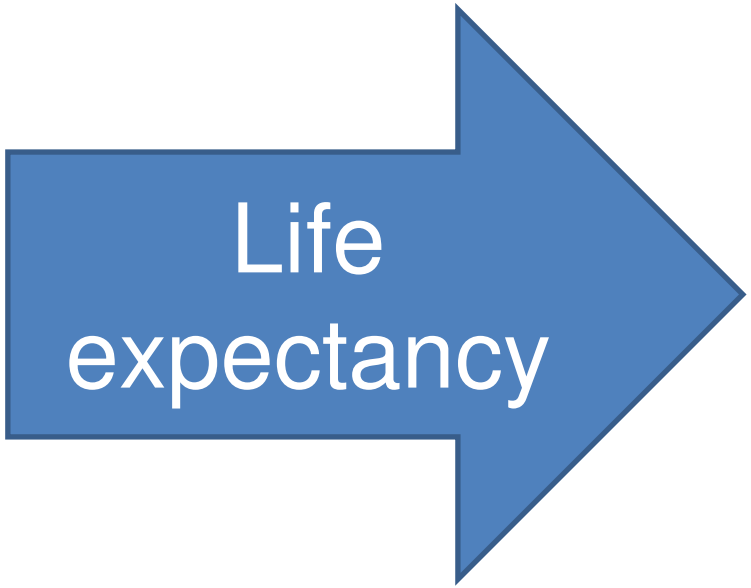


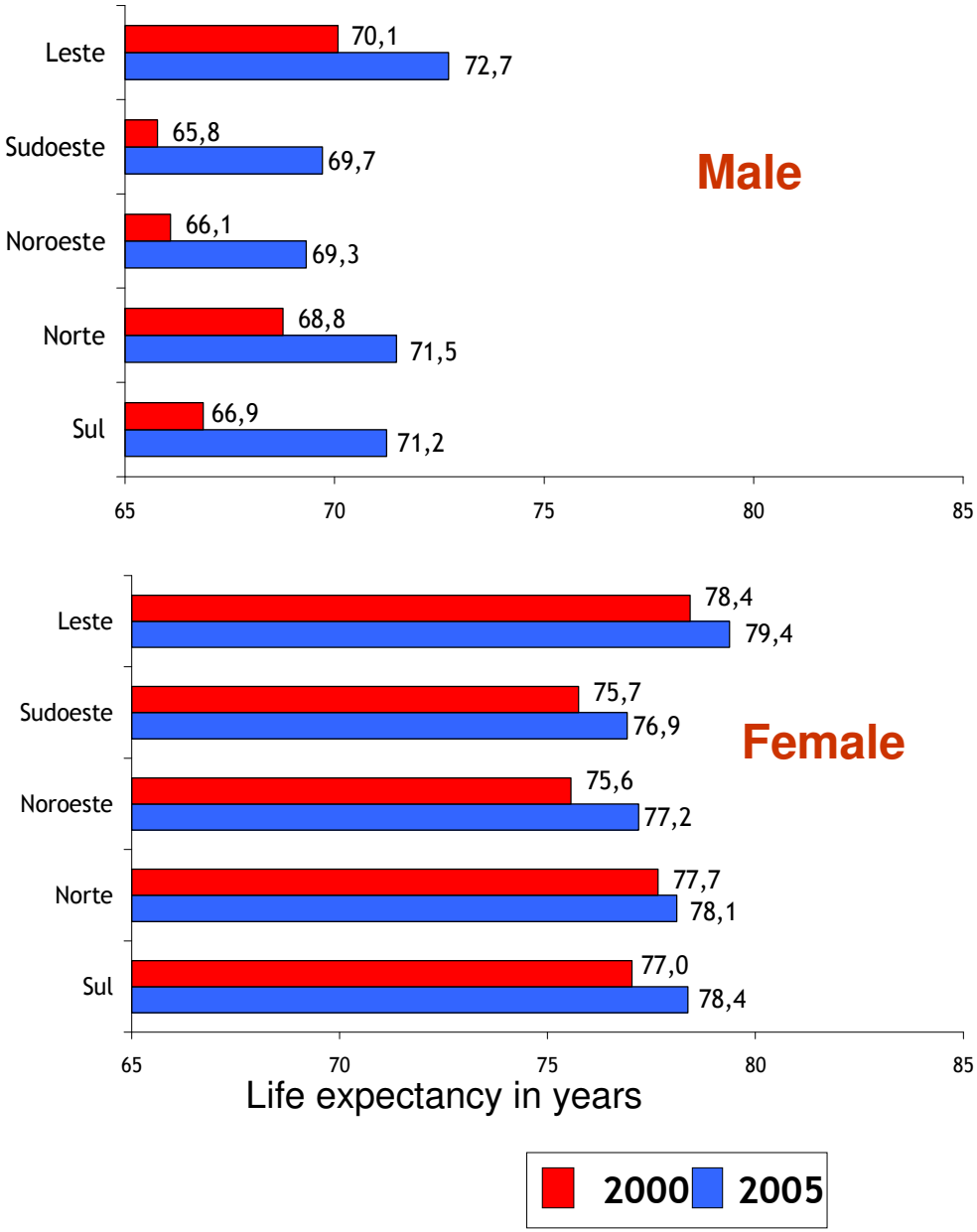
MC Restitutti, 2008

Homicide mortality rates of men 15 to 39 years, according to socioeconomic strata. Campinas, 1995 a 2007.



Sources: Datasus/MS 1995–1999, SIM/SMS de Campinas 2000-2007


Life
expectancy

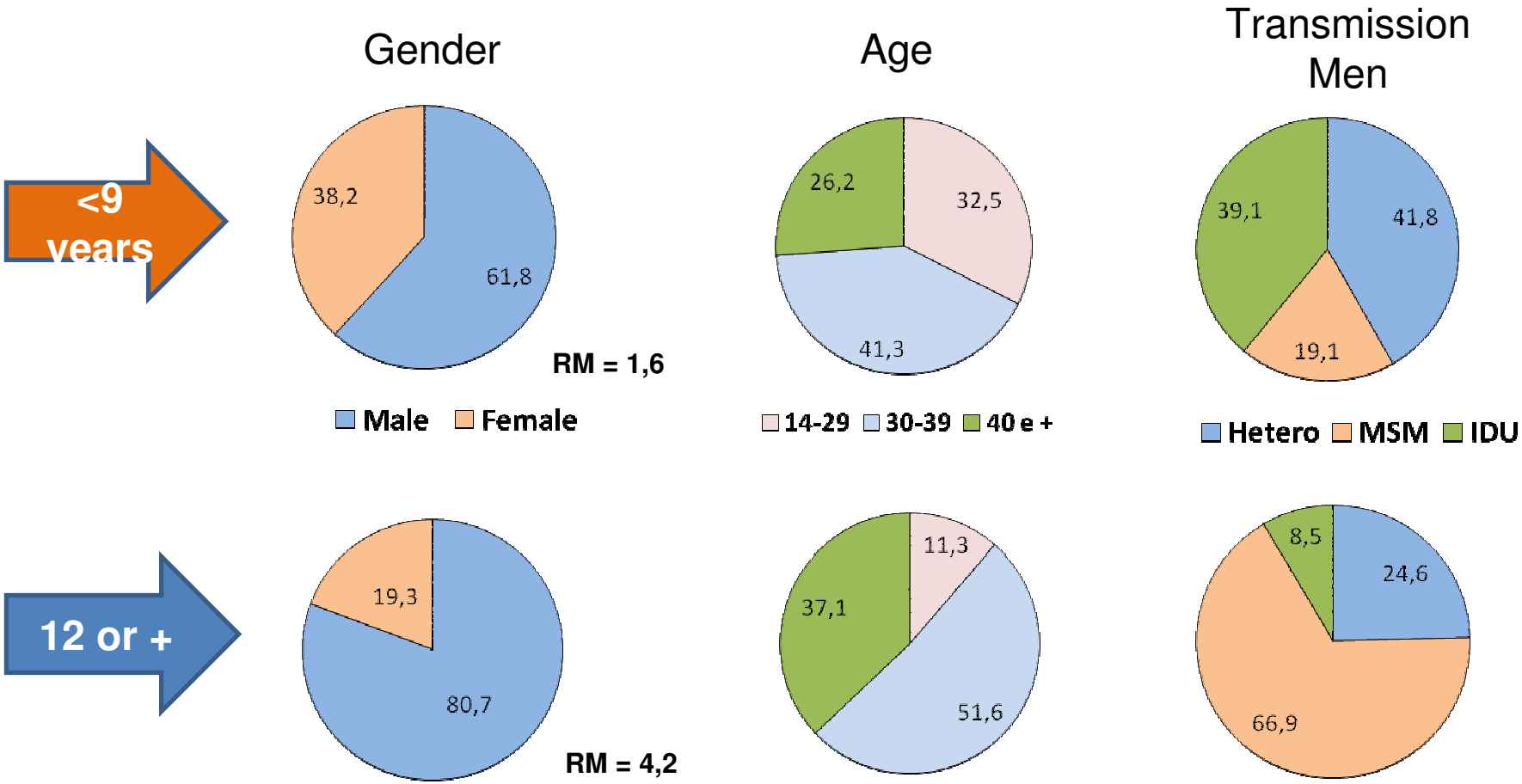


Life expectancy according to gender and Health District Area .

Source: Boletim no. 40:
Esperança de vida em Campinas:
http://www.fcm.unicamp.br/centros/ccas/

Survival inequalities

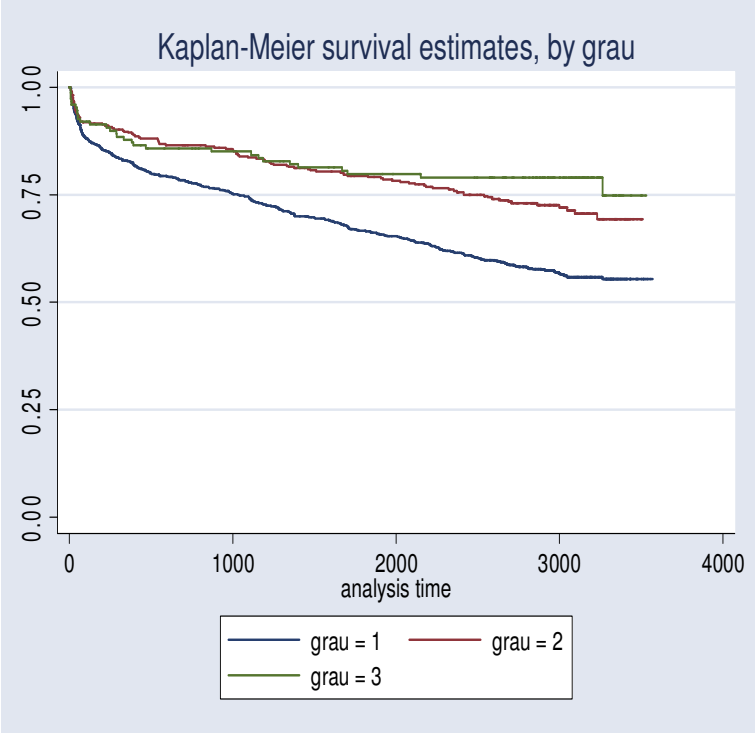
Demographic profile of AIDS patients according to years of schooling. South and Southeast Regions cohort of 1998-99.



Ione A. Guibu et al, 2008.
Relatório encaminhado para MS-SVS

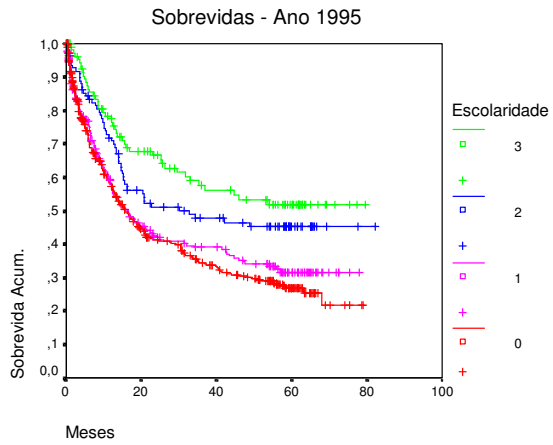
AIDS survival acoording to schooling. Brazilian cohort of 1995 and 1996; and South /Southeast cohort of 1998-99.

1998/99

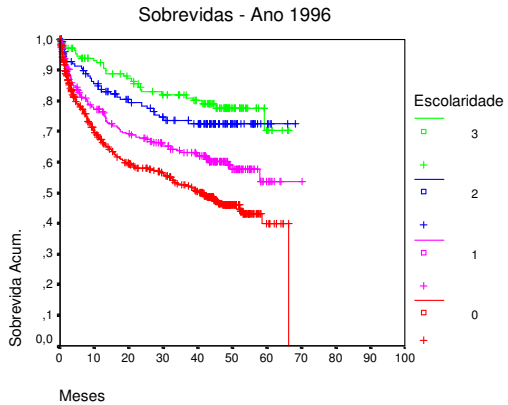


Ione A. Guibu et al, 2008.
Relatório para MS

1995



1996



Marins, JRP. PhD Thesis UNICAMP, 2004.

Aids patients (%) surviving 60 months since case notification. Brazilian cohort 1994,1995 and South/Southeast cohorte of 1998/99

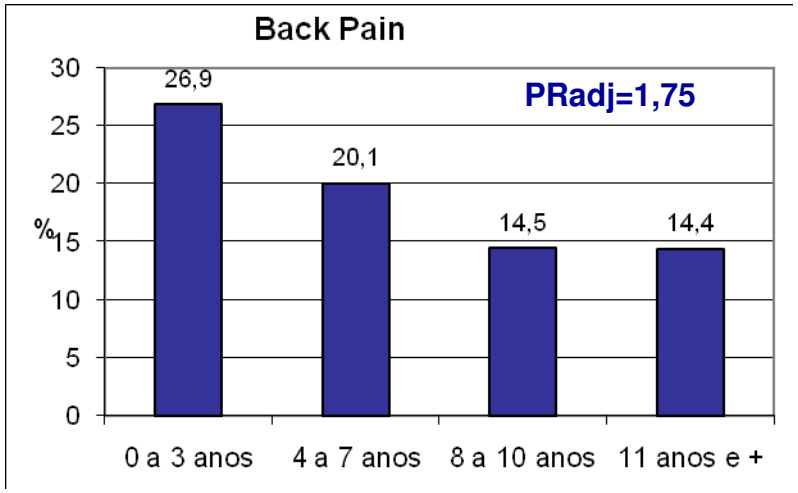
Schooling	1995	1996	1998/99
< 8 years	26,8	39,6	63,6*
12 or more	51,8	70,4	79,0
Difference	24,0	40,8	15,4

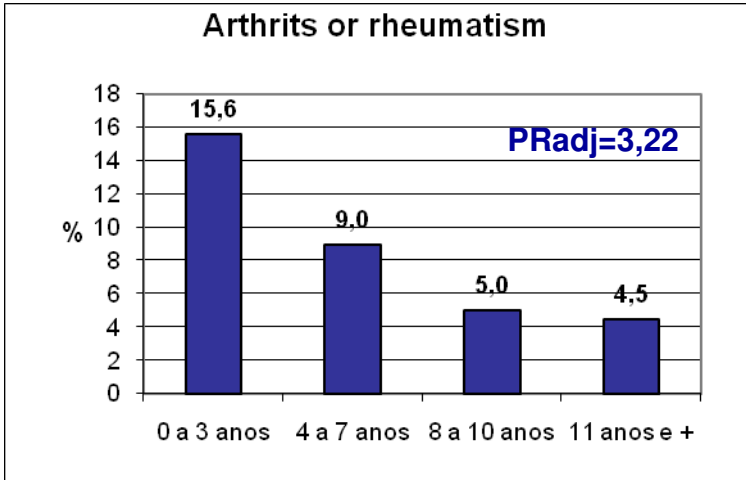
*<9

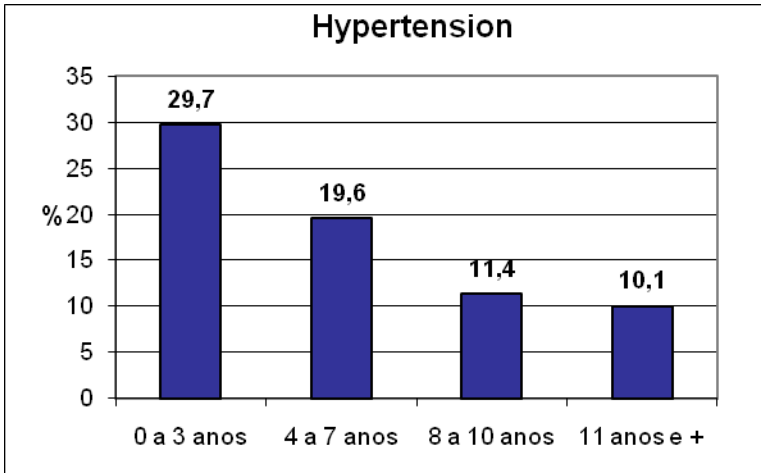
Marins JRP. PhD Thesis, UNICAMP, 2006.
Ione A Guibu et al. Relatório para MS, 2008.

Inequalities in diseases prevalence

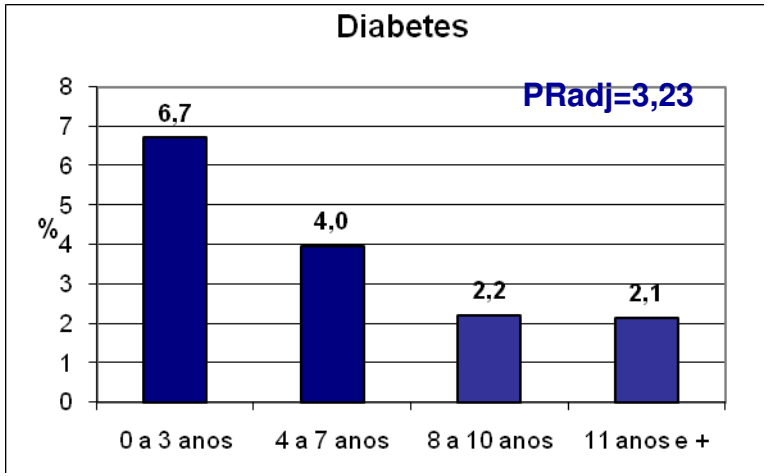
Prevalence of chronic diseases according to education. PNAD, 2003 (adults: 18 years or +)





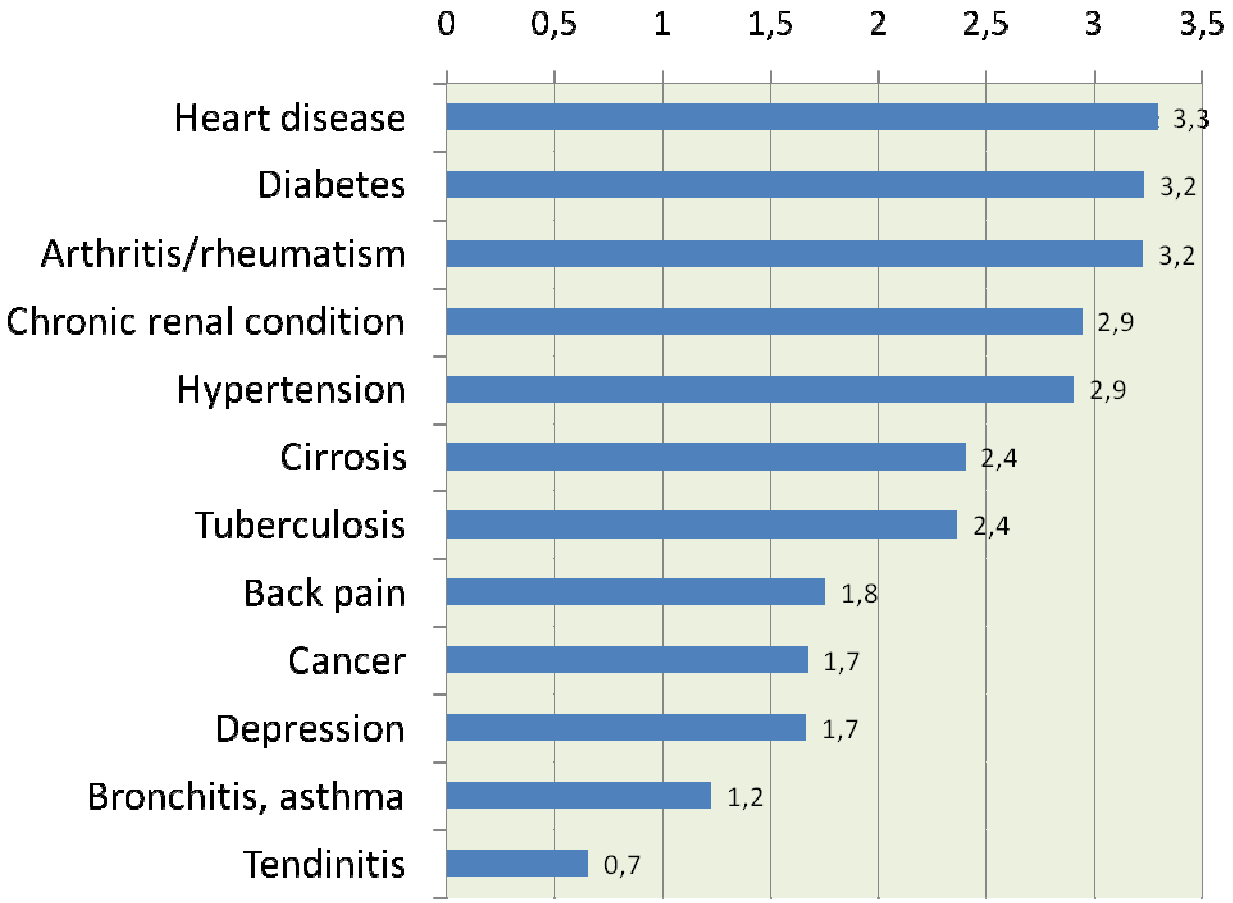


PRadj=2,90



Barros et al, 2006; Cien & Saude Coletiva. 11(4):911-26.

Prevalence rates of reported chronic conditions according to education. PNAD, 2003. (0-3 / 11 or + years of schooling)

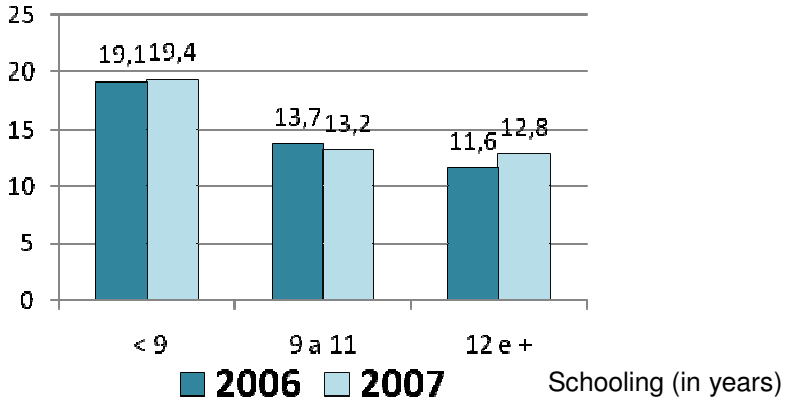


Ciência e Saúde Coletiva, 11(4): 911-26, 2006

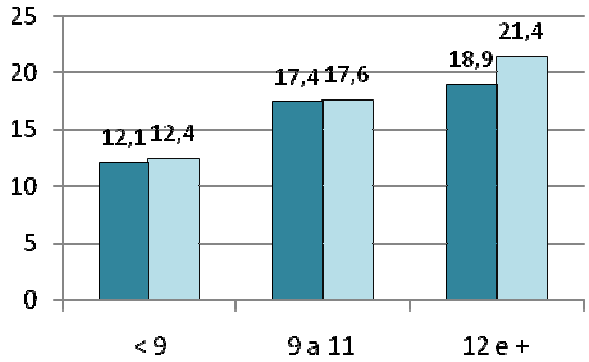
Behaviour and health

Monitoring health behaviour by education 2006/2007 - VIGITEL

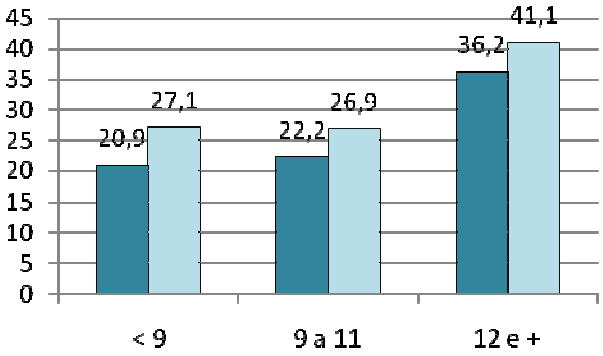
Smoking



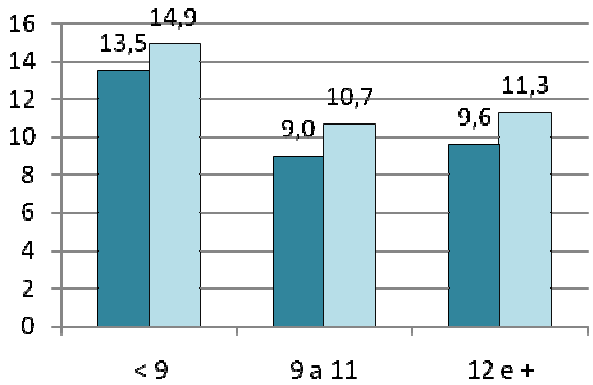
Leisure time physical activity



Vegetable and fruits (5 or + days a week)

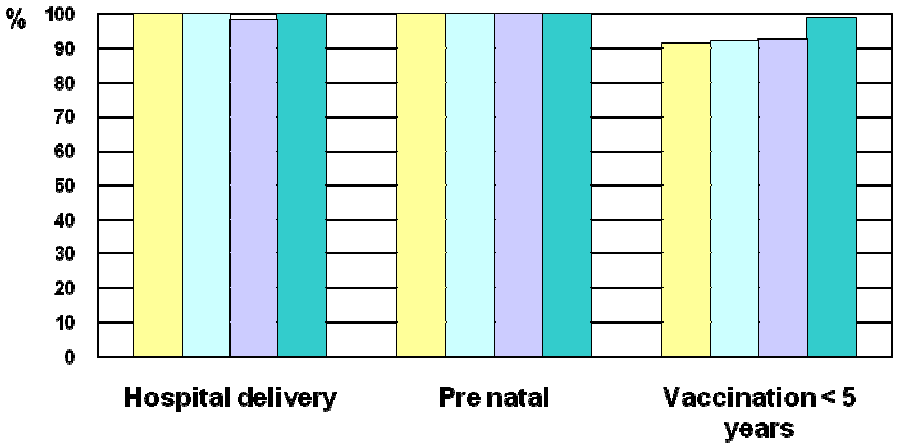


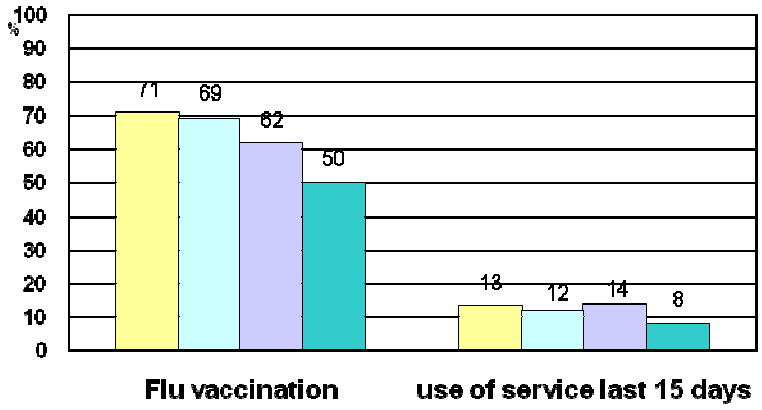
Obesity

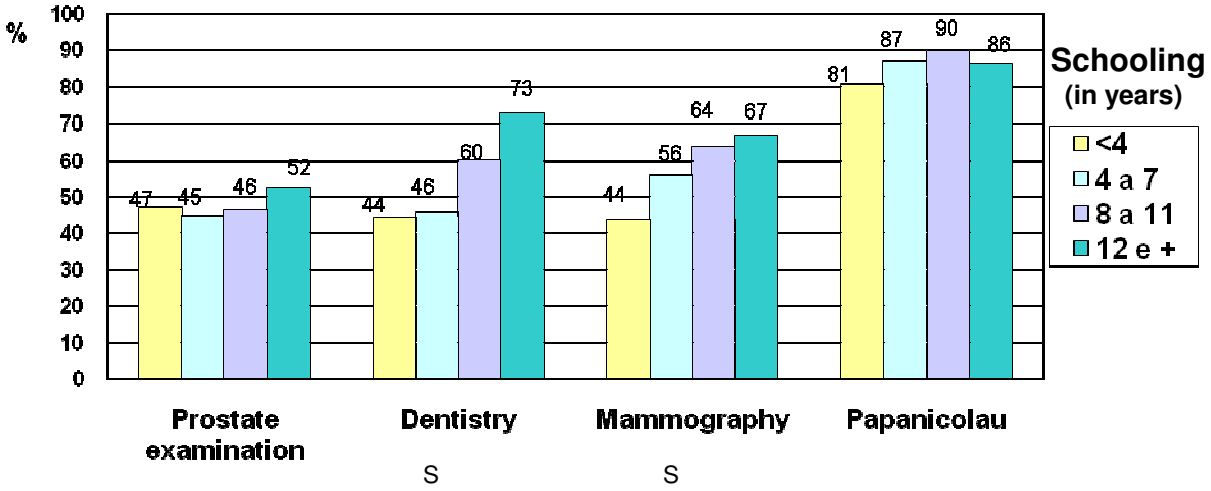


Use of health services

Use of health services by educational level
(ISA-SP: Campinas)







Social and geographic inequalities in the health services access

(PNADs: 1998- 2003)

(use of services in the last 15 days by individuals with restrict activities in the last 15 days)

- The access to health services in Brazil is strongly influenced by social conditions and place of residence.
- Reduction on social inequalities (income and education).
- Increase on regional differences.

Travassos et al. Cien Saúde Coletiva (2006):

Final comments

- We have nowadays in Brazil data basis that allows us to evaluate the trend in the magnitude of social and regional inequalities of a set of health indicators.

- These systems allow us to analyze the inequalities in the country, among the states, regions, municipalities and inner cities levels.

- The evidences point out that the inequalities may decrease in some aspects of health while increasing in others.

- The changes in these trends may occur very quickly depending on the various and dynamic processes of the health/disease determinants.

Challenges

❖ Coverage and quality of the health information systems that still are insufficient in many areas of Brazil.

❖ Inclusion or improvement of social variables (education, occupation, race, income ...) in those systems.

❖ To produce analysis of inequalities and their tendency aiming at convincing the health administrators. To encourage the inclusion of policies and goals in equity in the usual planning and programming activities on health.

❖ Methods and tecniques (time trends, spatial analysis, measures of inequalities, periods surveys) to improve the process of monitoring.

❖To identify the impact of health intervention on social inequalities and the actions with evident impact on reducing social differences on health.

The
End

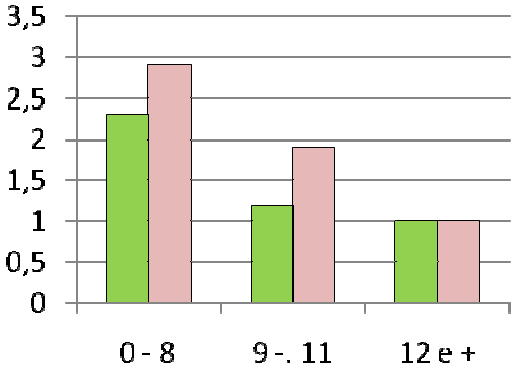
Self-evaluation of health and quality of life

(PNAD, Vigitel, Pesquisa Mundial)

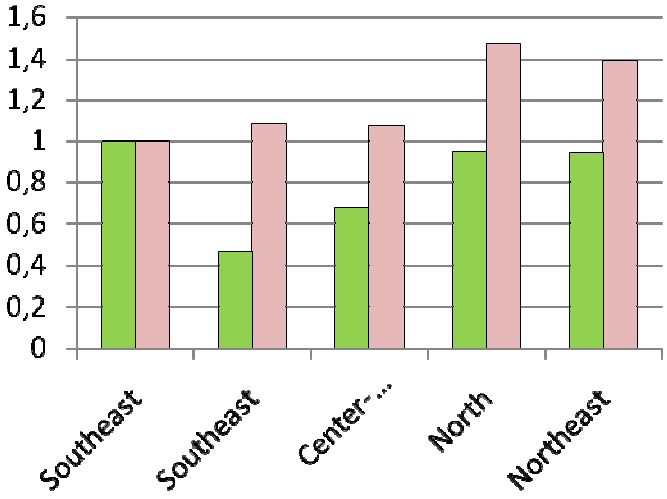
Self-rated health

Social inequalities in Brazilian capitals – VIGITEL, 2006. (Proportion with "poor" health - PR adjust. by age)

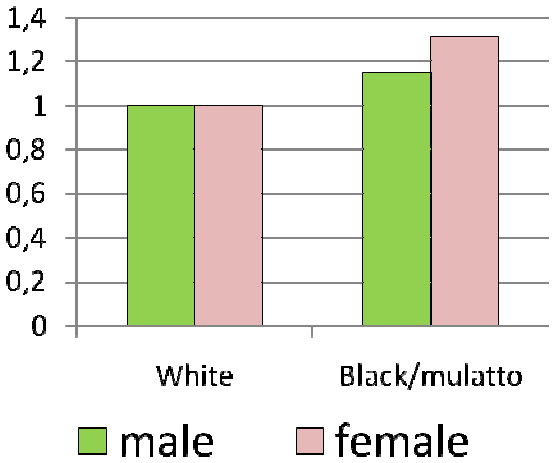
Education



Brazilian Region

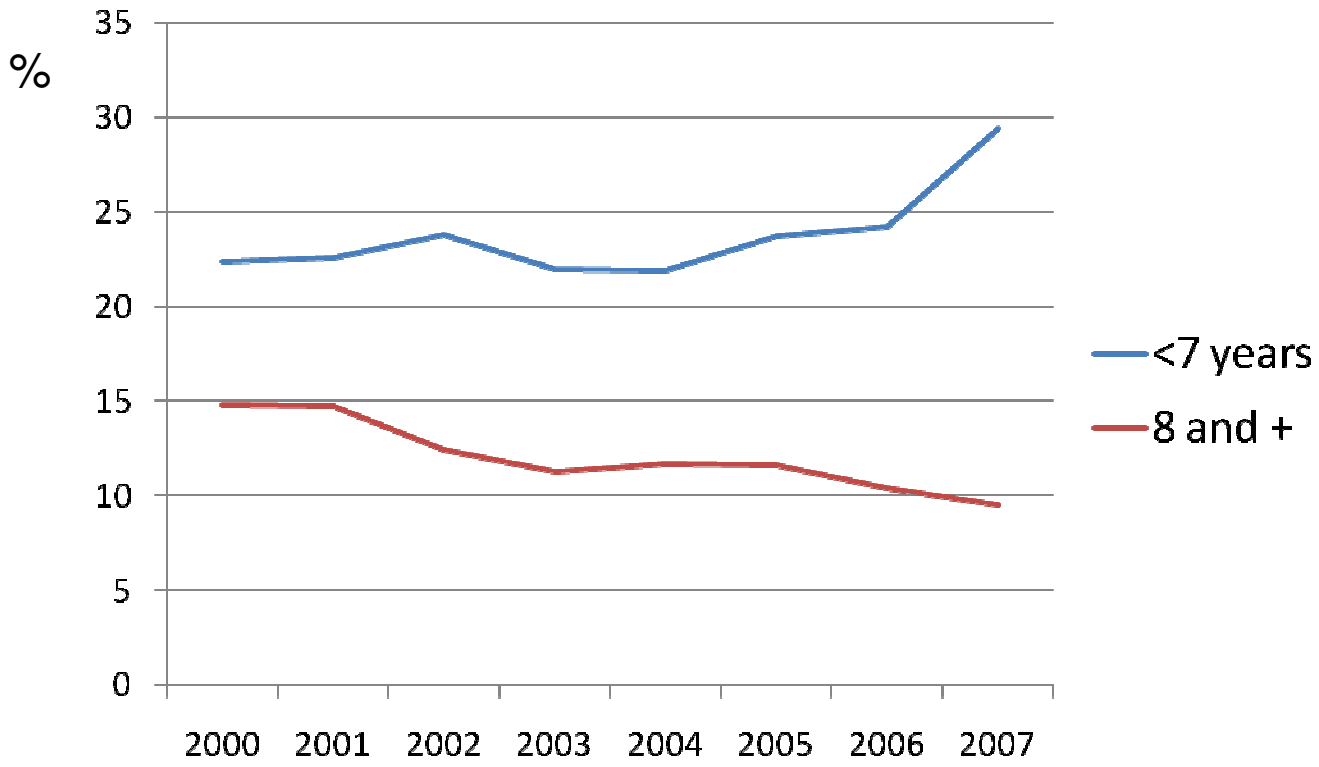


Race



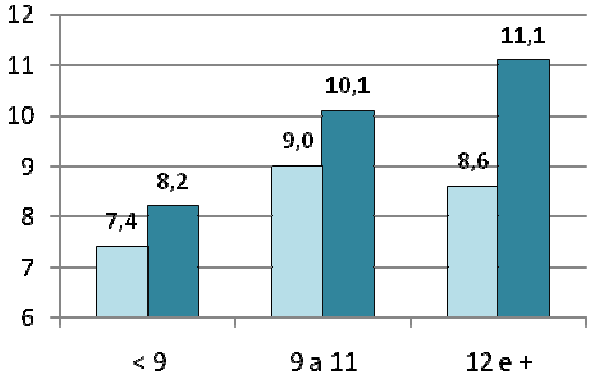
RSP – 2009
Suplemento sobre Vigitel, 2006

Adolescent pregnancy by education (in years).
Campinas,SP, 2000-07.

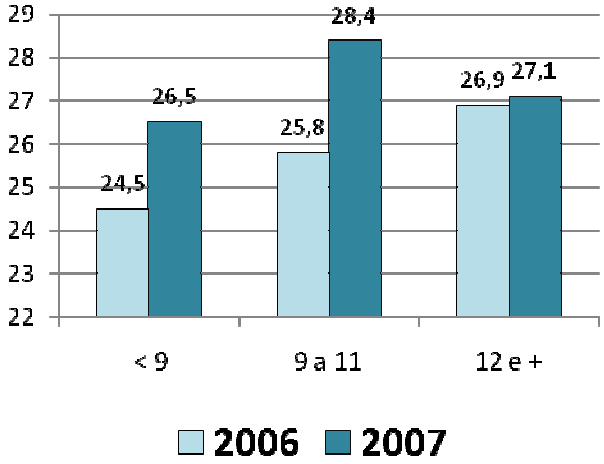


Monitoring health behavior by education 2006/2007 - VIGITEL

Alcohol - Women

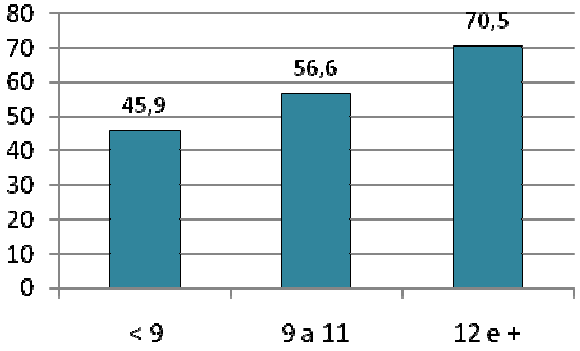


Alcohol - Men

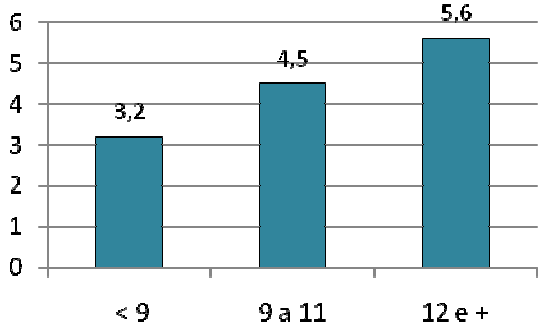


Schooling (in years)

UV protection

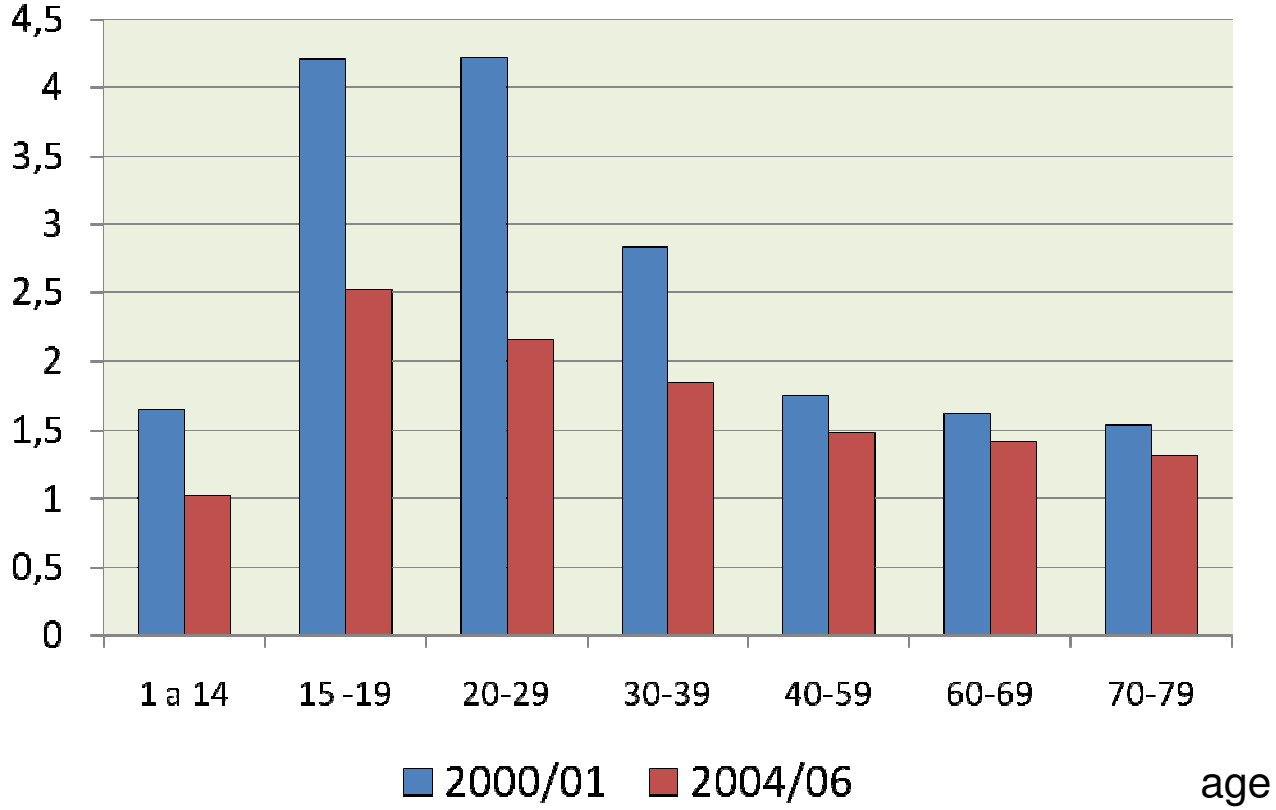


Alcoholic driving - Men



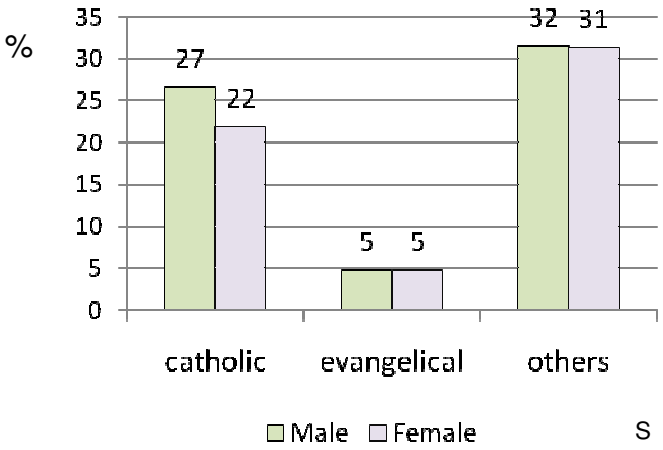
Relation between mortality rates of the worst and the best SEL according to age groups.

Campinas, SP, 2000-2001 e 2004-06.



Religion and Health (ISA-SP: Campinas, 2002)

Smoking



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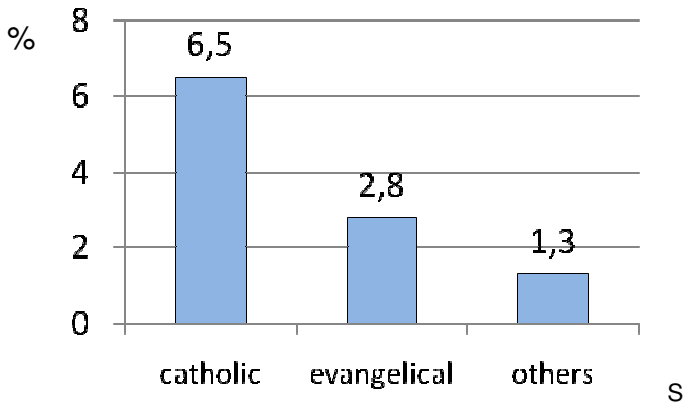
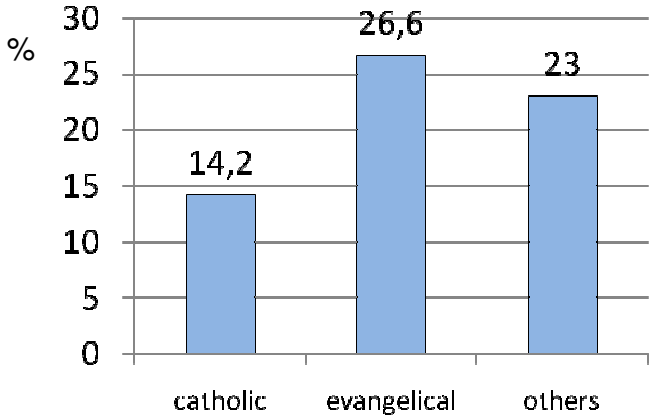
Alcohol - CAGE



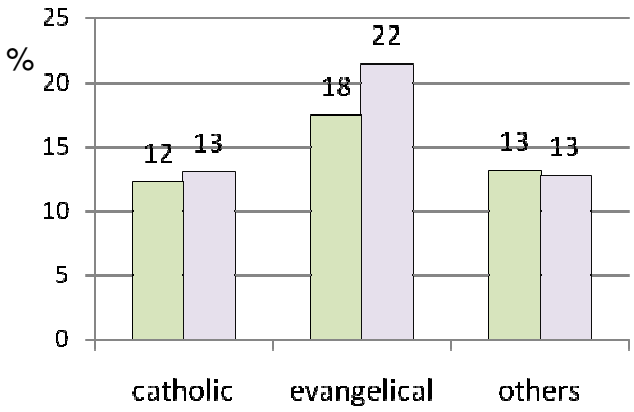
S

Common Mental Disorder



S

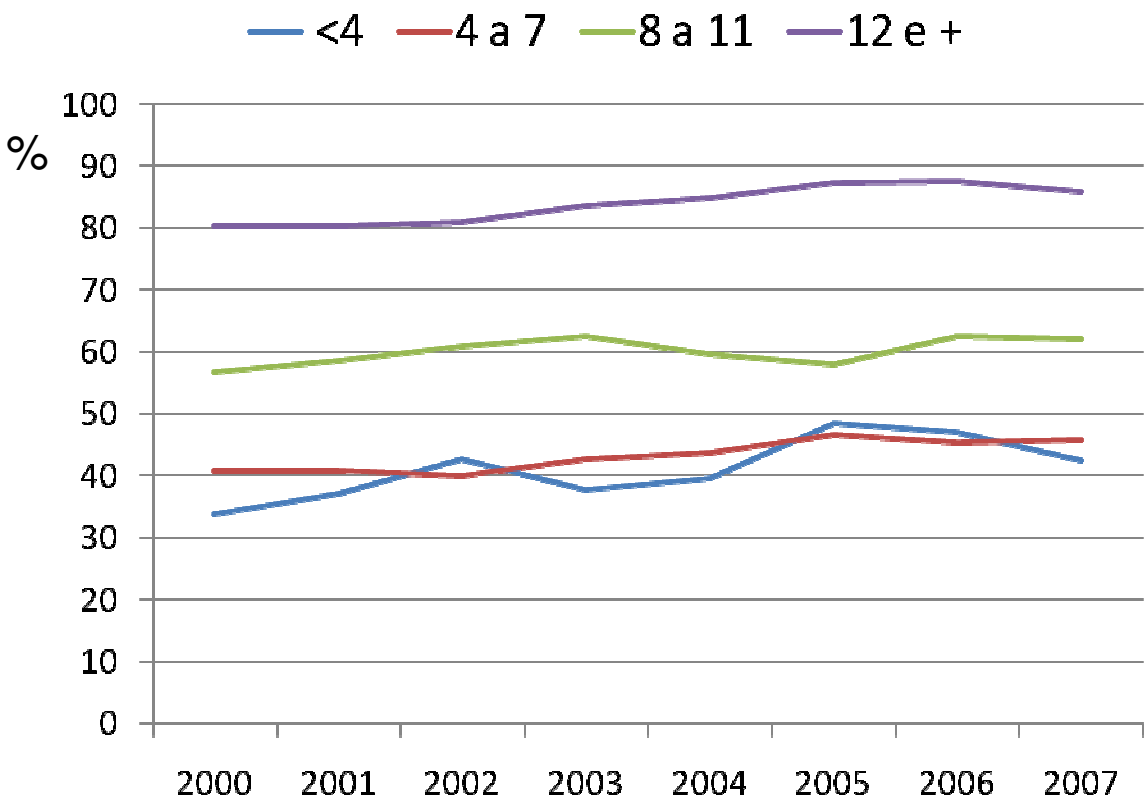
Obesity



NS

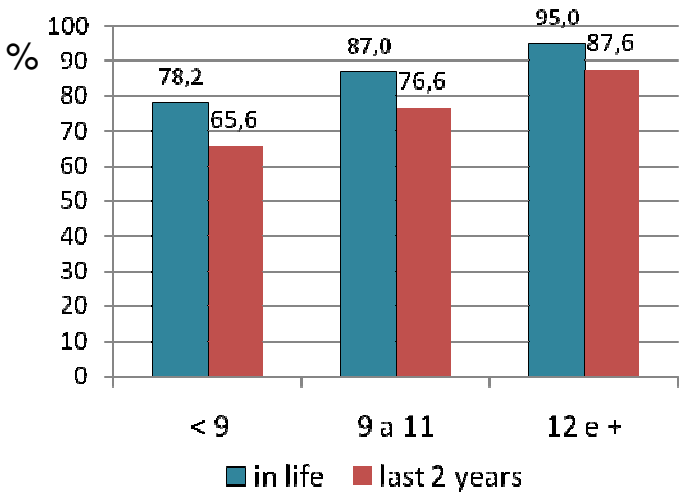
Delivery by cesarian section according to education (in years).

Campinas, 2000-2007.

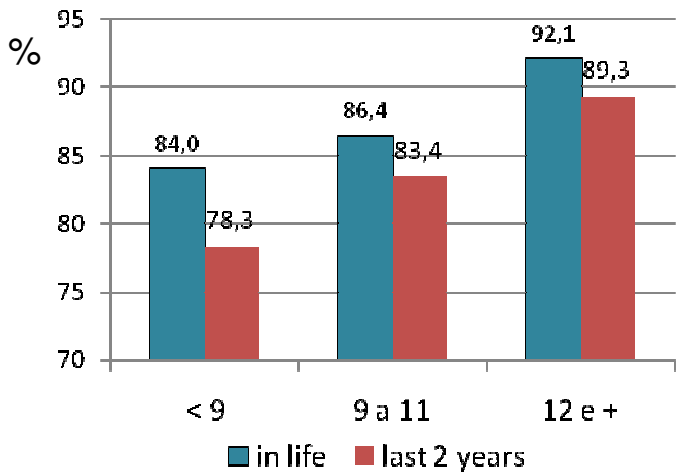


Preventive examination by educational level in Brazilian Capitals. Vigitel, 2007.

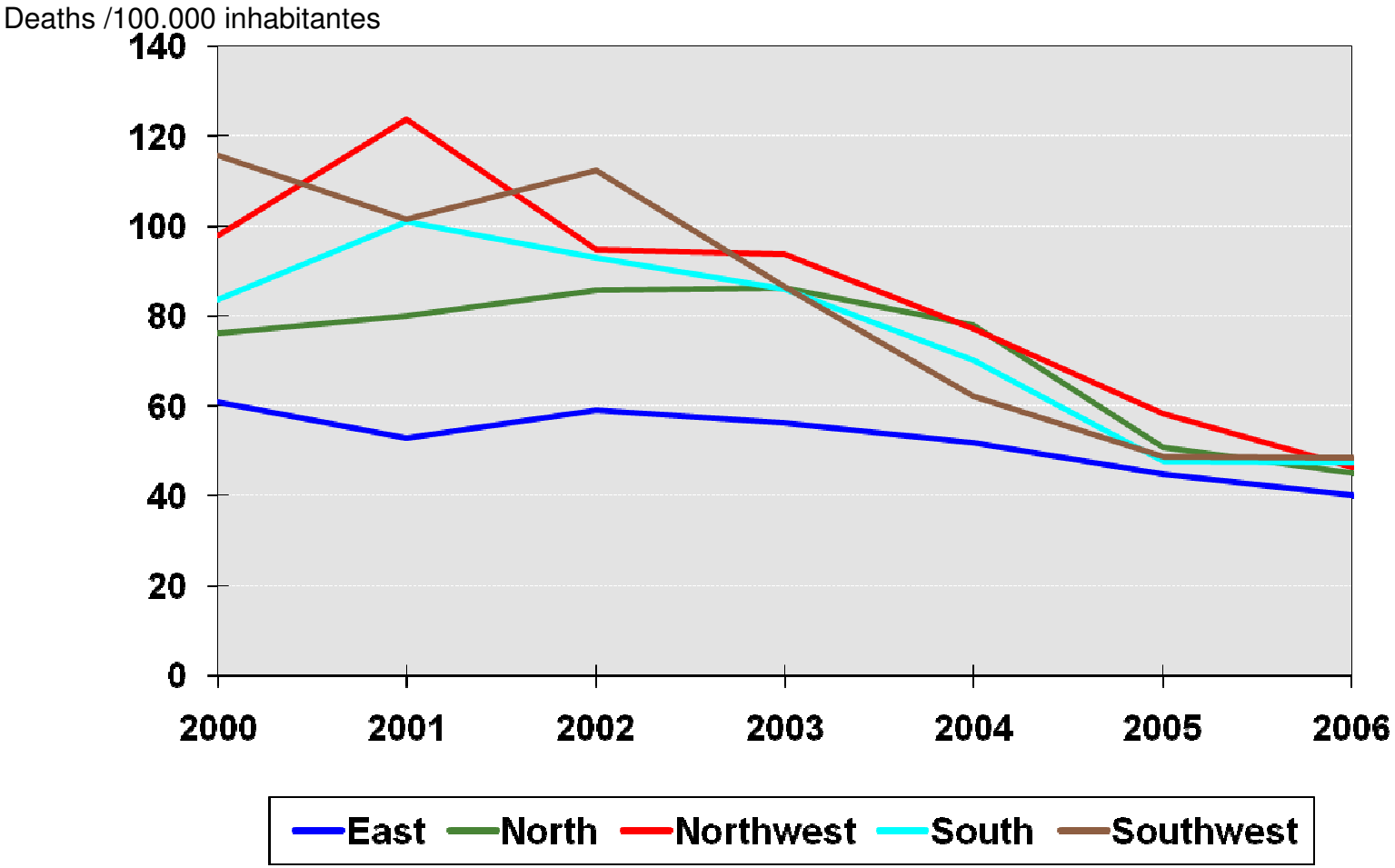
Mammography
(50 a 69 years)



Papanicolaou
(25 a 59 years)

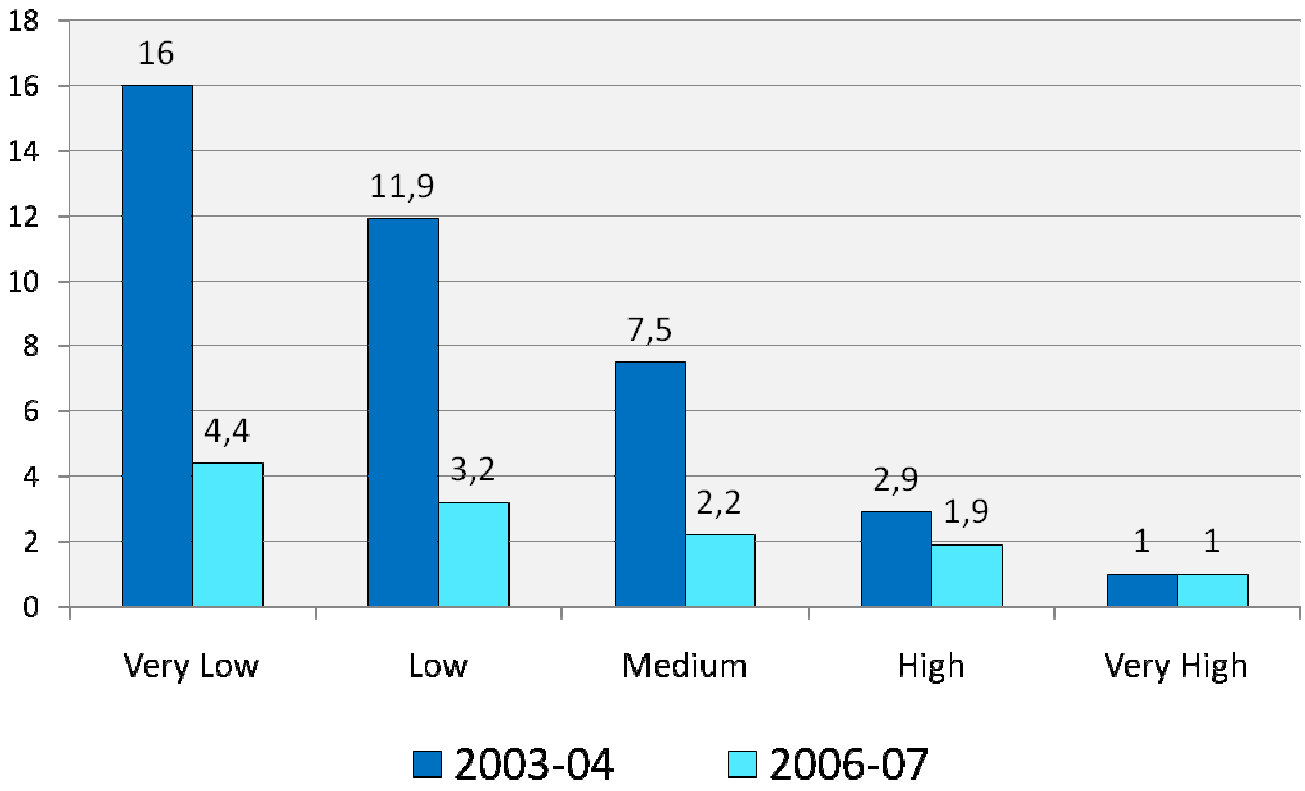


Mortality rates by external causes according to health districts areas. Campinas, 2000- 06.



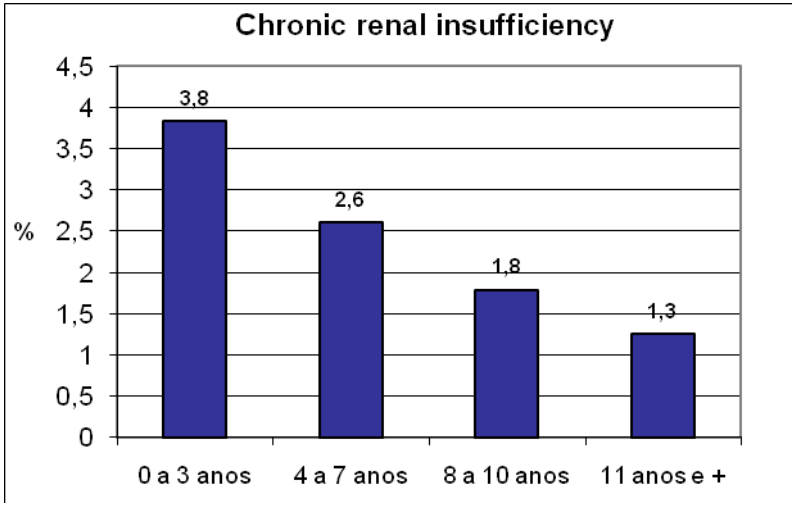
Sources: Datasus/MS, 2000–2004, SIM/SMS-Campinas, 2005-2006

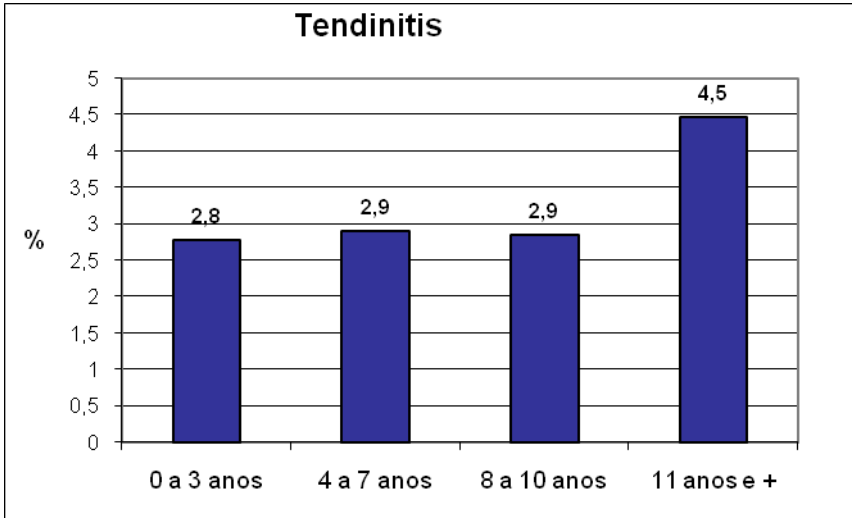
Rate ratios of homicide according to SEL of census tracts. Men, 15 - 39 years. Campinas, 2003-04 e 2006-07.

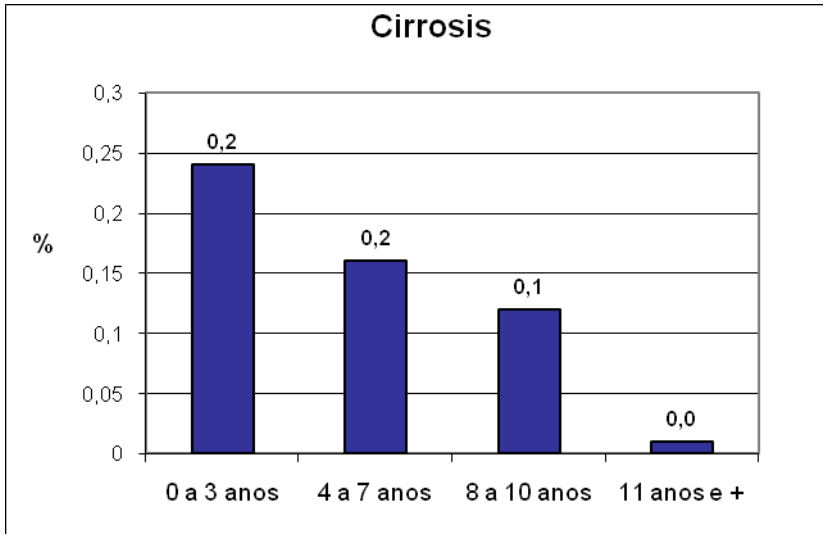


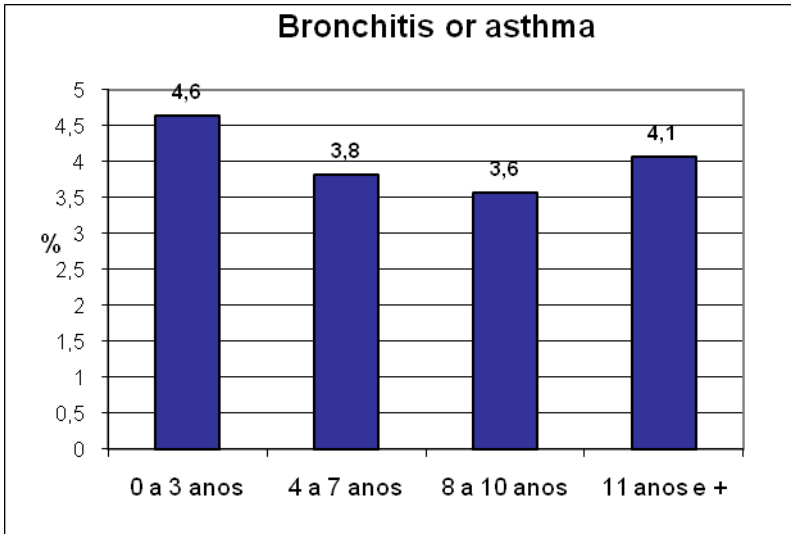
MC Restitutti, 2008

Prevalence of chronic diseases according to education. PNAD, 2003 (adults: 18 years or +)









Barros et al, 2006; C & SC. 11(4):911-26.

Mean scores of SF-36 scales according to educational level. ISA-SP, 2001 – 2002.

Scales	Schooling (in years)		
	0 a 3	4 a 8	9 or +
Functional Capacity	65,6	73,9	79,7
Physical aspects	74,6	84,3	89,6
Pain	69,7	75,6	81,5
General health	67,2	70,4	75,6
Vitality	61,3	64,7	70,6
Emotional Aspects	82,6	88,1	90,2
Social Aspects	83,1	87,3	89,7
Mental health	67,7	69,2	76,0

(significant differences after adjustment for age and sex)

Margareth Guimarães Lima et al.
Master Thesis UNICAMP, 2008

- Desenvolvimento de pesquisas interdisciplinares para produzir evidências para intervenções e melhor compreensão da associação do processo de globalização com os determinantes distais ("upstream variables") do estado de saúde.(Labonté e Schrecker, 2007).

- Estimular iniciativas que buscam promover saúde e equidade por meio de: emponderamento, participação e capacidade de organização da população (Becker et al, 2007).

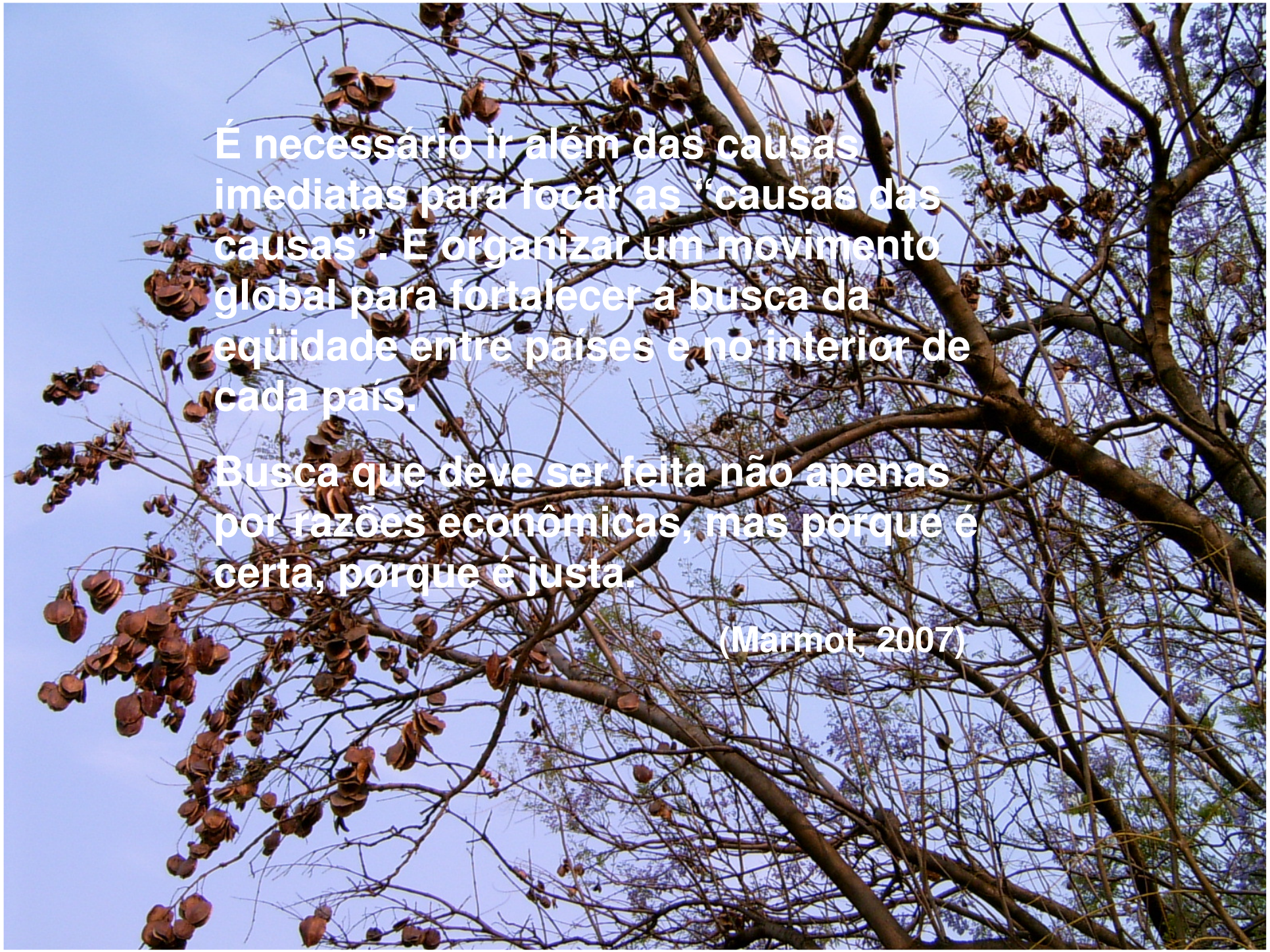
- Importante ampliar possibilidade de participação das pessoas que vivem a situação de pobreza e exclusão social nas atividades de desenvolvimento, planejamento, oferta e avaliação dos serviços de saúde, ampliando a participação nos processos de decisão.

- Necessidade de definição de prioridades de problemas e de processos – Miller (2007) com a escolha de processos sociais e pluralísticos de ação mais que investimentos setoriais específicos.

É necessário ir além das causas imediatas para focar as “causas das causas”. E organizar um movimento global para fortalecer a busca da eqüidade entre países e no interior de cada país.

Busca que deve ser feita não apenas por razões econômicas, mas porque é certa, porque é justa.

(Marmot, 2007)



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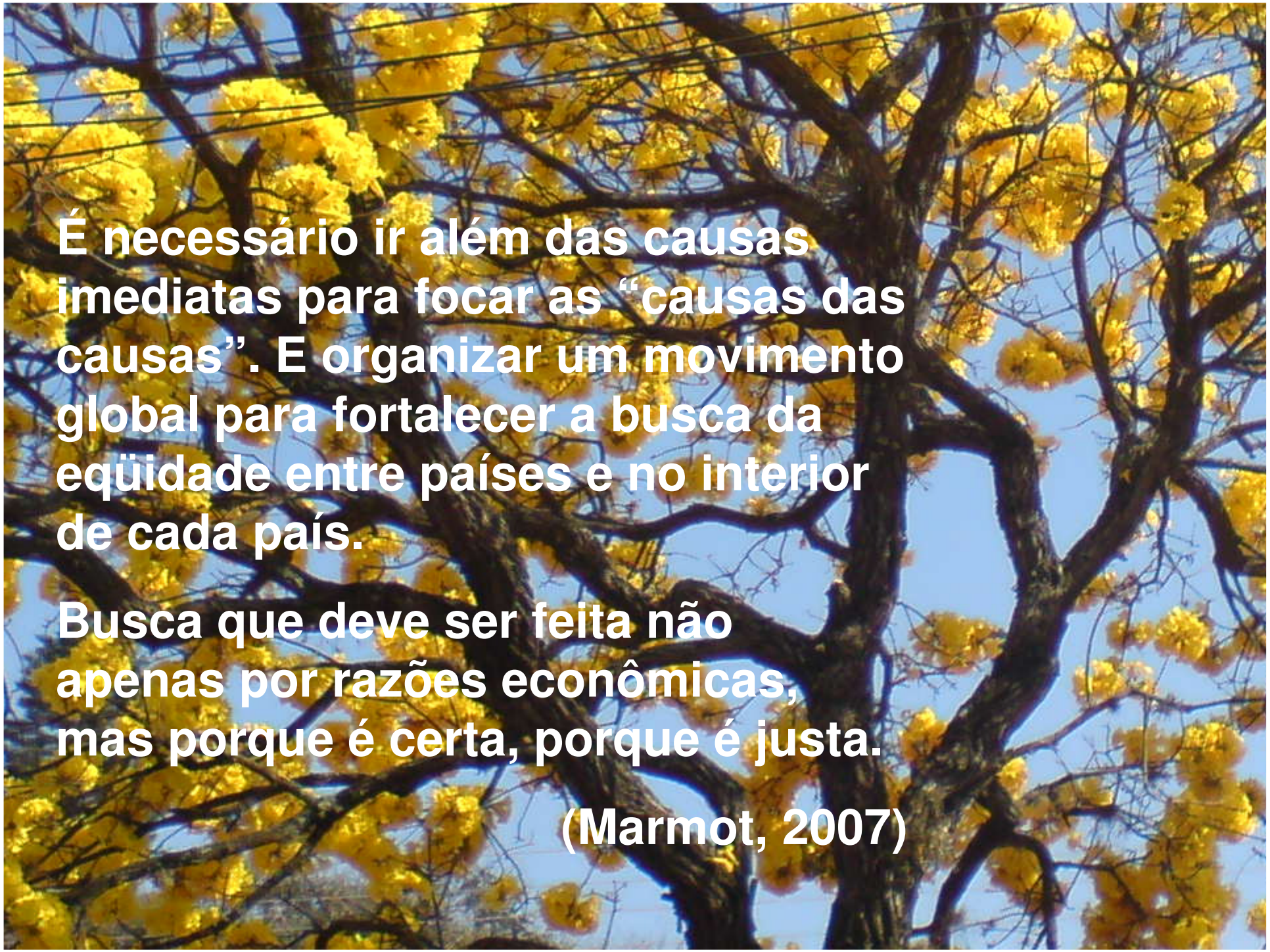

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Busca que deve ser feita não apenas por razões econômicas, mas porque é certa, porque é justa.

(Marmot, 2007)

Homicídios por local de residência, 2003-2006

Figura 2. Distribuição das residências das vítimas de homicídio. Campinas, 2003

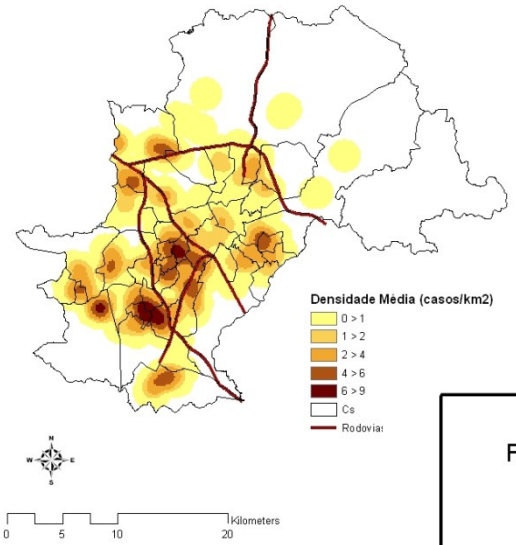


Figura 3. Distribuição das res das vítimas de homicíc Campinas, 2004

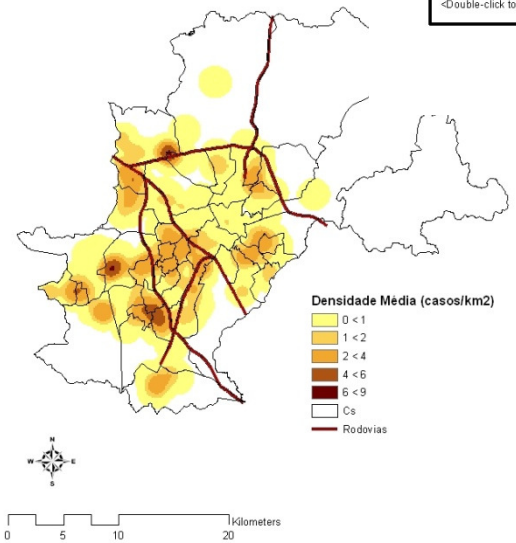


Figura 4. Distribuição das residências das vítimas de homicídio. Campins, 2005

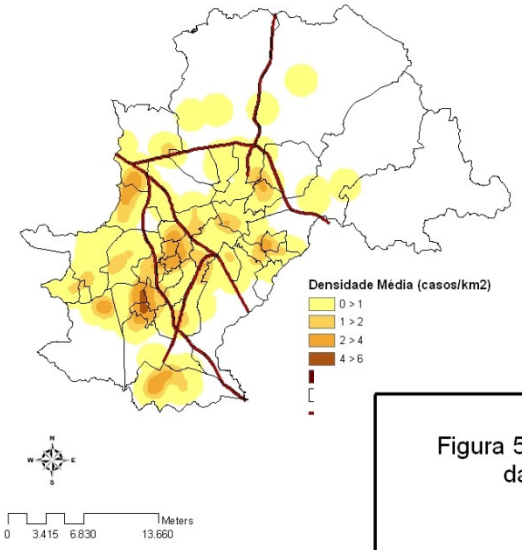
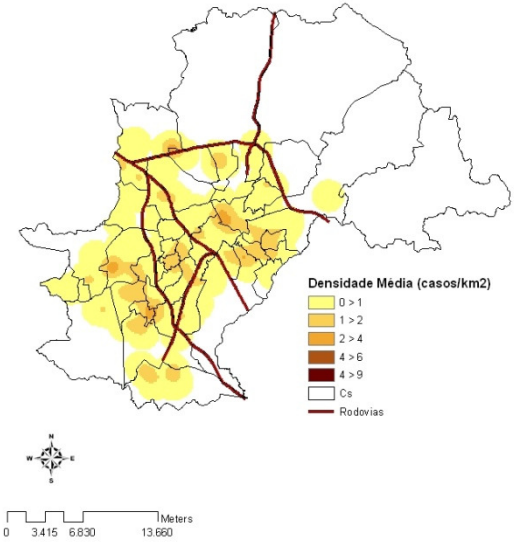
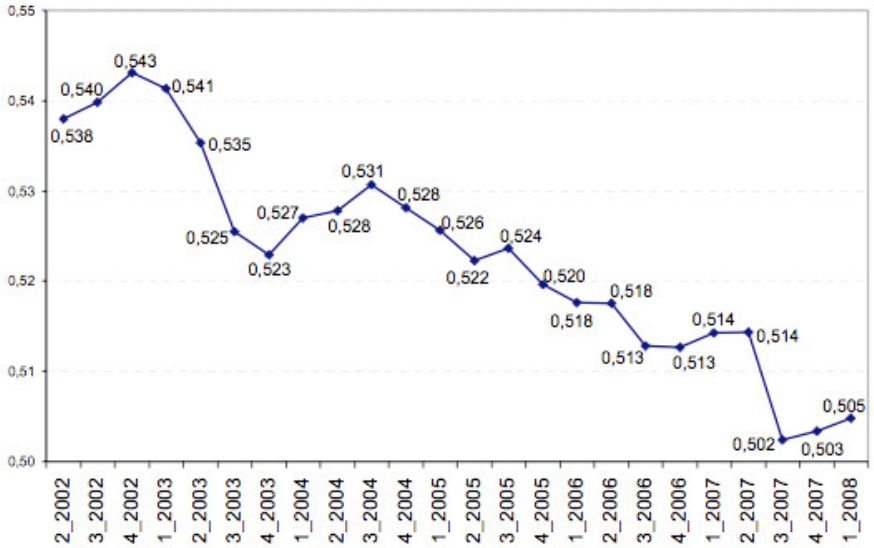


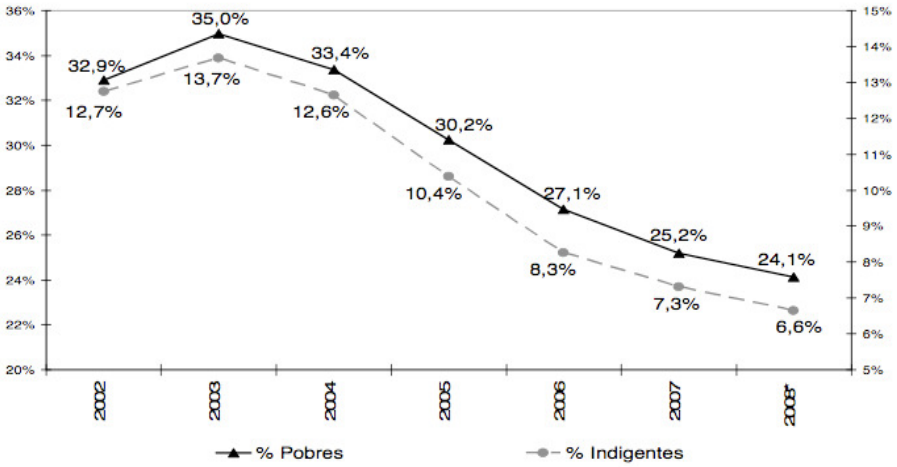
Figura 5. Distribuição das residências das vítimas de homicídio. Campins, 2006



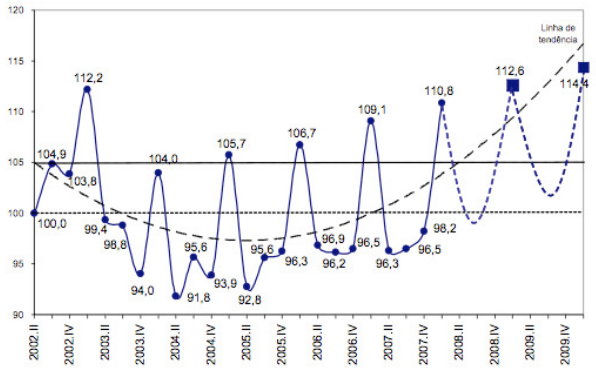
Restitutti MC



Fonte: Pesquisa Mensal de Emprego/IBGE. (Elaboração própria.)



(*) Estimtiva.
Fonte: IBGE. Pesquisa Mensal de Emprego. (Elaboração própria.)



**Exclusive empregadores.*
*** Recife, Salvador, São Paulo, Porto Alegre, Belo Horizonte e Rio de Janeiro.*
Fonte: IBGE – Sistema de Contas Nacionais e Pesquisa Mensal de Emprego. (Elaboração própria)

Mas, o Brasil persiste entre os dez com as maiores concentrações de renda.
Exibindo contrastes sociais profundos

O país do luxo:
É o 3. país em realização de cirurgia plástica.
O em consumo de cosméticos, perfumes..
O em consumo de viagra e similares.
Comércio de luxo
Um jogador de futebol ganha

O país da miséria
Milhões sem luz elétrica
Sem água
Sem moradia decente
Sem atendimento médico de qualidade
Uma esportista ganhadora de medalha de bronze – mãe sem televisão para assistir.

Medidas da magnitude das desigualdade sociais em saúde

Índices que sumarizam as diferenças:

- **Diferenças relativas e absolutas (RR e RA)**
- **Índices de efeito e de impacto total**
- **Medidas cruas ou modeladas**

  (15 tipos de medidas)

(Kusnt, A., 1997; Schneider et al, 2002)

Pan Am J Public Health, 12 (6) (2002) –editor: Carlos Castillo-Salgado

Utilizando o conceito de classe social

- Trabalhadores manuais têm maior chance de se apresentarem mais prejudicados em vários domínios da auto-avaliação de saúde em estudo realizado na Suécia (Fors et al, 2007).

- Trabalhadores manuais na Finlândia apresentam riscos de morte por suicídio 2,3 vezes superior ao de trabalhadores não manuais, tendo a desigualdade ampliado entre 1970 e 1990 (Mäki e Martikainen, 2007).

- Estudo realizado em Barcelona utilizando os indicadores de classe social de Wright aponta a contribuição original produzida pela abordagem de classe social na análise da auto-avaliação da saúde (Borrell et al, 2004).

Desigualdades sociais em adultos e idosos

(PNAD 1998 – PNAD 2003)

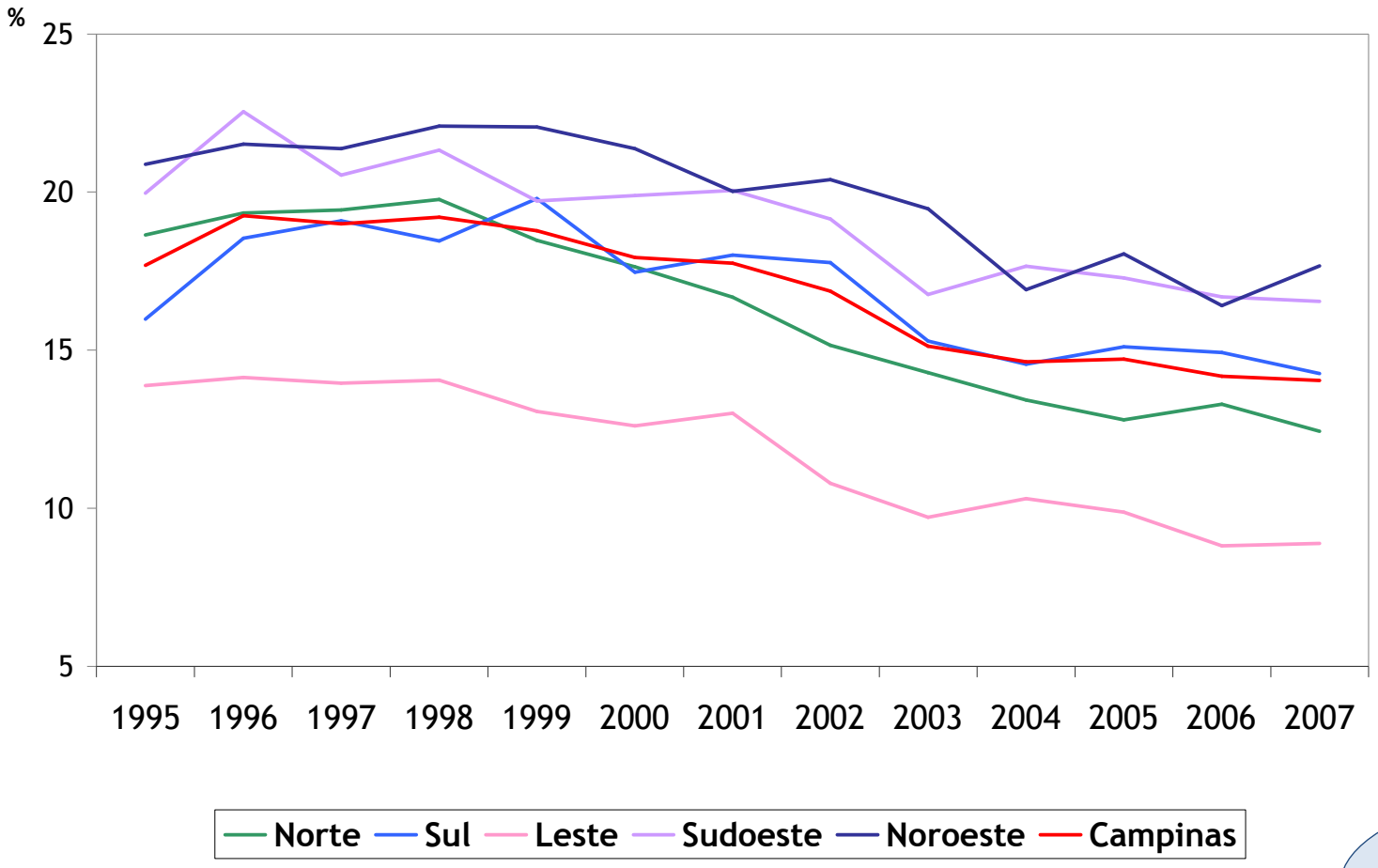
- Segmento de menor renda: menor uso de serviços de saúde

- A força de associação da renda com o uso de serviços não se modificou entre 1998 e 2003

- Não houve alteração na desigualdade social em saúde no período → ineficiência das políticas.

Lima-Costa et al, 2006

Figura 6 - Trend in the percentage of adolescent pregnancies, according to Health Districts Areas. Campinas, 1995-2007.



Source: Bol 41