

Social determinants in health: The Brazilian case

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Ministry of Social Development and Fight Against Hunger

1. Health inequalities in Brazil

Socioeconomic & demographic determinants

Major inequalities in health

2. Public policies targeting health inequalities - some examples:

The Family Health Program (PSF)

The Bolsa Familia Program (PBF)

3. Social determinants in health committee

Health Inequalities in Brazil:

Socioeconomic & demographic
determinants

Brazil in South America



Population: 180 millions

Area: 8.514.215,3 km²

26 States and the Federal District (5 regions)

5.900 municipalities

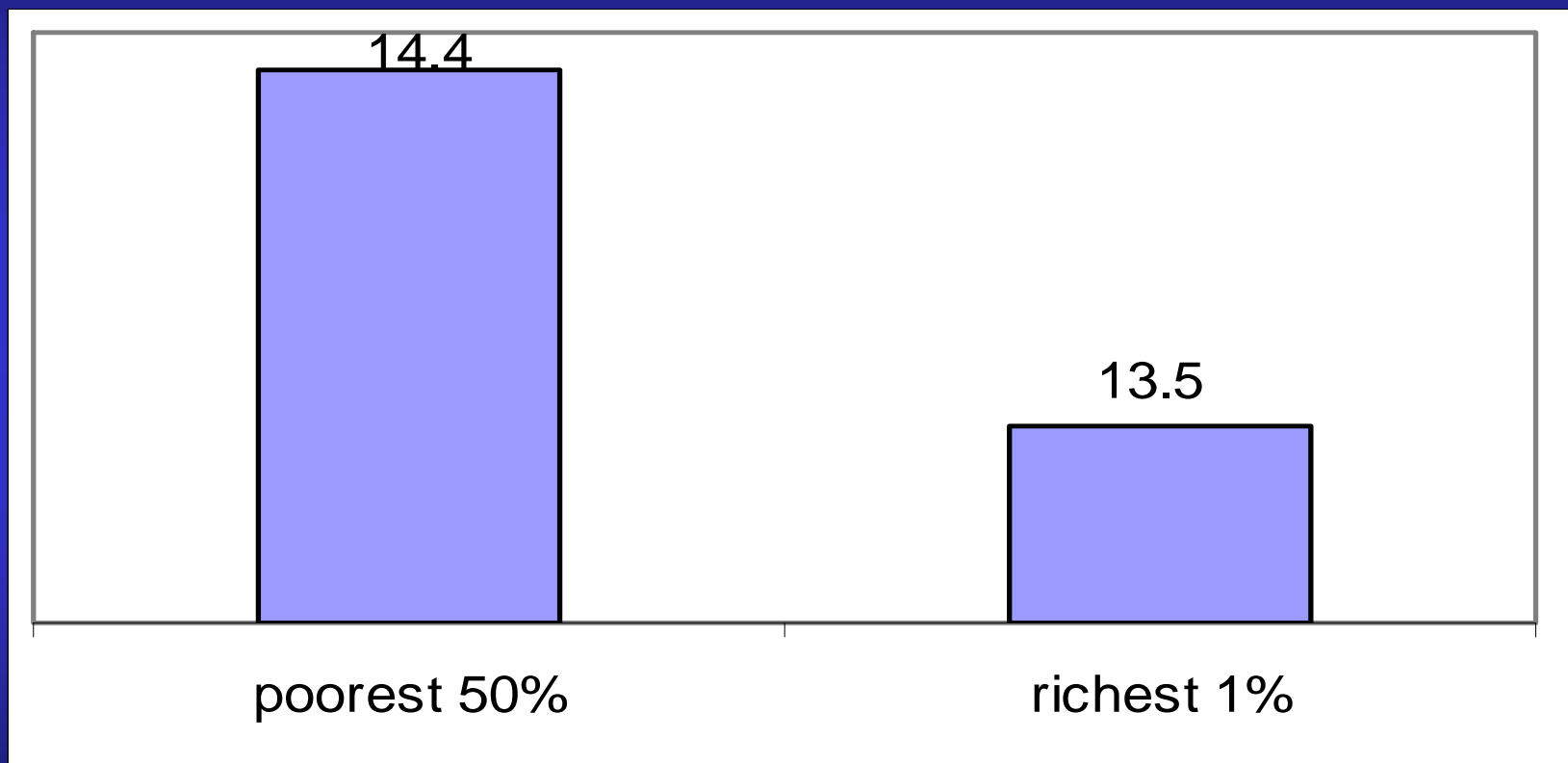
Poor families: around 11 million (44 million people)

Extremely poor families: around 4,5 million

Source: Ministry of Social Development and Fight Against Hunger

Income inequalities

Income distribution for the poorest 50% and for the richest 1% in relation to total income – 2002

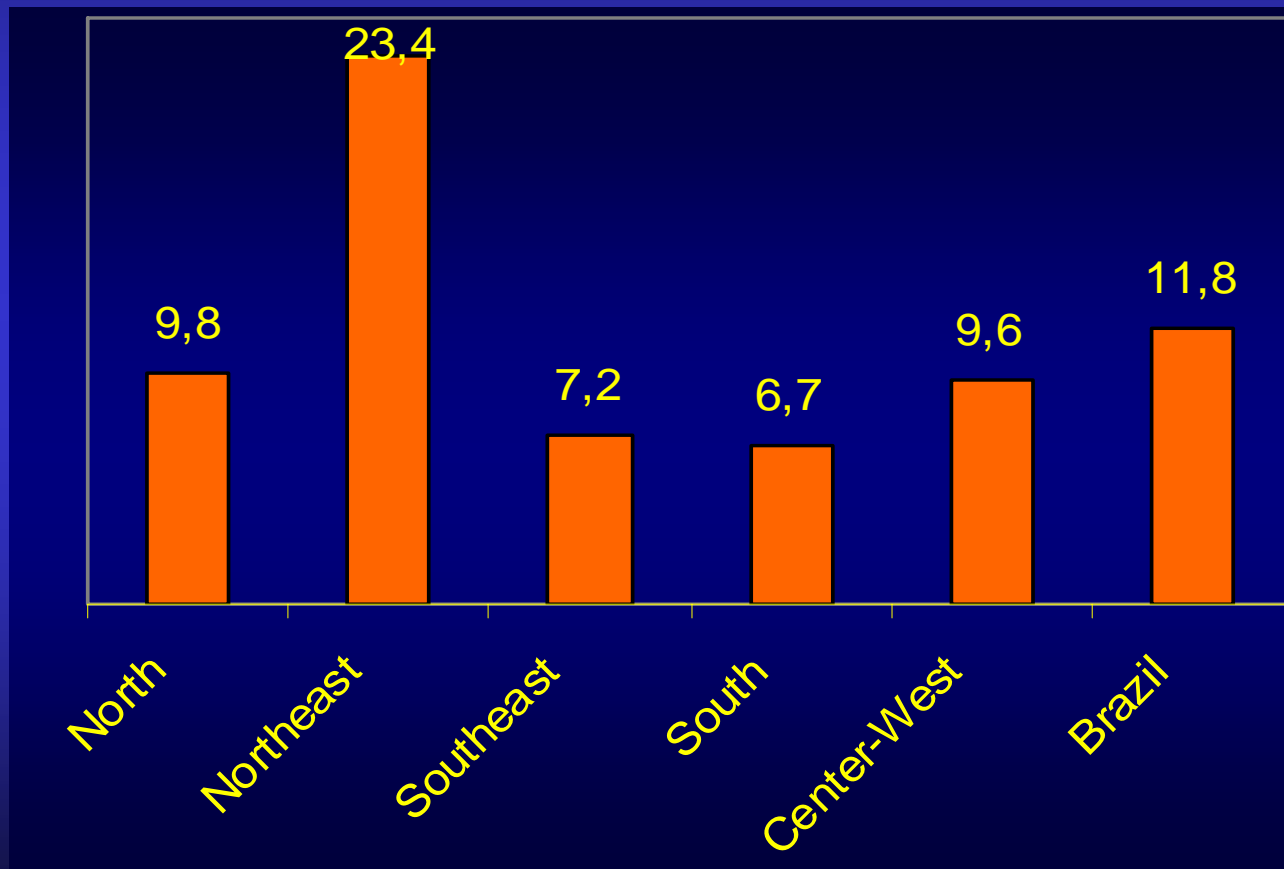


The Gini Coeficiente in 2002 = 0.589

Source: IBGE (Brazilian Institute of Geografy and Statistics) and IPEA (Institute of Research on Applied Economy)

Illiteracy inequalities: regions

Illiteracy rate for people ≥ 15 years old - 2002



Source: IBGE (Brazilian Institute of Geography and Statistics) & MDS

Illiteracy inequalities: trends

% children between 7-14 years old attending fundamental school

Estates	1991	2000	%
Alagoas	59,03	84,07	25,04
Bahia	61,54	86,10	24,56
Paraíba	62,88	88,62	25,74
Rio Janeiro	83,84	89,92	6,08
São Paulo	87,85	93,56	5,71
Dist.Federal	90,54	92,11	1,57

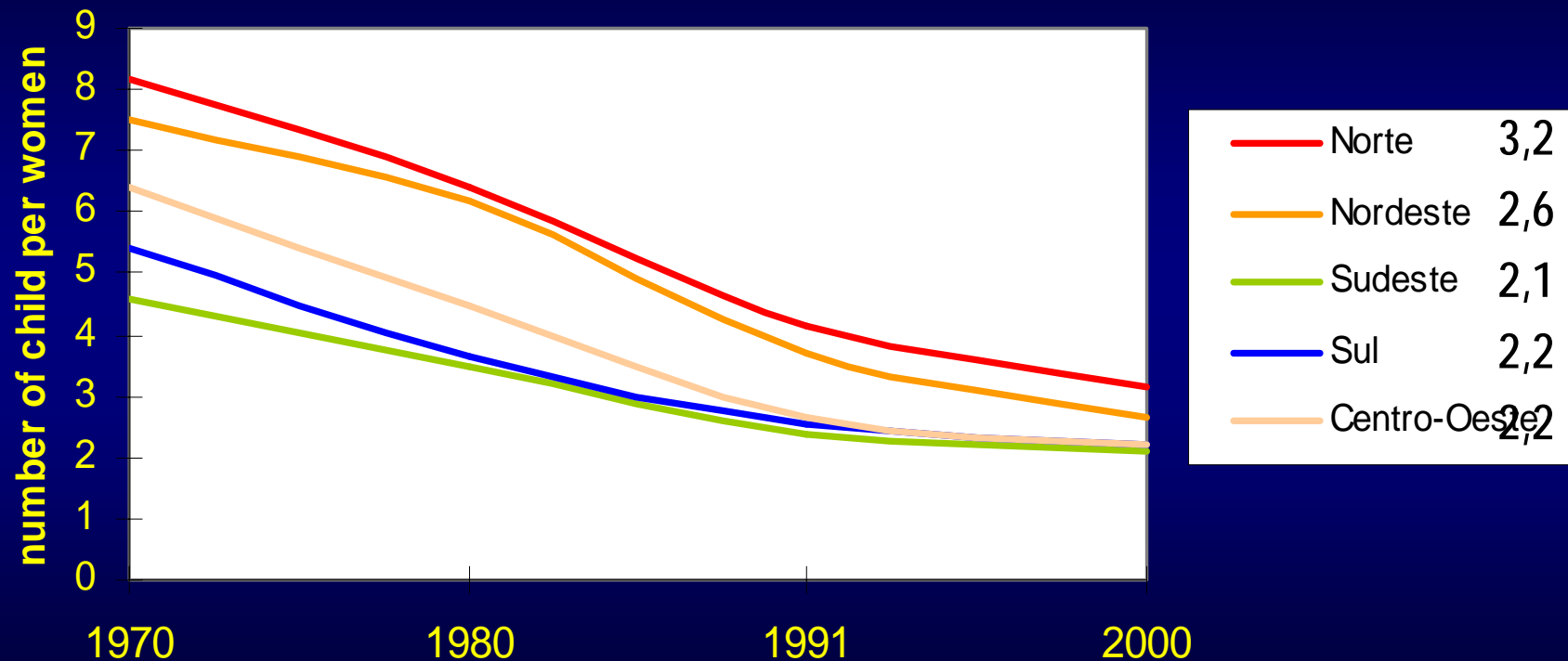
Ratio 1991: 1,5

Ratio 2000: 1,1

Source: IBGE (Brazilian Institute of Geography and Statistics)

Fertility rate inequalities: regions and trends

Fertility rate – Regions, 1970 a 2000.



Source: IBGE (Brazilian Institute of Geograpy and Statistics)

Fertility rate inequalities: regions

PERFIL
GEOGRAFICO

MORBIDADE

MORTALIDADE

OUTROS
INDICADORES

PERFIL
SOCIOECONOMICO

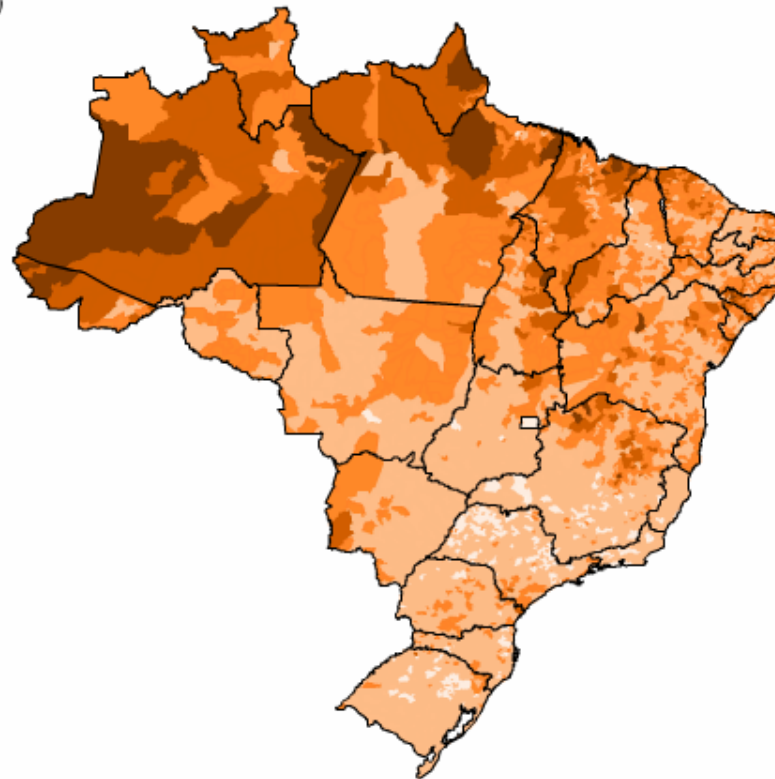
População

Densidade
demográfica

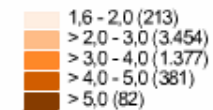
Densidade
domiciliar

Taxa de
crescimento
populacional

Taxa de
Fecundidade



Taxa de fecundidade
Taxa média de nascidos
vivos por mulher
Brasil, 2000



Taxa de fecundidade

Número médio de filhos nascidos vivos, tidos por uma mulher ao final do seu período reprodutivo, na população residente em determinado espaço geográfico

Fonte: Censo demográfico de 2000, Instituto Brasileiro de Geografia e Estatística (IBGE)

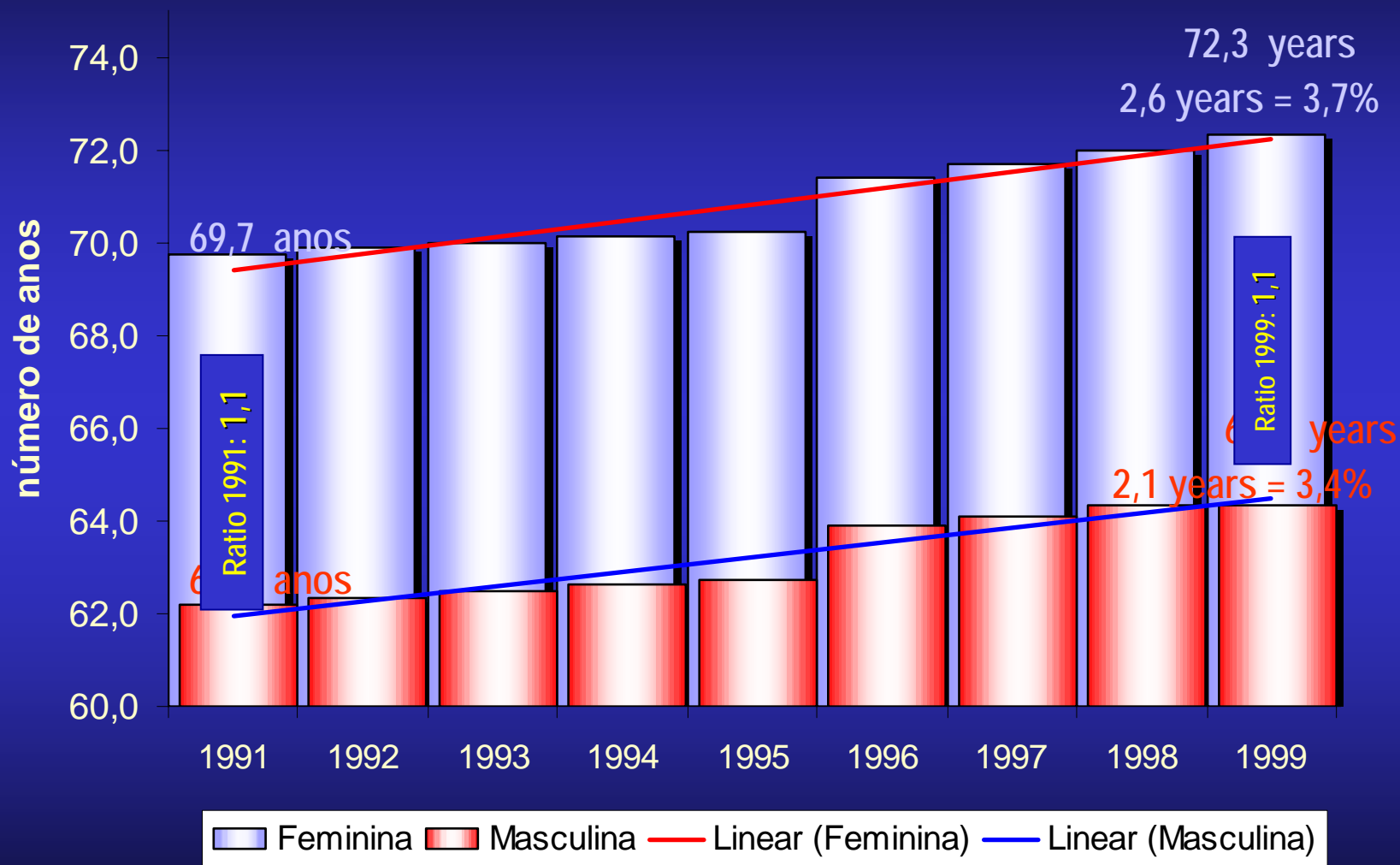


Age specific fertility rate (per 1.000)

age	1970	1980	1991	2000	variation %
15-19	74,8	79,8	76,9	85,1	14%
20-24	254,6	213,1	163,7	145,8	-43%
25-29	295	226	148,2	117,6	-60%
30-34	242,9	173,1	93,9	69,8	-71%
35-39	131,2	117	47,3	34,4	-74%
40-44	35	53,7	17,2	10,6	-70%
45 e +	22,3	10,8	3,1	1,5	-93%

Source: IBGE (Brazilian Institute of Geografy and Statistics)

Life expectancy inequalities: gender and trends



Life Expectancy inequalities: regions and trends

Regions	1980	2000	variation (years)
Brazil	61,7	68,6	6,9
North	61,3	68,5	7,2
Northeast	58,7	65,8	7,1
Southeast	64,5	69,6	5,1
South	65,3	71,0	5,7
C-West	63,5	69,4	5,9

Ratio 1980: 1,1

Ratio 2000: 1,1

Population aging, 1980 e 2000.

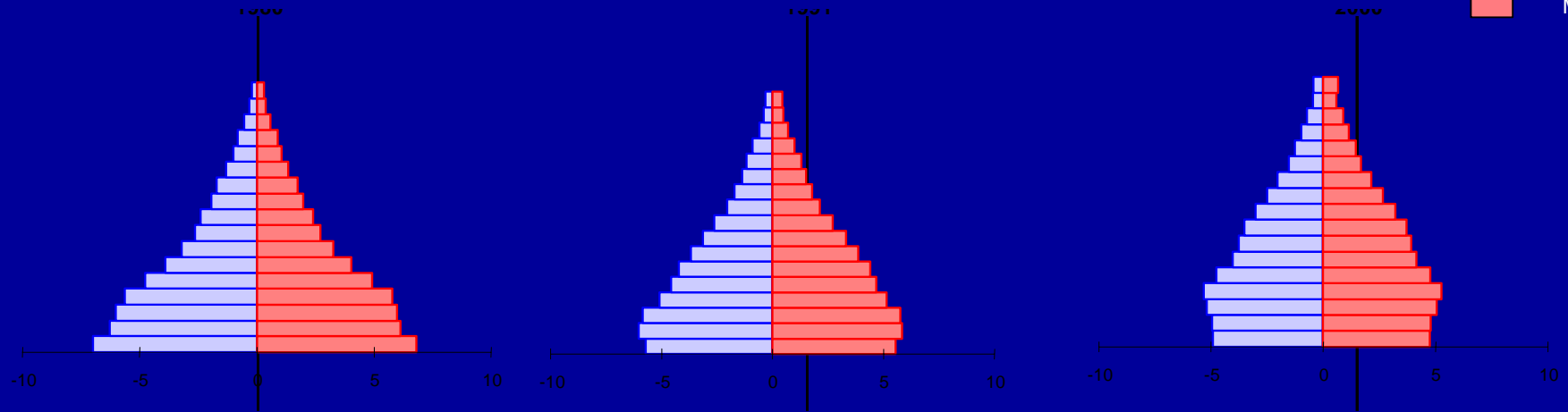
Regions	<15	15 - 64	65&+
Brasil	-22,51	11,90	45,96
North	-19,19	15,83	32,00
Northeast	-23,98	17,41	32,89
Southeast	-21,77	8,64	52,23
South	-24,03	10,70	61,99
C-West	-27,02	16,93	62,88

Source: IBGE (Brazilian Institute of Geograpy and Statistics)

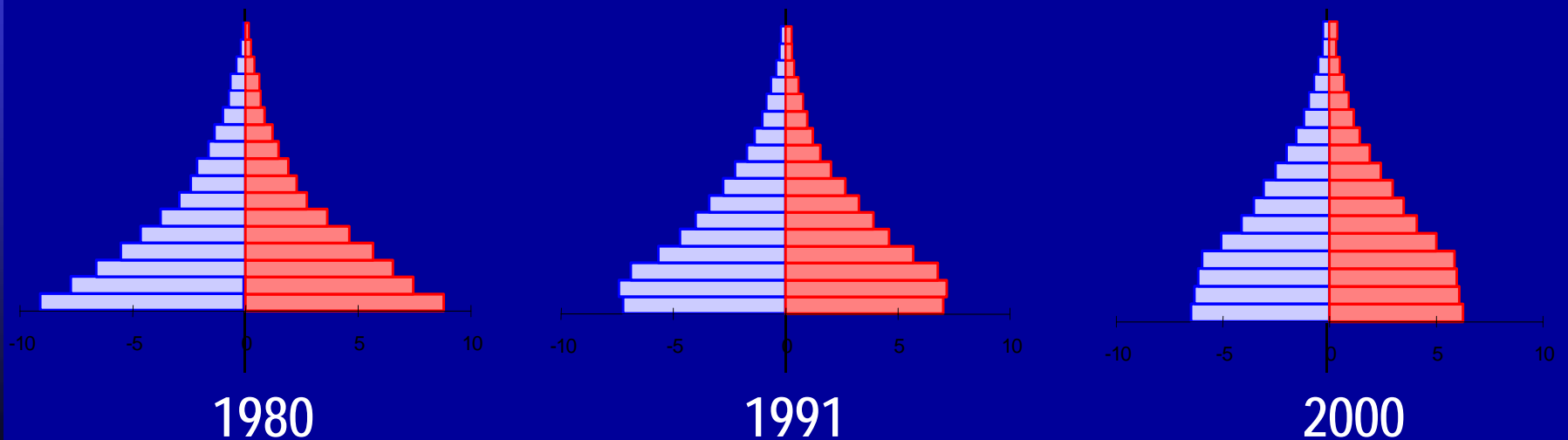
Population aging inequalities: regions and trends

Estrutura etária seq. anos

BRAZIL



NORTH

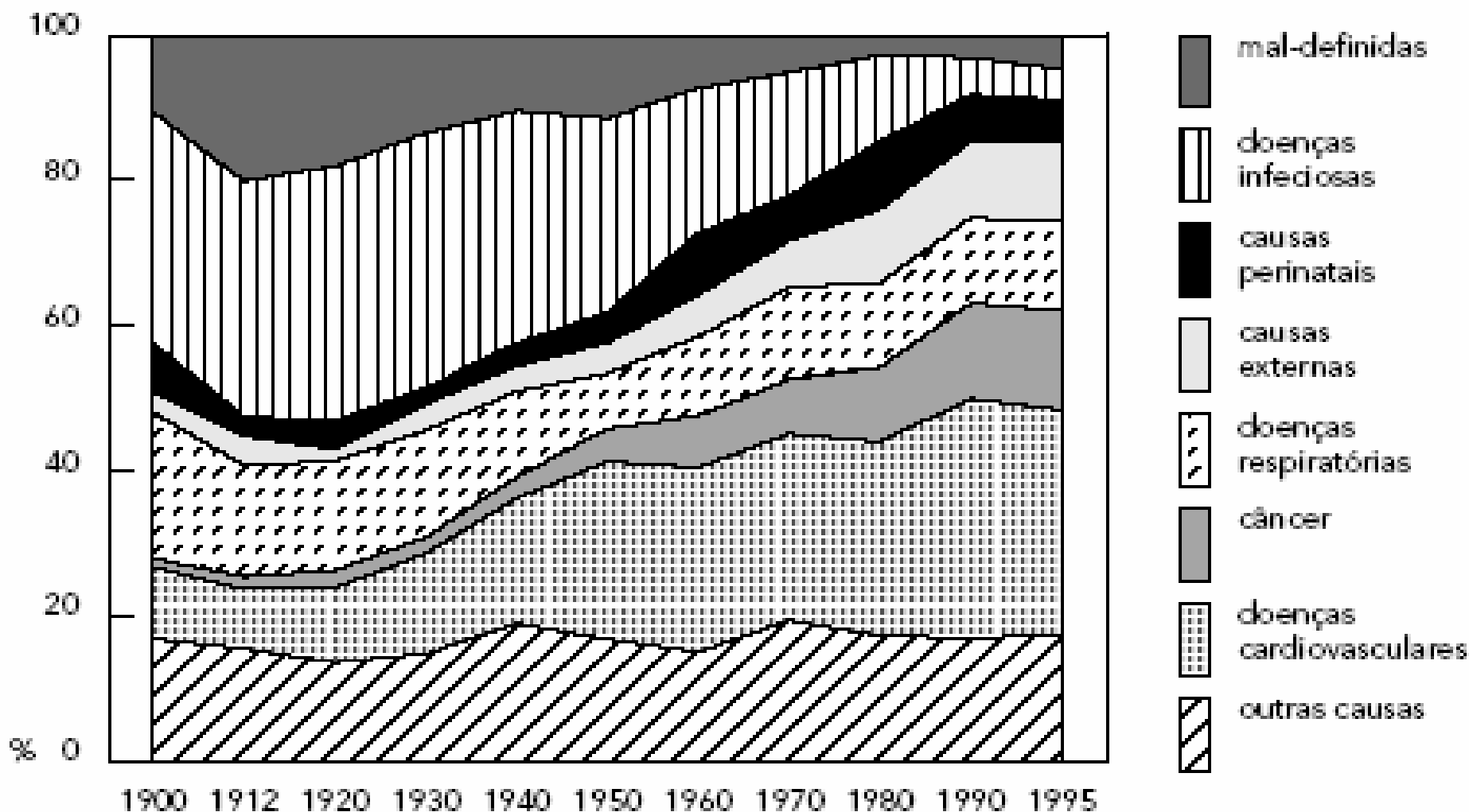


Health inequalities

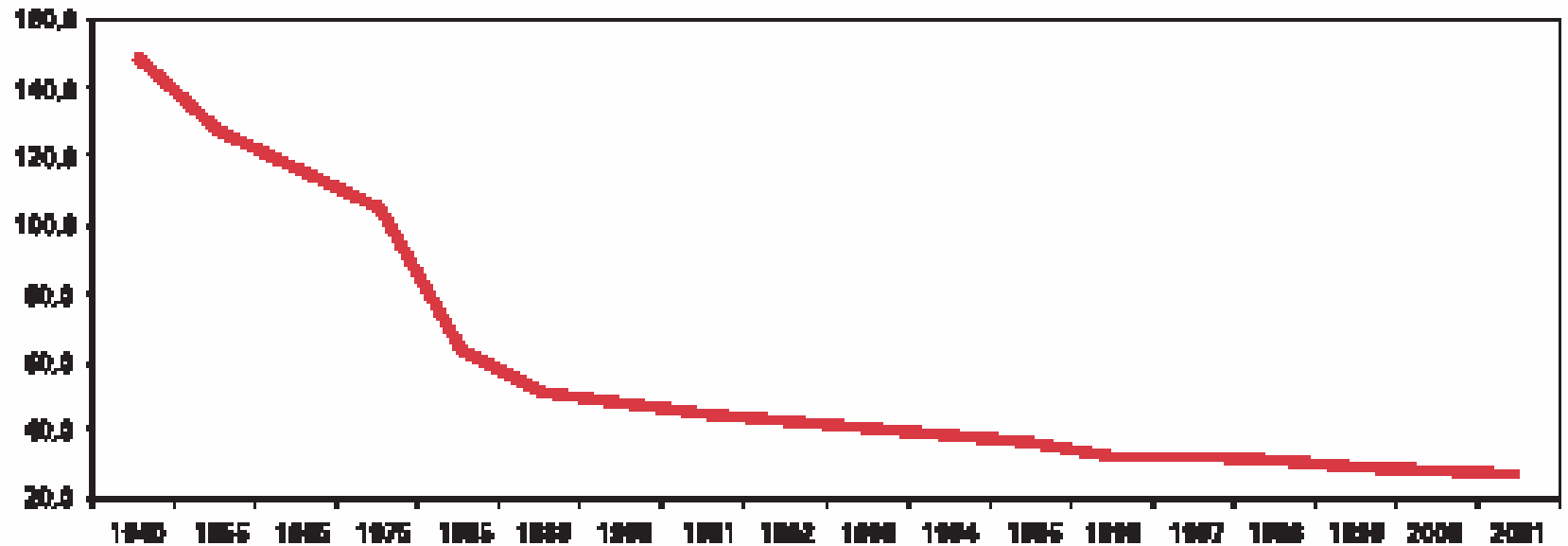
Examples: IMR, Homicides and Obesity

Distribuição relativa da mortalidade por grupo de causa.

Belo Horizonte, Minas Gerais, Brasil, 1900-1995.

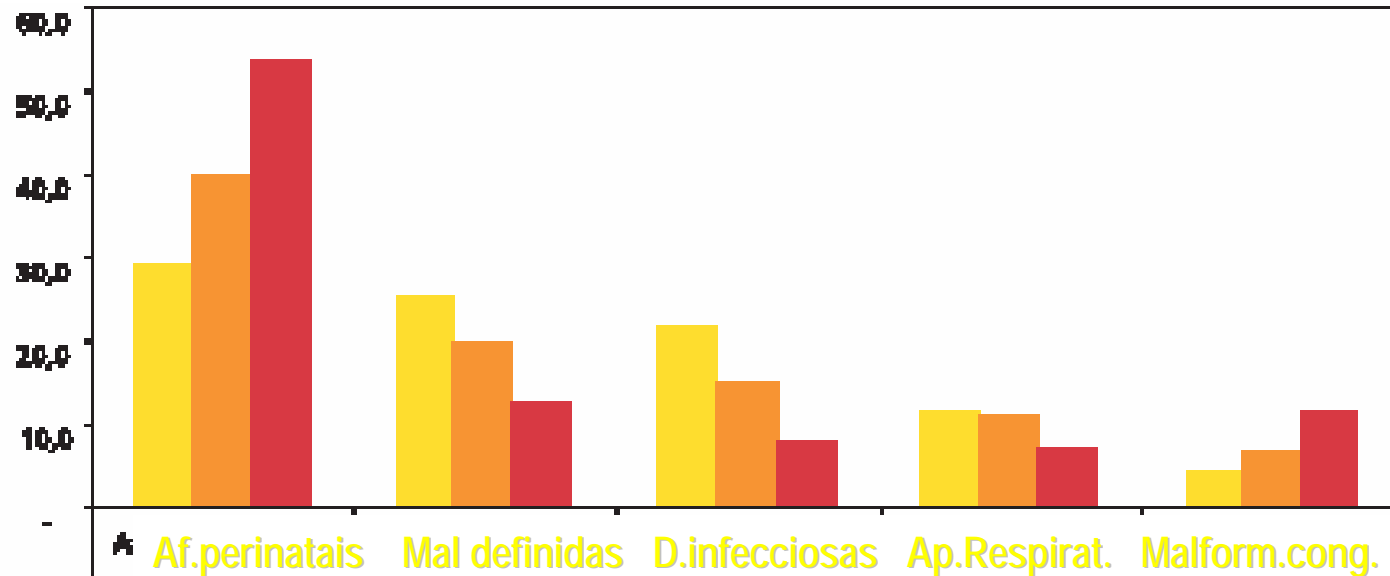


Infant Mortality Rate, BRAZIL, 1980-2001



Source: IBGE (Brazilian Institute of Geography and Statistics) - SVS - MoH

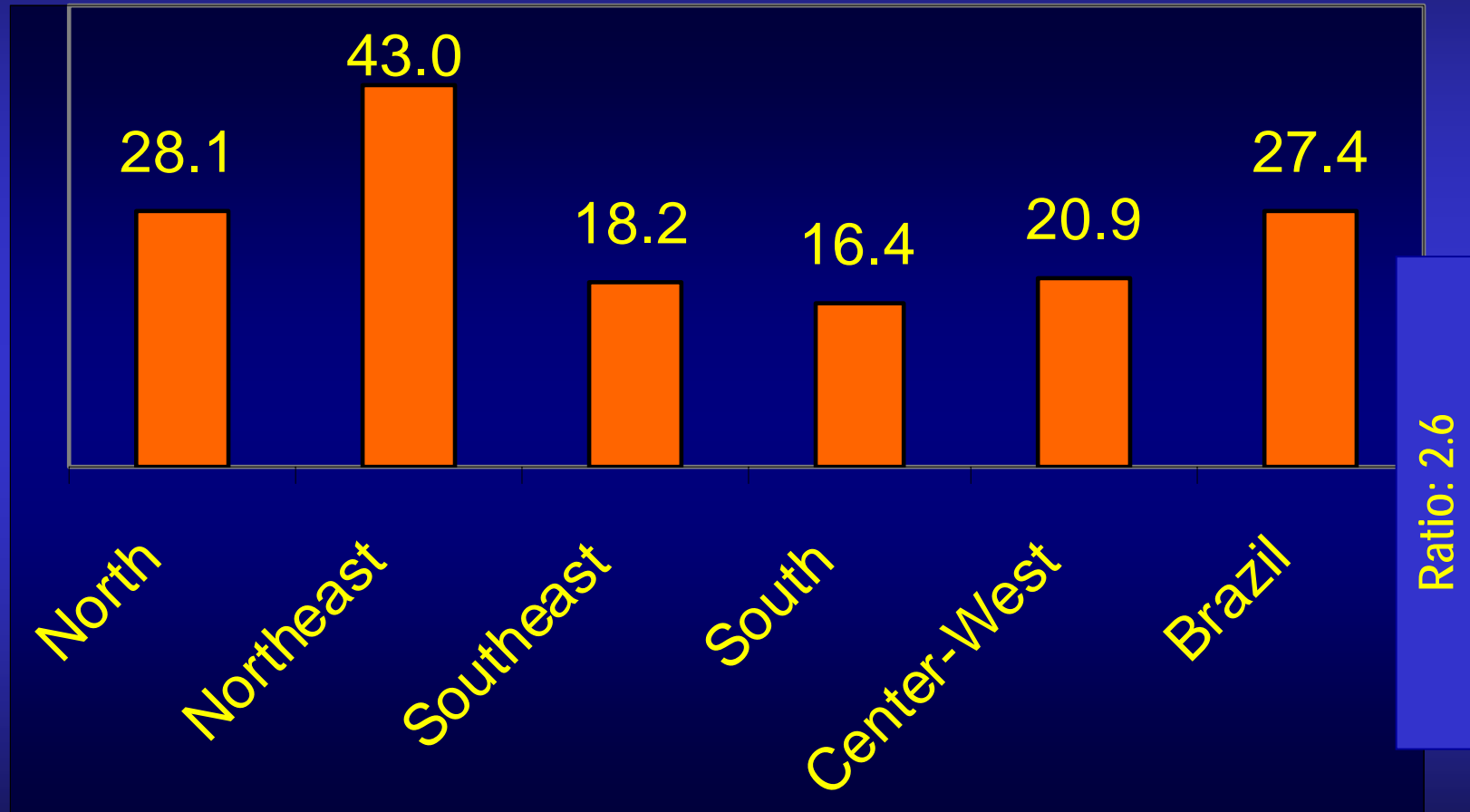
Proportional Infant Mortality, Brazil, 1980, 1990 e 2000



	Af. perinatais	Mal definidas	D. infecciosas	Ap. Respirat.	Malform. cong.
1980	28,7	25,1	21,5	11,8	4,0
1990	41,9	21,2	14,8	11,9	4,7
2000	53,6	12,9	7,9	6,9	11,4

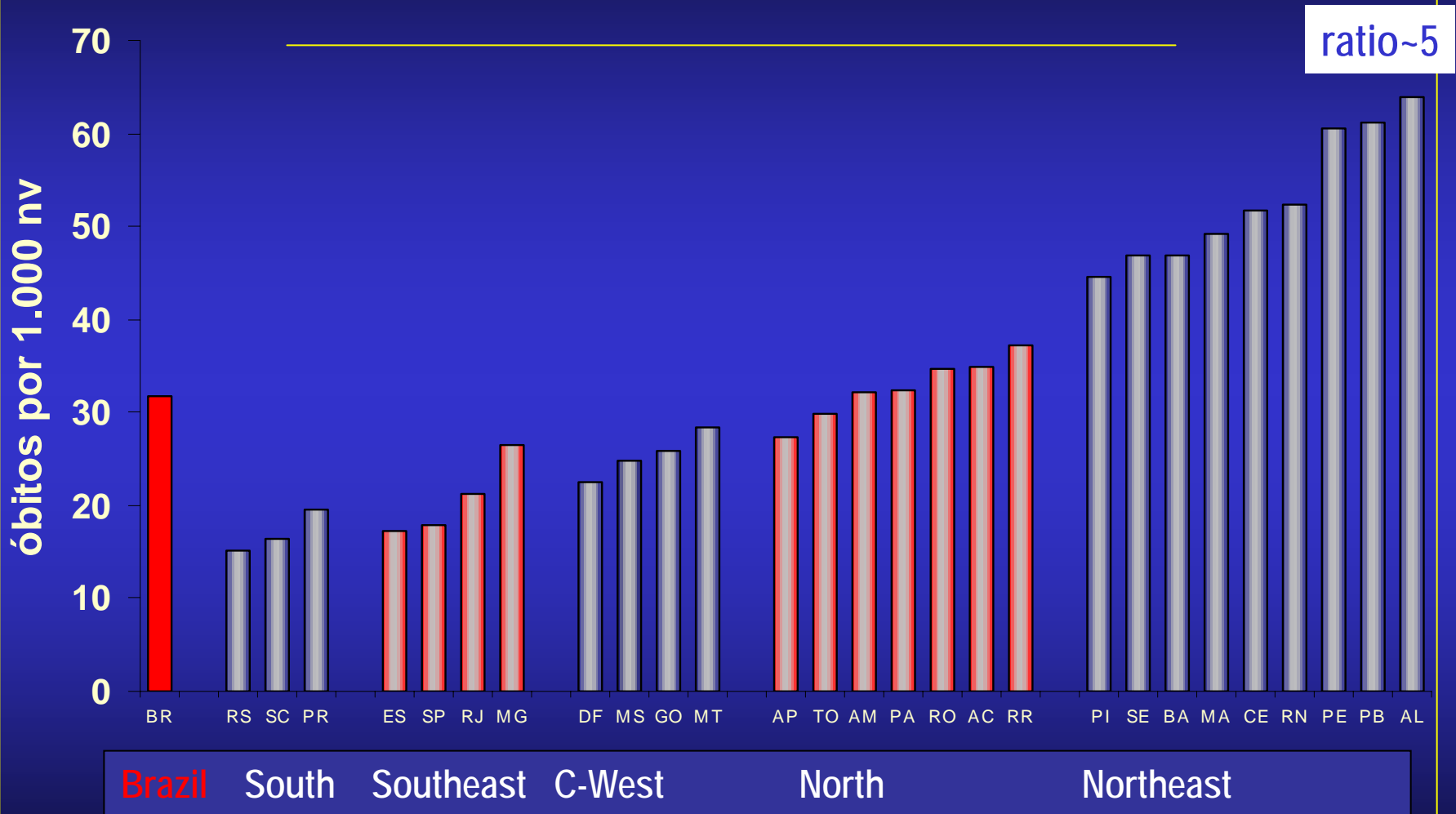
Source: SVS – MoH

Infant mortality rate inequalities: regions



Source: IBGE (Brazilian Institute of Geography and Statistics) - SVS - MoH - 2001

Infant mortality rate inequalities: states



Source: Duarte, et al. 2001

IMR inequalities: regions and trends

Infant Mortality Rate, 1997-2001

Grandes regiões e estados	1997	1998	1999	2000	2001	Variação
Brasil	31,9	30,8	29,1	28,2	27,4	-14,1
Norte	32,1	30,9	29,9	29,0	28,1	-12,4
Nordeste	50,9	48,7	46,7	44,9	43,0	-15,4
Sudeste	22,8	21,4	19,8	19,1	18,2	-20,2
Sul	17,5	18,7	17,2	17,1	16,4	-6,5
Centro-Oeste	24,3	23,4	22,6	21,0	20,9	-14,0

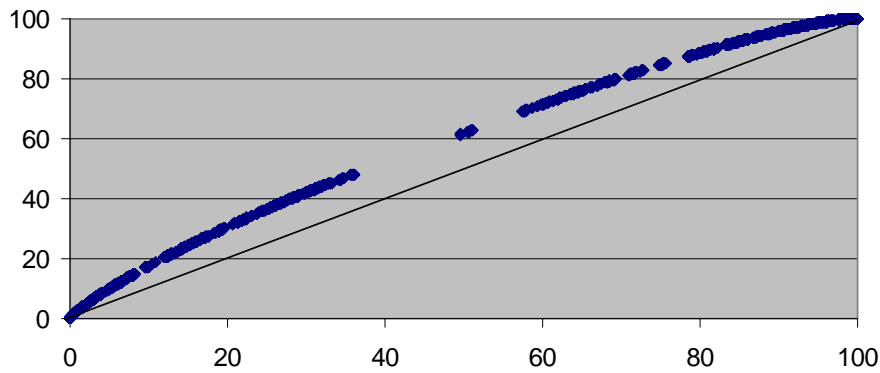
Ratio 1997: 2.9

Ratio 2001: 2.6

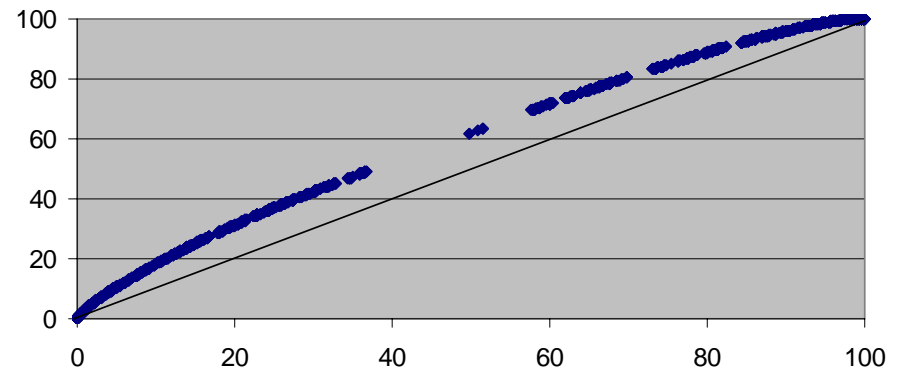
Source: IBGE (Brazilian Institute of Geography and Statistics) - SVS – MoH

IMR inequalities: trends

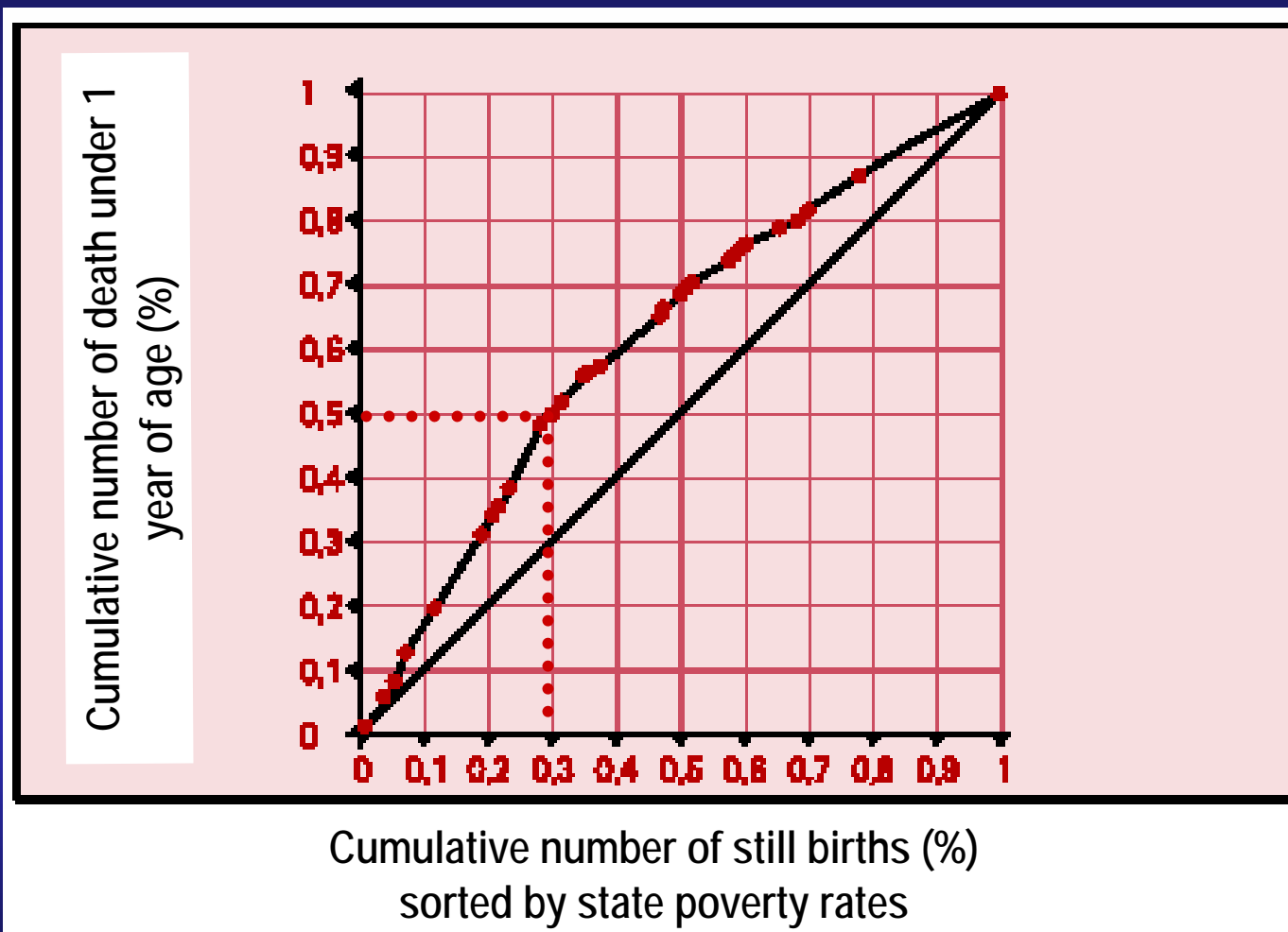
Lorenz curve, 1996



Lorenz curve, 2002

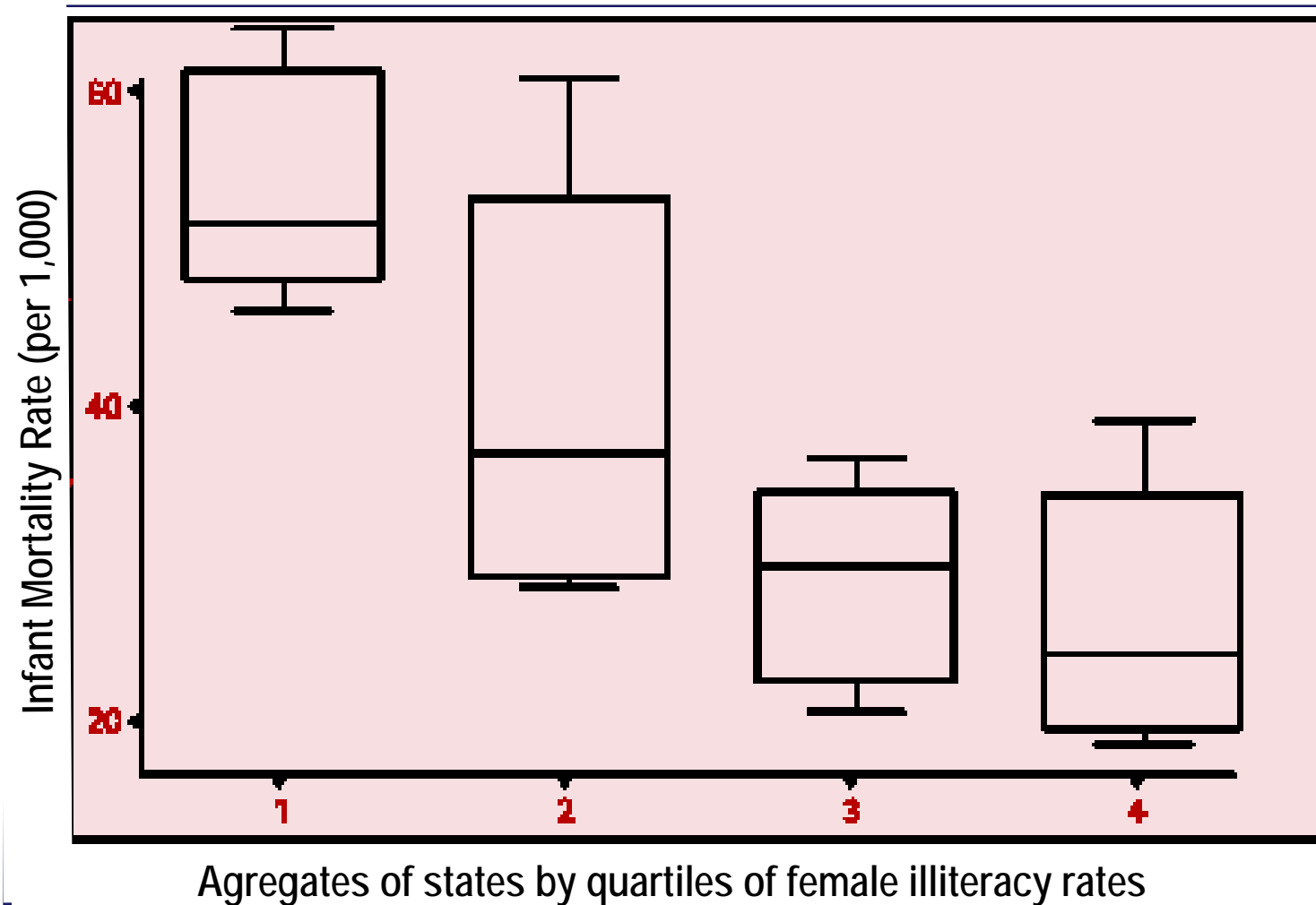


IMR Inequalities: poverty



Source: Duarte, et al. 2001

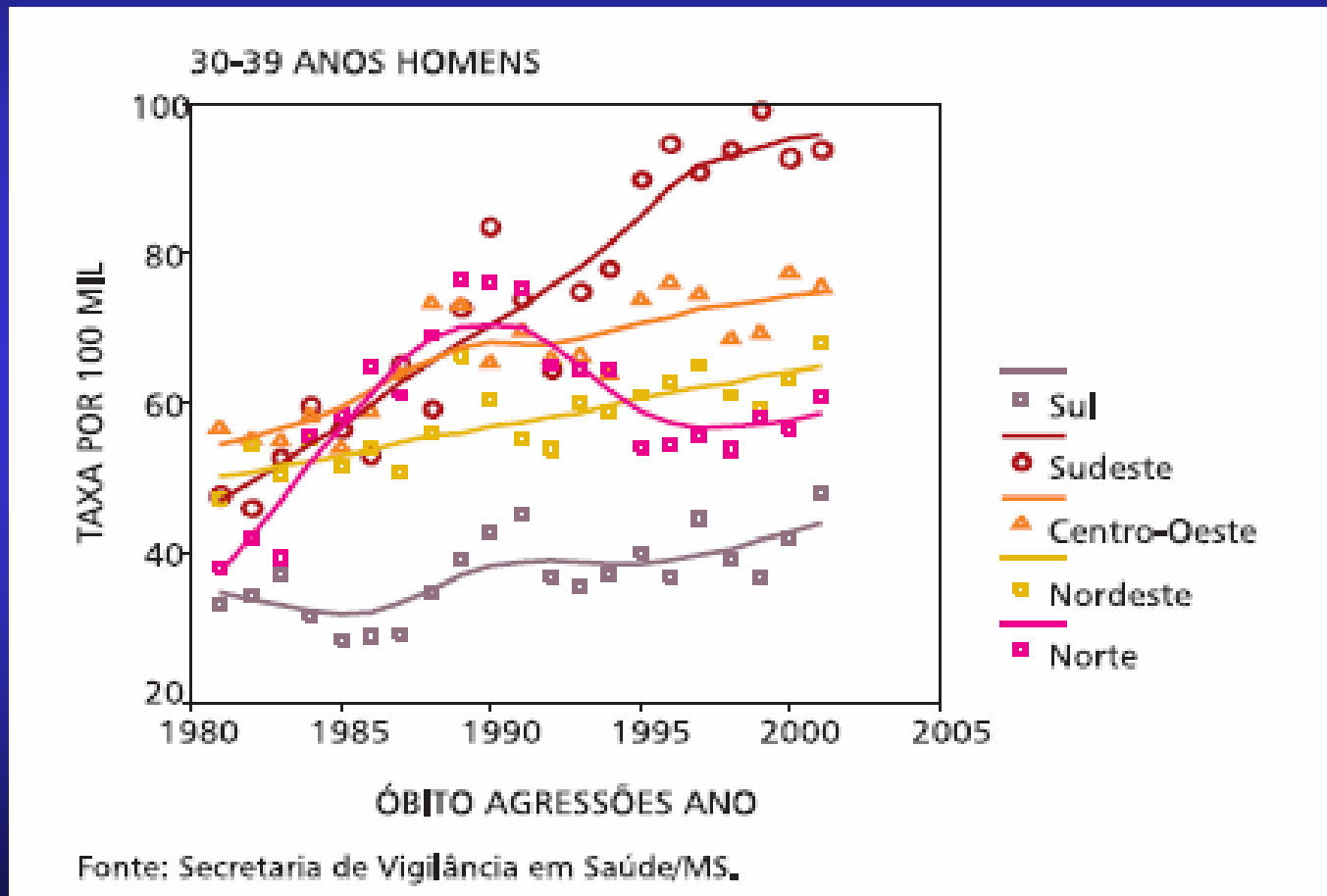
IMR Inequalities: illiteracy



Source: Duarte, et al. 2001

Homicide Mortality Inequalities: regions and trends

Rate in man 30 – 39 years of age (per 100,000)



Homicide inequalities: regions and trends

rate in man 30 – 39 years of age (per 100,000)

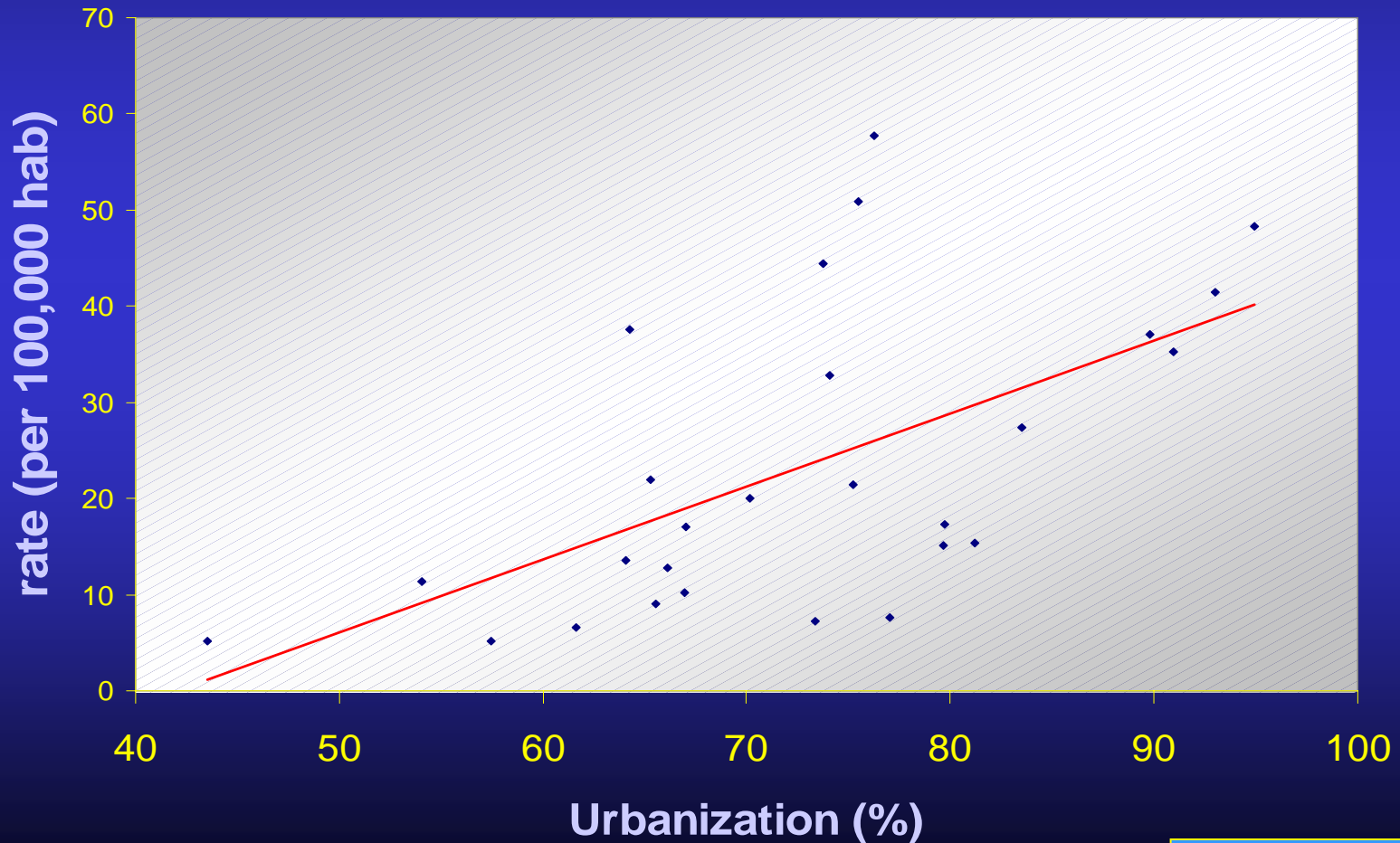
	Regions	Rate 1981	Rate 2001
30 a 39	Norte	59.1	76.7
	Nordeste	57.6	74.7
	Centro-Oeste	66.2	85.8
	Sudeste	71.6	153.1
	Sul	37.0	48.0

Ratio 1981: 1.9

Ratio 2001: 3.2

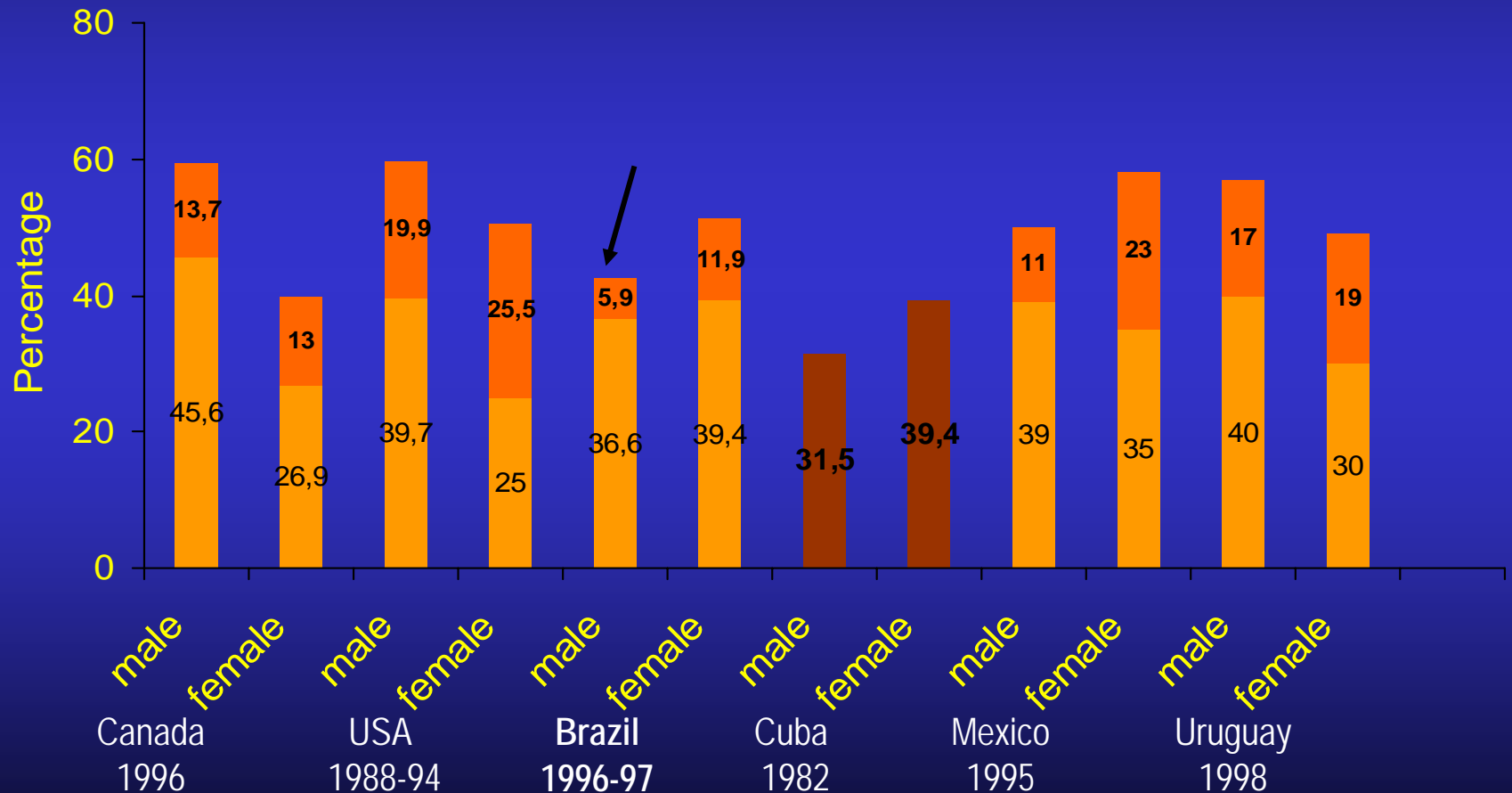
Homicide inequalities: urbanization

Correlation between homicide rates and urbanization



Risk factor Inequalities: gender

Obesity and overweight prevalence (adults) - Americas

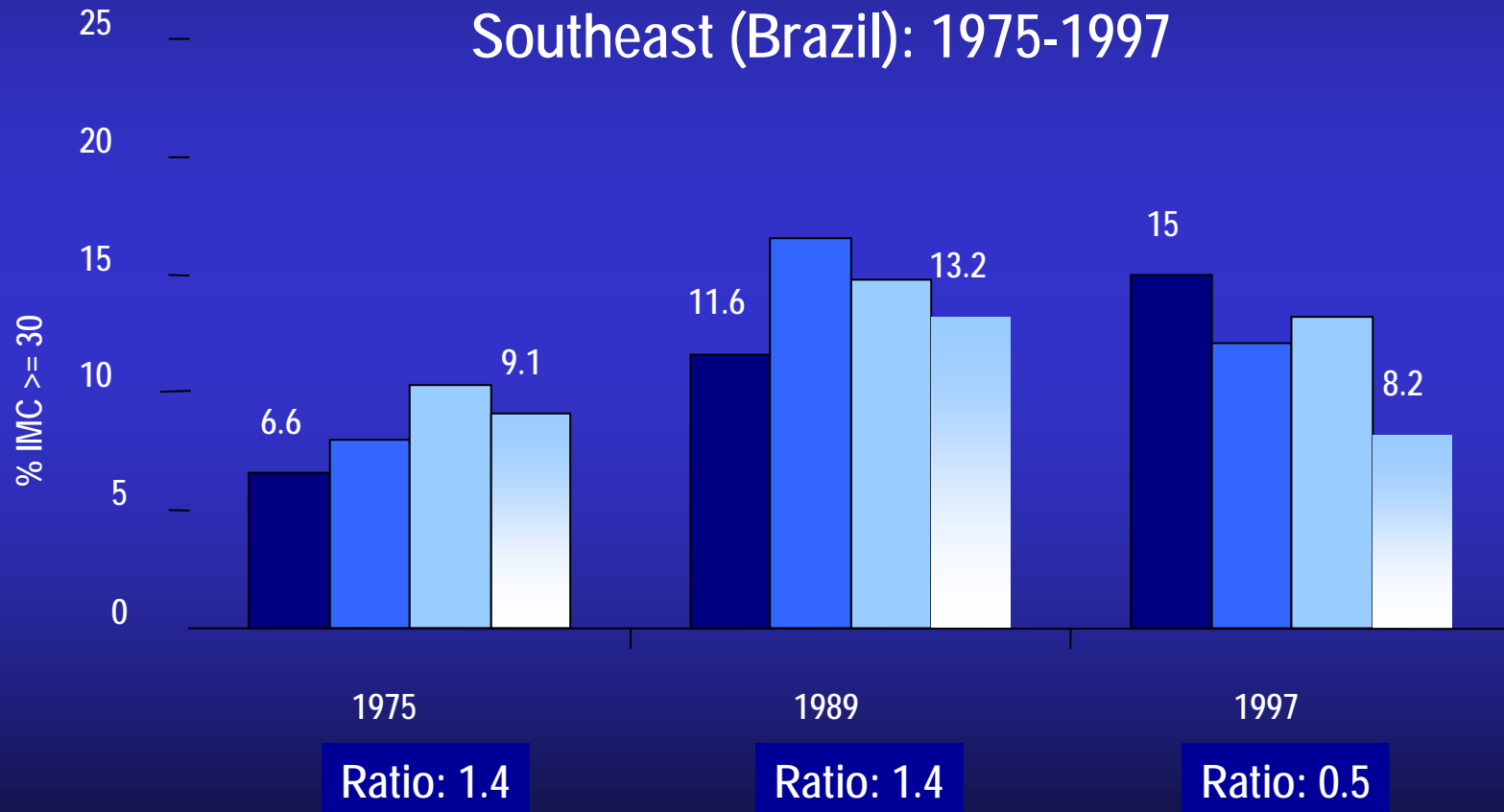


Source: WHO Global Database on Body Mass Index (BMI)

Risk factor Inequality: trends



Obesity and poverty: Prevalence among women from Southeast (Brazil): 1975-1997



Public policies targeting health inequalities, some examples:

The Family Health Program (PSF)

The Bolsa Familia Program (BFP)

The Health System in Brazil (SUS)

Total Population: 180 millions

SUS users = 75% of overall population:

134.212.651

(2,03 bilhões de procedimentos ambulatoriais /ano

11,6 milhões de internações/ano)

The family health program

A change of the primary care model:

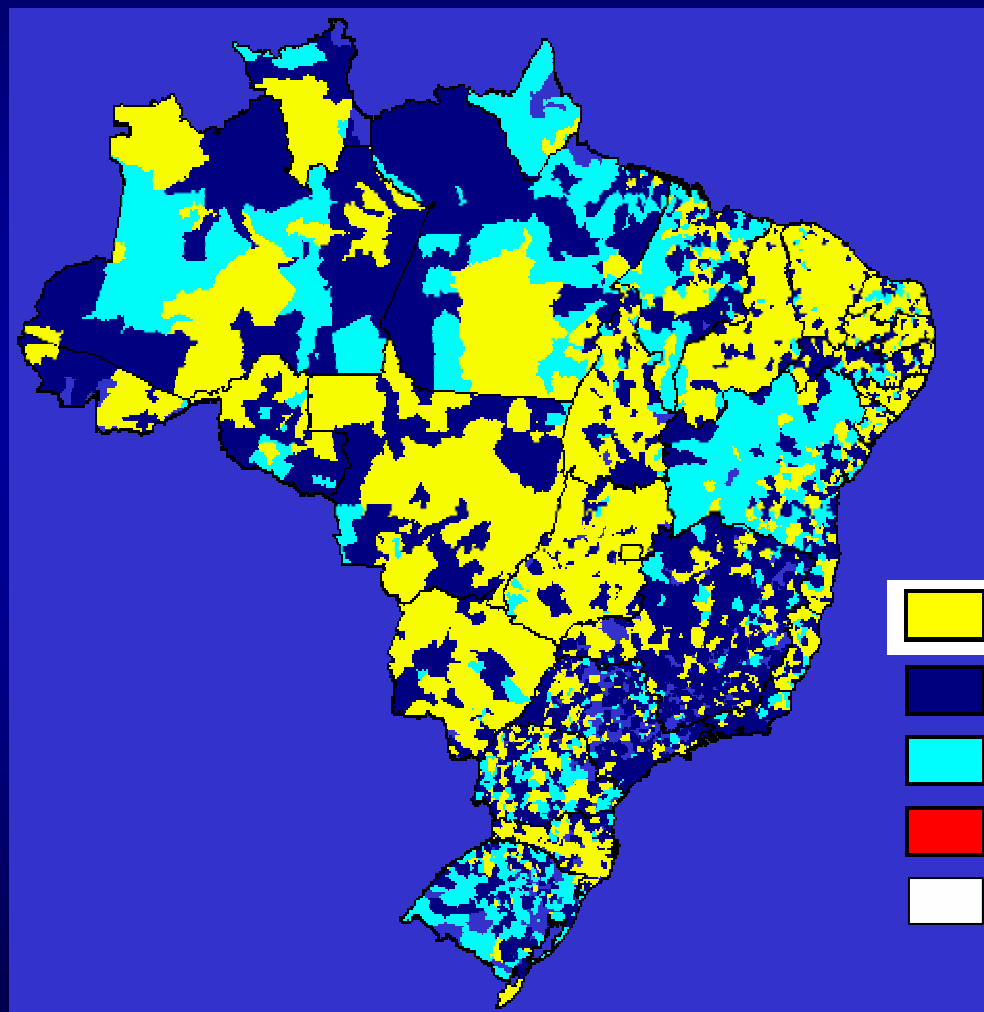
AIM

Organization of the primary care as the entrance
door for SUS

Access amplification (targeting specially the poorest)

Qualification of the practices

Family Health Program Coverage: 2005



Nº EQUIPES – 21.939
Nº MUNICÍPIOS - 4.707

Nº AGENTES – 196.009
Nº MUNICÍPIOS - 5.110

Nº EQUIPES DE SAÚDE
BUCAL – 9.781
Nº MUNICÍPIOS – 3.346

Incentivos Financeiros Transferidos à SF, PACS e SB

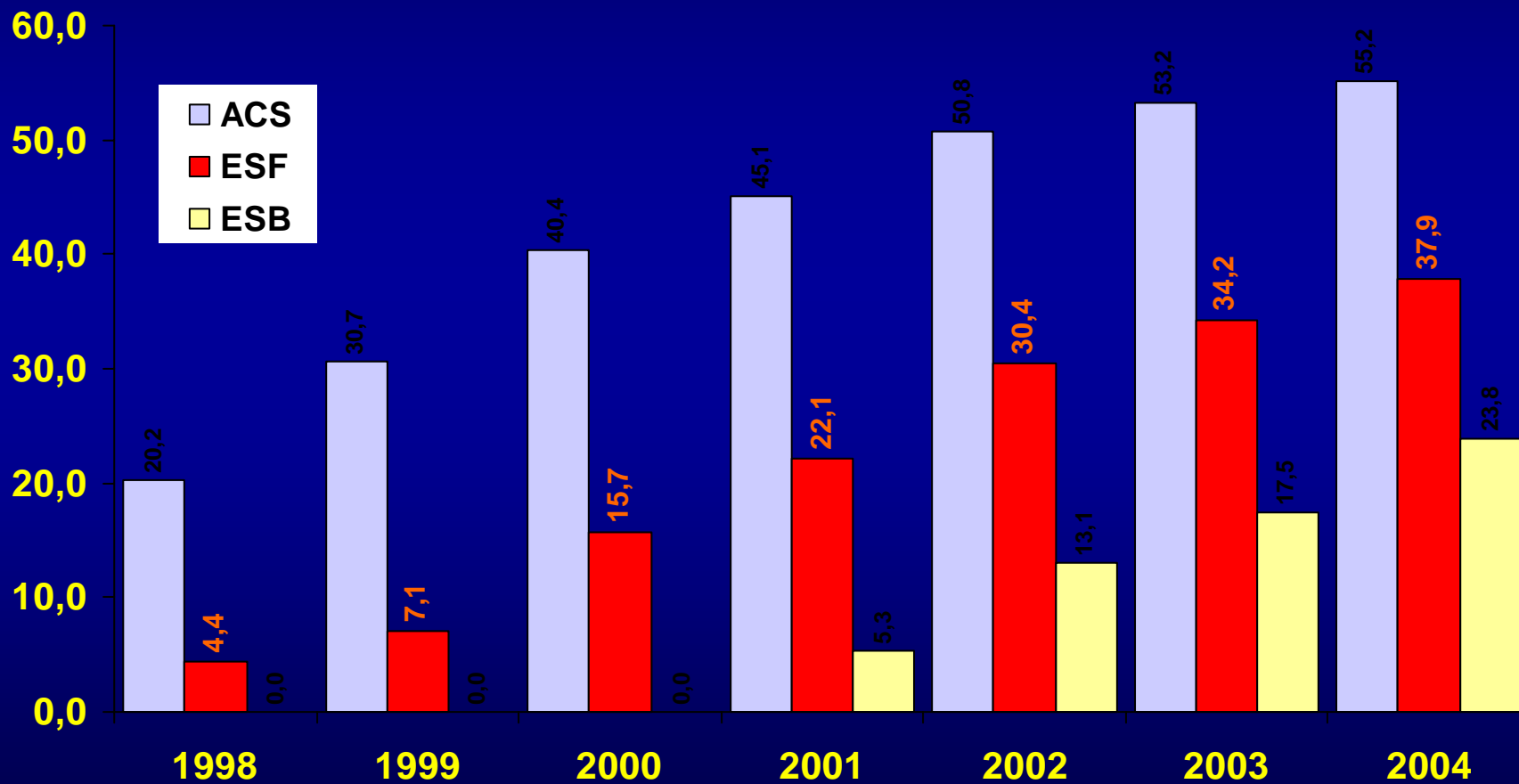
ANO	ORÇAMENTO	EXECUÇÃO	% EXECUTADO
1998	R\$ 201.000.000,00	R\$ 143.763.058,42	71,52
1999	R\$ 378.999.286,00	R\$ 306.583.162,50	80,89
2000	R\$ 680.000.000,00	R\$ 648.500.575,97	95,37
2001	R\$ 970.000.000,00	R\$ 857.778.827,63	88,43
2002	R\$ 1.350.000.000,00	R\$ 1.204.978.139,88	89,25
2003	R\$ 1.680.000.000,00	R\$ 1.655.722.702,97	98,55
2004	R\$ 2.071.000.000,00	R\$ 2.071.000.000,00	100,00
2005	R\$ 2.349.794.994,00		



US\$ 860,000,000.00

2005 US\$2.250.000.000,00 ATENÇÃO BÁSICA EM SAÚDE

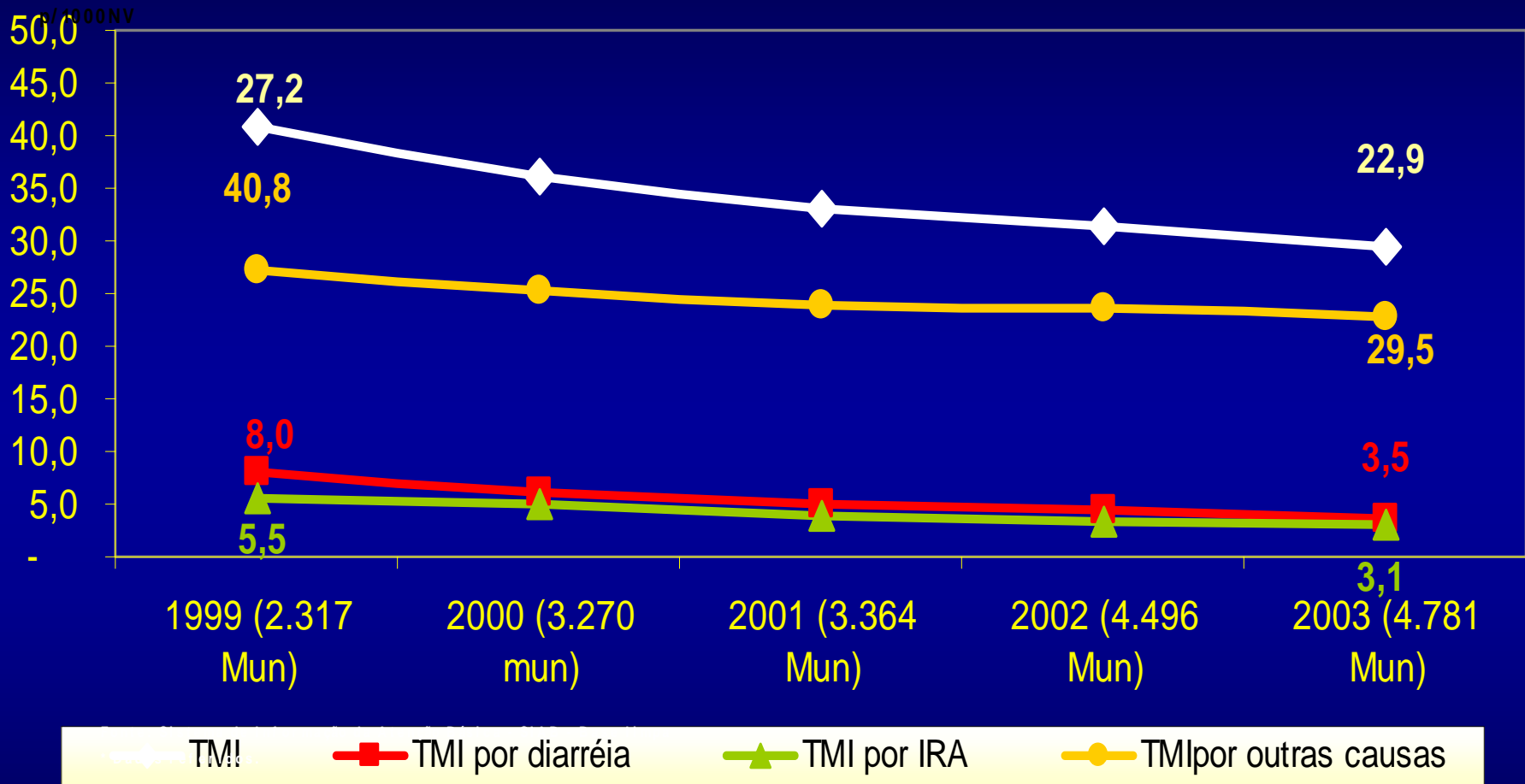
Family Health Program Population Coverage (%), Brasil, 1998 a 2004



Fonte: SIAB

*Situação em julho de cada ano referido

IMR trends within PSF areas, Brazil, 1999 - 2003



Similar results from Macinko et al, 2005

IMR trends within PSF areas, Brazil, 1999 - 2003

Similar evidences from:

Macinko J & Marinho MF, 2005

New York University & Health Ministry-DASIS

Impact of the FHP on infant mortality rates (specially due to decreasing in diarrhea mortality):

after adjusting for other IMR determinants (water supply, sanitation, presence of other health professionals, etc)

in all Brazilian regions (but higher impact in the less developed regions).

PROESF:

Expansion of the Family Health Program 2005

Municipalities with >100 thousand inhabitants

210 municipalities

US\$ 550 millions

Monitoring and evaluation program:

State Health Secretaries

US\$500,000.00

Ministry of Social Development and Fight Against Hunger

The Evaluation and Monitoring of Social Development Policies

Romulo Paes de Sousa
Secretary of Evaluation and Information Management

Brasilia, 2005 march

Fome Zero (Zero Hunger)

- A public policy which places hunger not as an individual fatality, but as a national matter.
- Set of public and social policies which articulates government and non-government actions towards the eradication of hunger and the promotion of social inclusion in Brazil.
- Express the Federal Government's decision of placing the fight against hunger at the core of national political agenda.
- The Bolsa-Familia Program is one of the main actions of Fome Zero (Zero Hunger).

Beneficiaries' Selection Criteria and Cash Transfer Values*

Extremely poor families:

Household monthly per capita
income below US\$ 20

Fixed benefit: US\$ 20

Variable benefit: up to US\$ 18

Children 0-15 age group { US\$ 6

Poor families: Household
monthly per capita income
between US\$ 20 and US\$ 40

Variable Benefit: up to
US\$ 18

*Exchange Rate 05/19/05 1US\$ = R\$ 2,50

The Bolsa Família Program

Conditional cash transfer program that works in two dimensions :

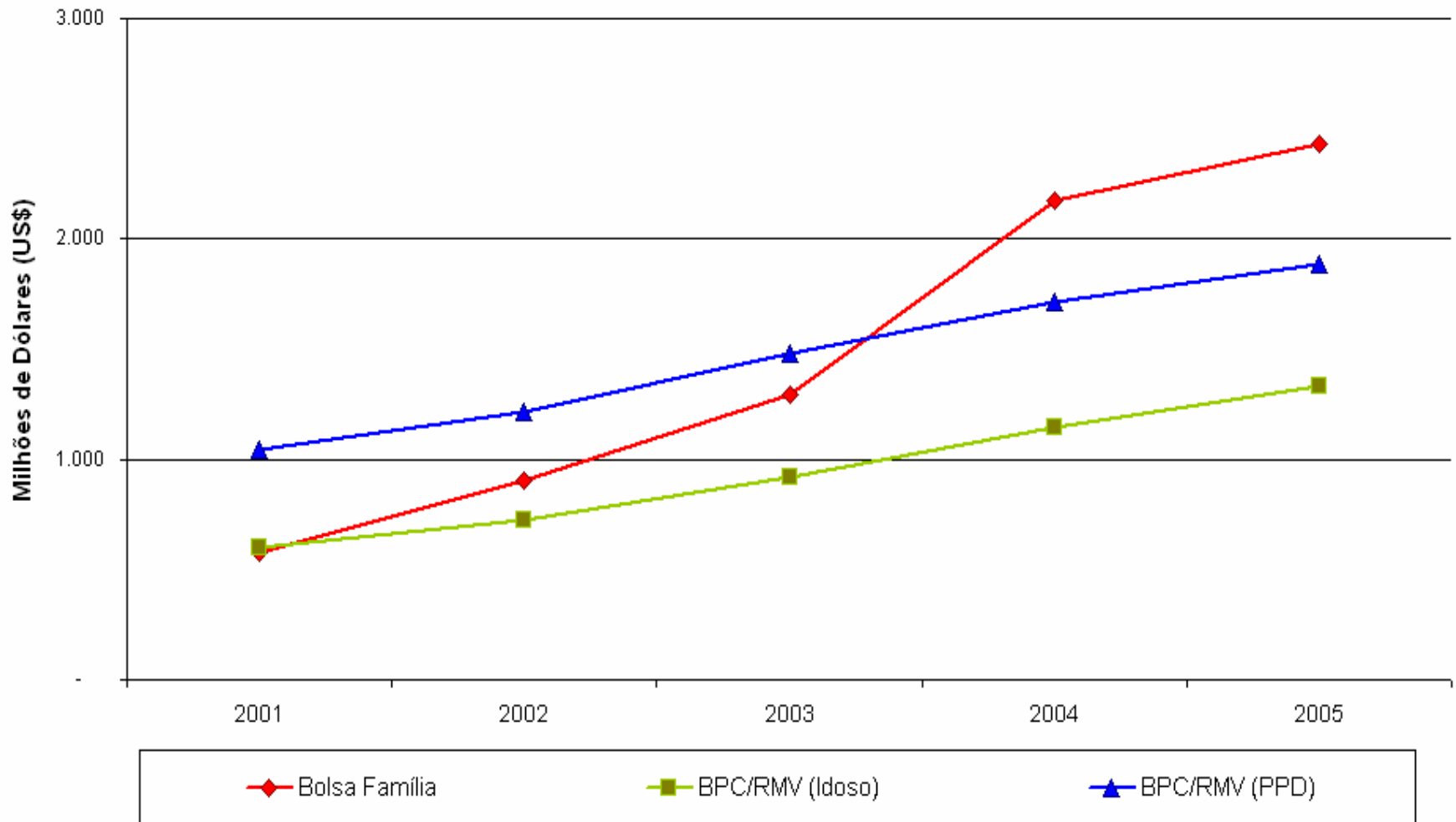
- Alleviation of poverty immediately, through the provision of monetary transfers; and
- Eradication of poverty and promotion of social inclusion, through the basic social rights (such as health and education) and through access to complementary policies.

Conditionalities (FAMILIES)

Health	Pregnant and lactating women: <ul style="list-style-type: none">- Pre-natal and post-natal health visits
	Children under 7 years old: <ul style="list-style-type: none">- Vaccines up to date
Education	School attendance for children in the 6-15 age group

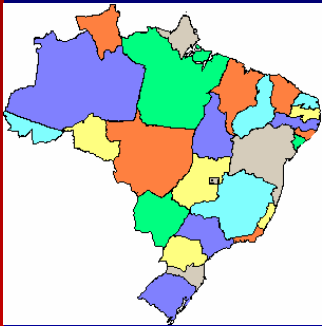
The Federal Government Investment in Social Welfare

Gastos do Governo Federal - Transferências de Renda
Bolsa Família e Benefício de Prestação Continuada(BPC) / Renda Mensal Vitalícia(RMV) para Idosos e Portadores de Deficiência - 2001 a 2005

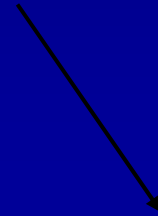


Outcomes

ABR/2005



**5.537 municipalities – 99,6% of
Brazilian municipalities**



7 million families



28 million people



The Impact of the Bolsa Família Program on the life of beneficiaries

In 2004, a pool with the beneficiaries was carried through, which enhanced:

- the necessity of the benefit due to the lack of access to the remunerated work
- the impact on food security
- the importance of the regularity of the benefit in the organization of the familiar budget
- the importance of the benefit for the local commerce
- commitment on the part of the children: to go to the school has become a way to help improve the family income

Commission

What are the health inequity main determinants? Do we know all?

Do we need to know all before start action?

What works?

How to solve methodology difficulties in studying health inequalities?

What others governments are doing?

Is the health system a protective factor against health inequity or a risk factor?

To help the fulfillment of the gaps in knowledge.

Advocacy based on evidences already available.

To help the evaluations of program impacts on health iniquities.

Provide some methodological guidance: measurement, reverse causality bias, confounding, high colinearity ...

Observatory of governmental experiences or forums for exchanging experiences.

Brings the focus on the health sector responsibilities.

SVS

Ministério
da Saúde

