

# USING DHS AND NHA INDICATORS TO ANALYZE EQUITY IN HEALTH FINANCING



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# Examples from three studies

- Nicaragua: Health and Equity, USAID, 2003.
- Evolution of Nicaraguan NHA 1997-2003, with international perspective, Harvard School of Public Health / MSH, 2005.
- Dominican Republic: NHA 2002, within a LAC context, CERSS / IADB, Santo Domingo, 2006.



# Health Financial Equity contributes to human development

- Human development objective: attain equal opportunities for all
- Government intervention is required to:
  - Correct inequalities
  - Improve income distribution
  - Reduce poverty

# Data sources for papers

- National Health Accounts studies in several LAC countries: DR, Nicaragua, Mexico, Bolivia, Guatemala, El Salvador and Paraguay.
- Demographic and Health Survey (DHS) in Nicaragua and the DR, years 1996 and 2002.
- WHO NHA indicators for some specific analysis.



# Few NHA international comparative studies: four studies reviewed

- Berman, Peter, Berman, Peter, et al, *Health Care Financing in Eight Latin American and Caribbean Countries: The First Regional National Health Accounts Network*, Harvard School of Public Health and PHR-USAID, 1999
- Magnoli, Alessandro, *NHA in LAC: concepts, results and employment policy*, Harvard/ IDB/ INDES, (2001).
- Nandakumar, A. K. et al, *Synthesis of Findings from NHA Studies in Twenty-Six Countries*, PHRplus / Abt Associates, Maryland, USA, 2004.
- Berman, Peter and Heather deVries, *Differences in National and International Estimates of National Health Spending in Developing Countries*, Harvard School of Public Health, (2005).

# Deficiencies in NHA data comparability

- Most LAC studies focused on the first NHA LAC round (years 1995 to 1997).
- Many variables are not comparable (do not measure the same).
- The methodological approach and the definitions of health expenditures, entities and functions were not standardized at that time (even using the NHA approach).



# WHO NHA indicators

- WHO produces yearly NHA indicators (not complete NHA) for almost all countries in the world.
- For most comparative analysis this is the best source available.
- However, there are differences between these estimations and those produced by the LAC countries national teams.
- The latter – when available – are probably more accurate.

# In order to assess financial equity we focused in:

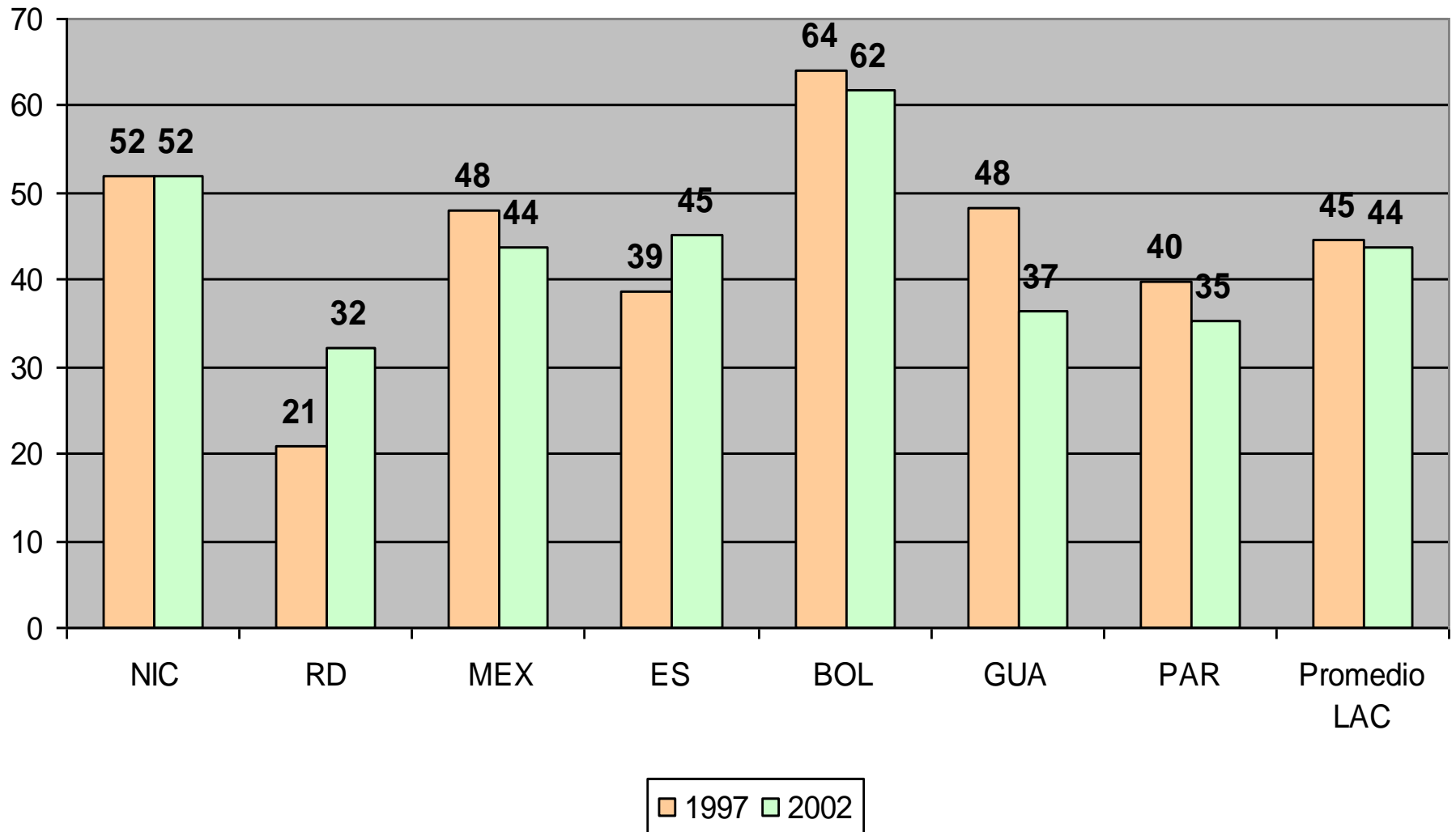
- Relationship between public and private financing and expenditures.
- Patterns of health services consumption and expenditures
- Financial burden of health expenditures on household income.
- Distributive impact of public expenditures.



# Positive relationship between public financing and equity

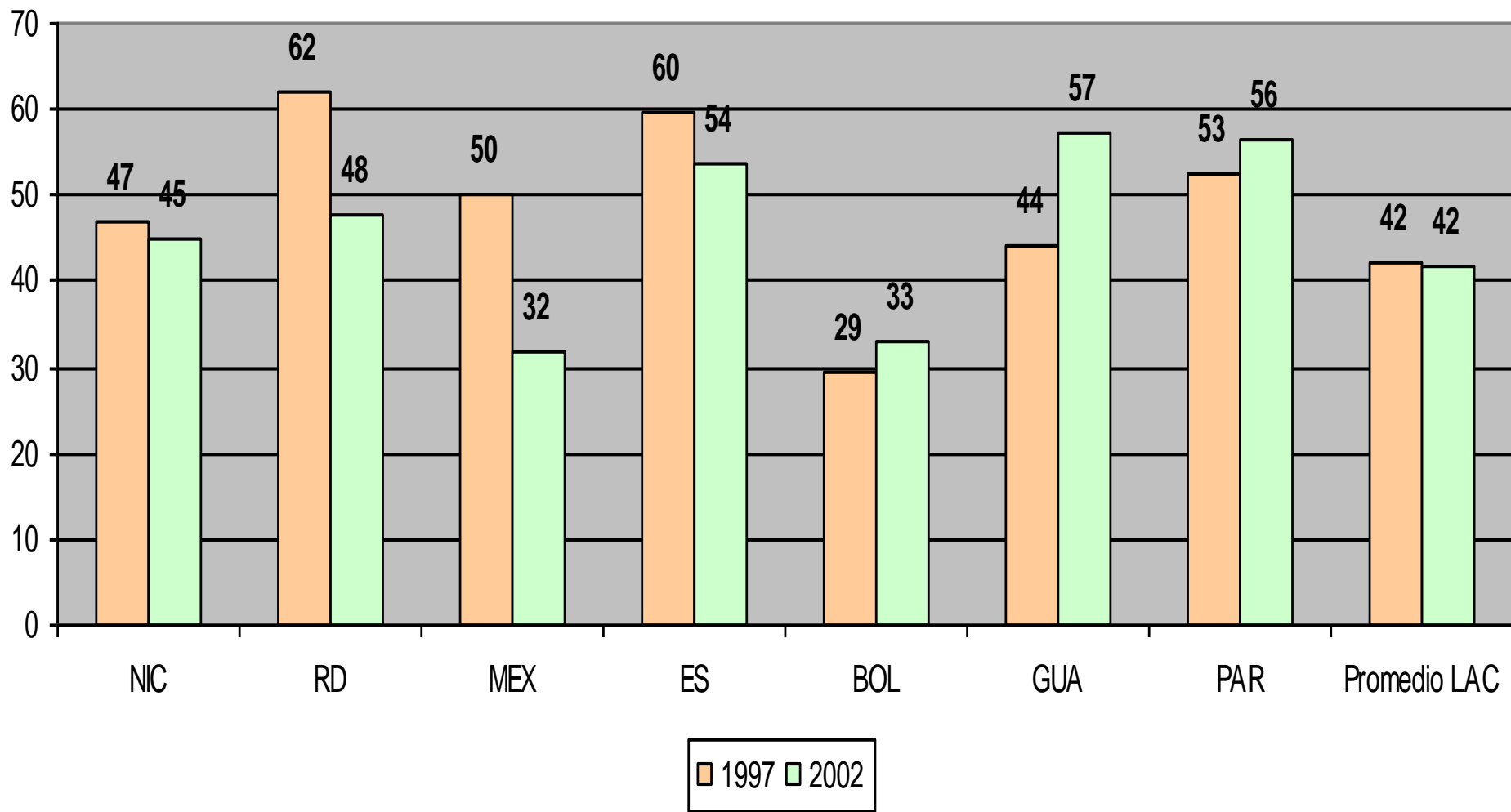
- Most developed countries have a very high proportion of health expenditures financed by the Government through:
  - General taxation
  - Social or public insurance
- Out-of-pocket expenditure is the most unequal way of financing health care and it is frequent in less developed countries.

# Public Health Expenditure as a % of Total Health Expenditures

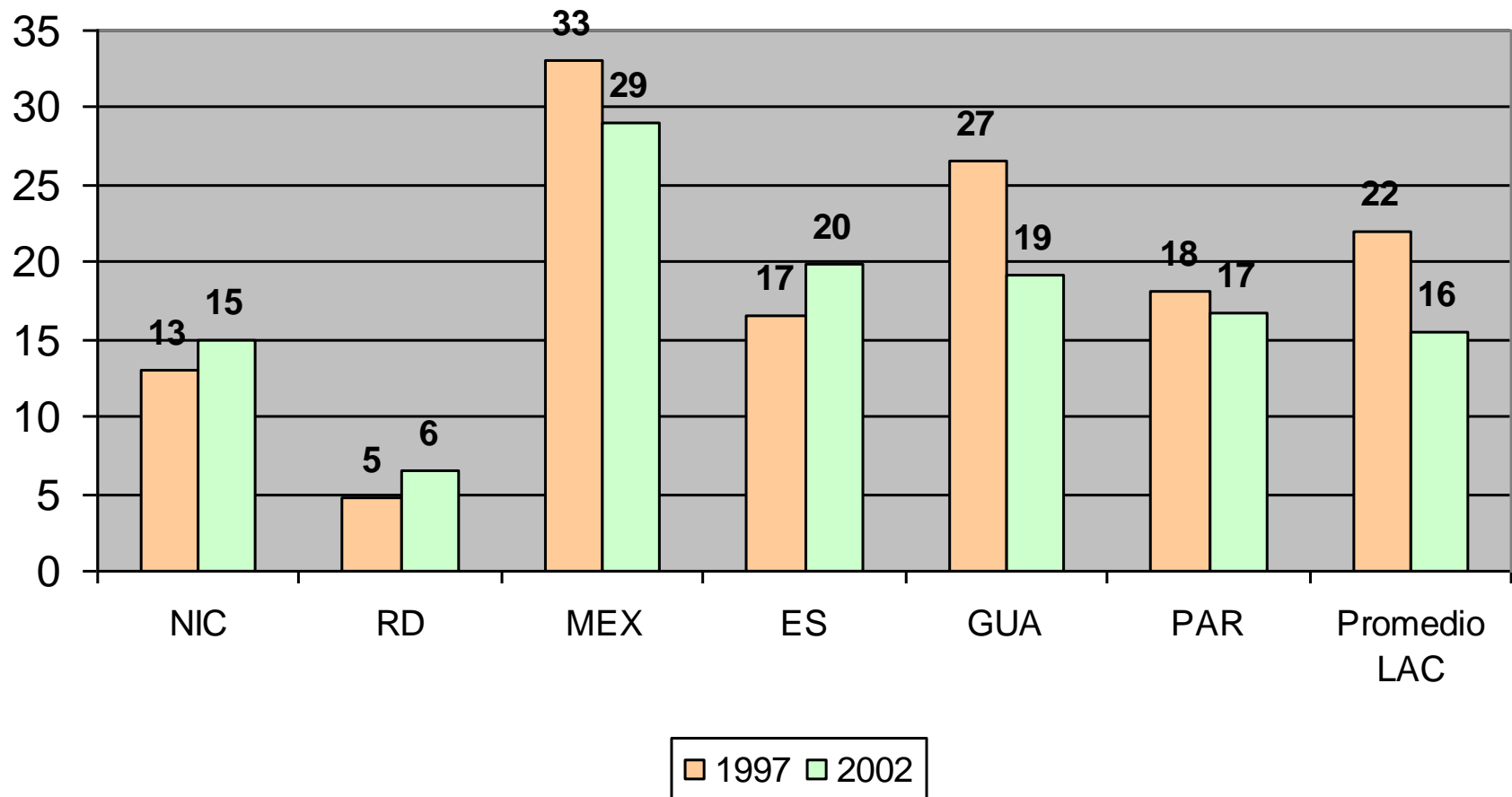




# Out-of-Pocket Health Expenditures as a % of Total Health Expenditure

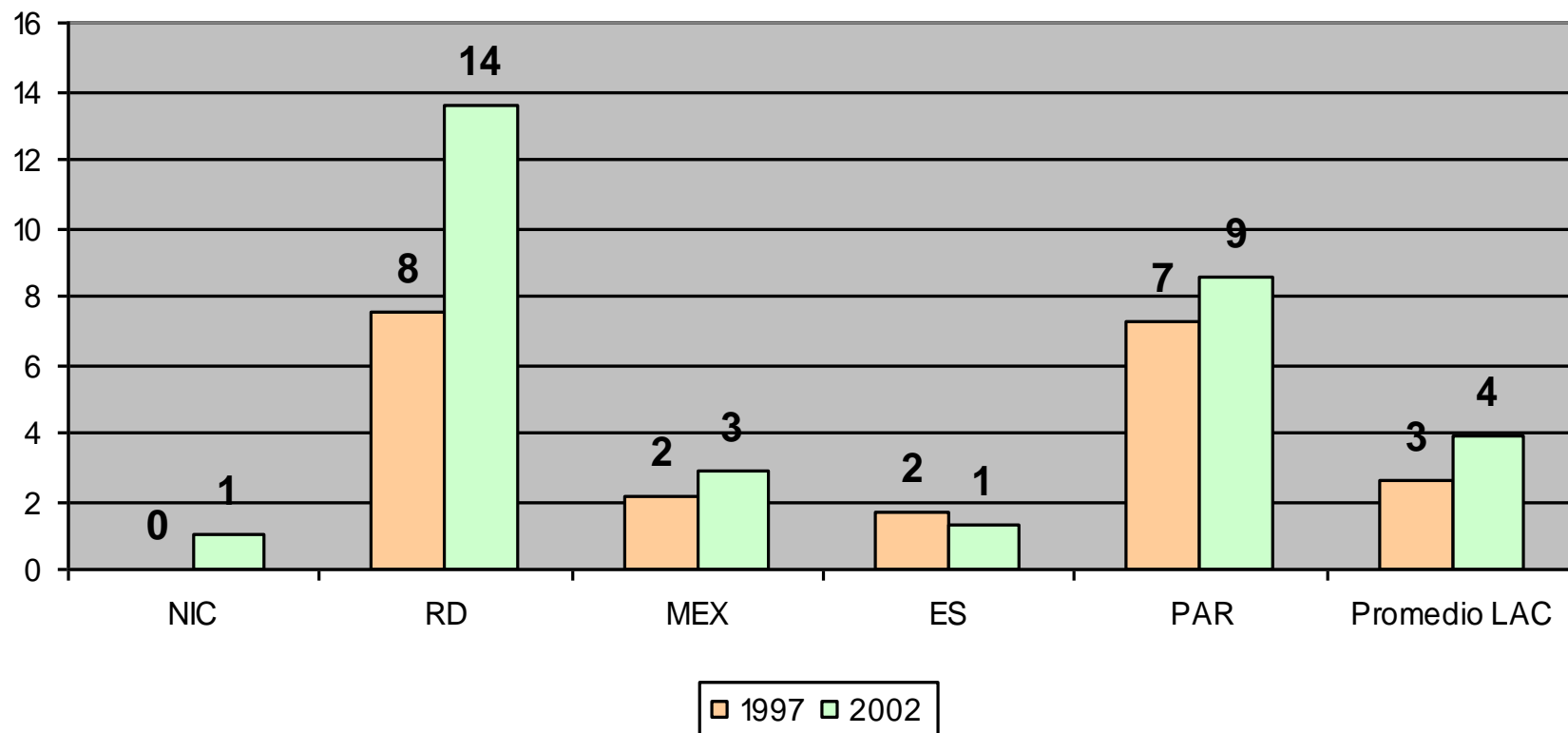


# Social Insurance as a % of Total Health Expenditure



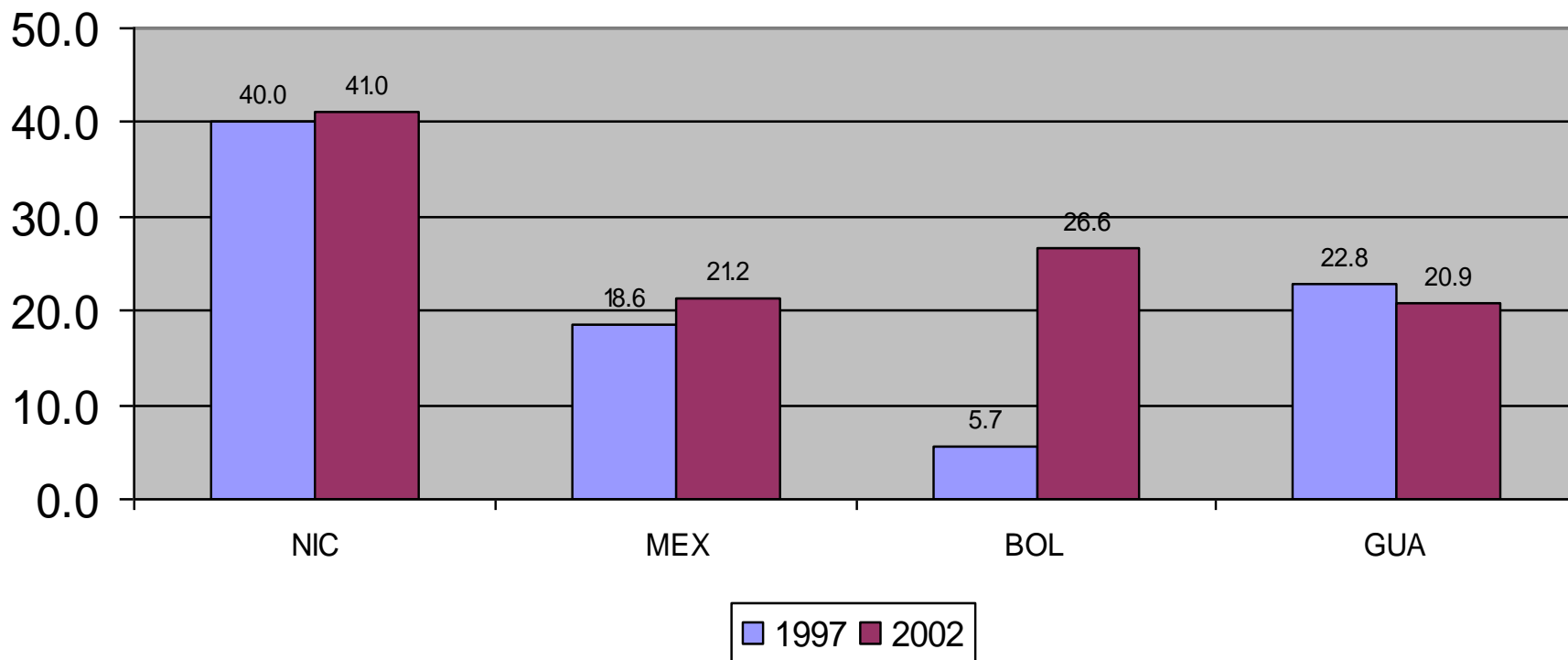


# Private Insurance as a % of Total Health Expenditure



# Drugs are an important expenditure item in several countries

## Drugs Expenditures as a % of Total Health Expenditures



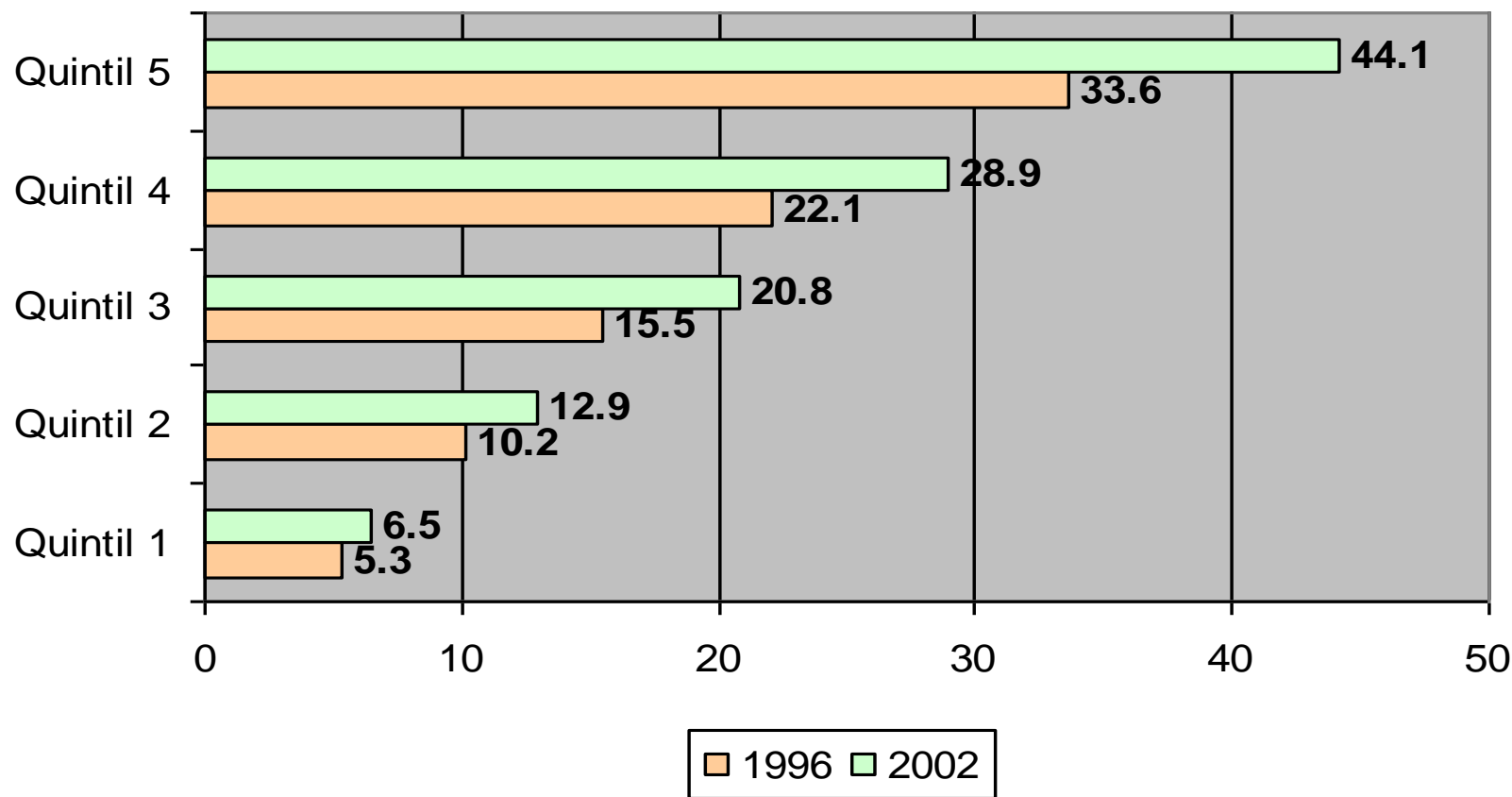


# Drugs: Guidelines for policy

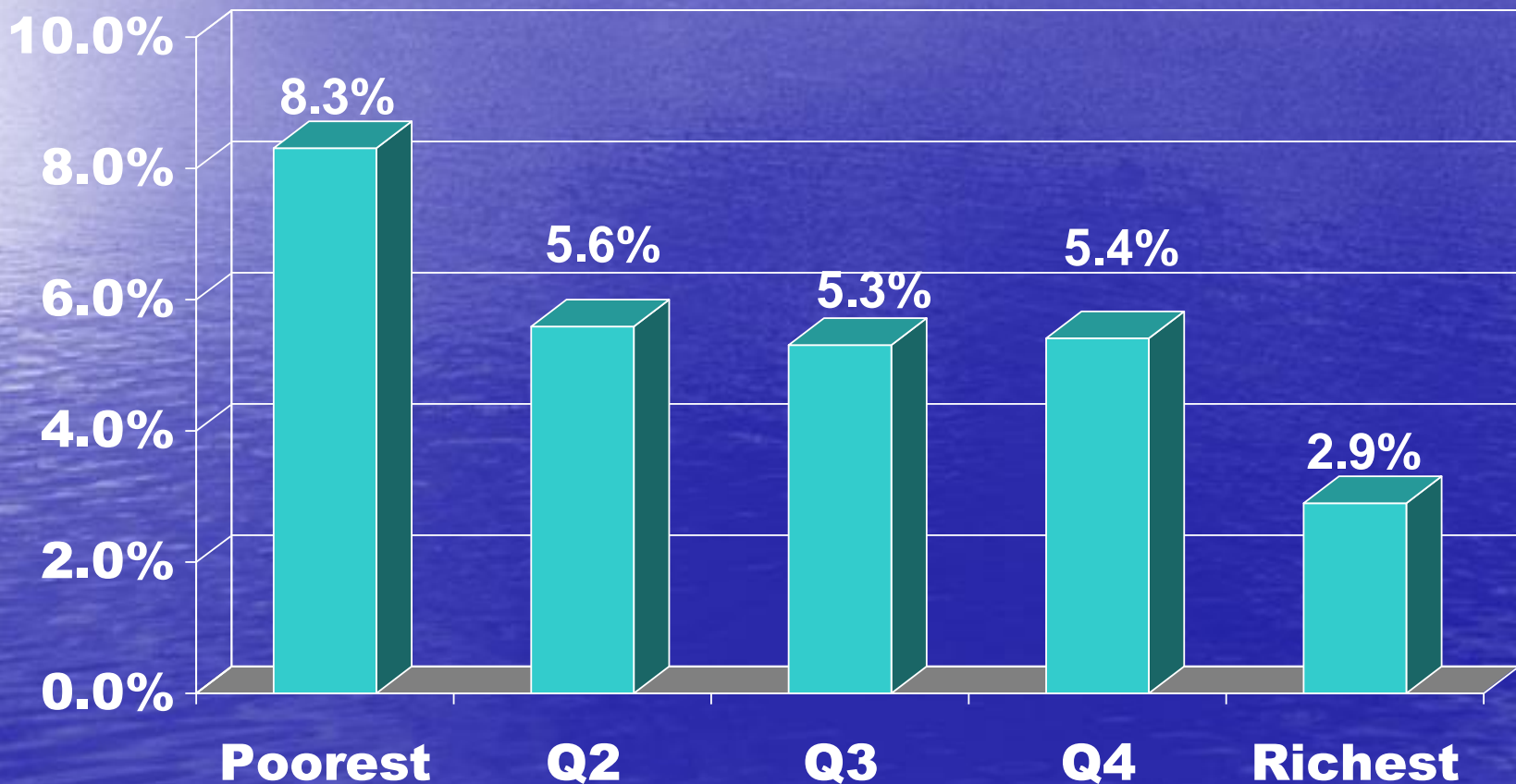
- Drugs represent the main component of out-of-pocket household expenditures and sometimes of total expenditure.
- More expenditures in prescribed drugs in Nicaragua although self medication is important.
- Policy guidelines to:
  - Reduce the total expenditure level
  - Reduce the financial burden of health expenditure on households' income.
  - Increase financial equity in the health system.

# DR: Poor financial protection

## DR: Insurance Coverage, 1996-2002



# Nicaragua: Financial Burden of Health Expenditures (% of income)



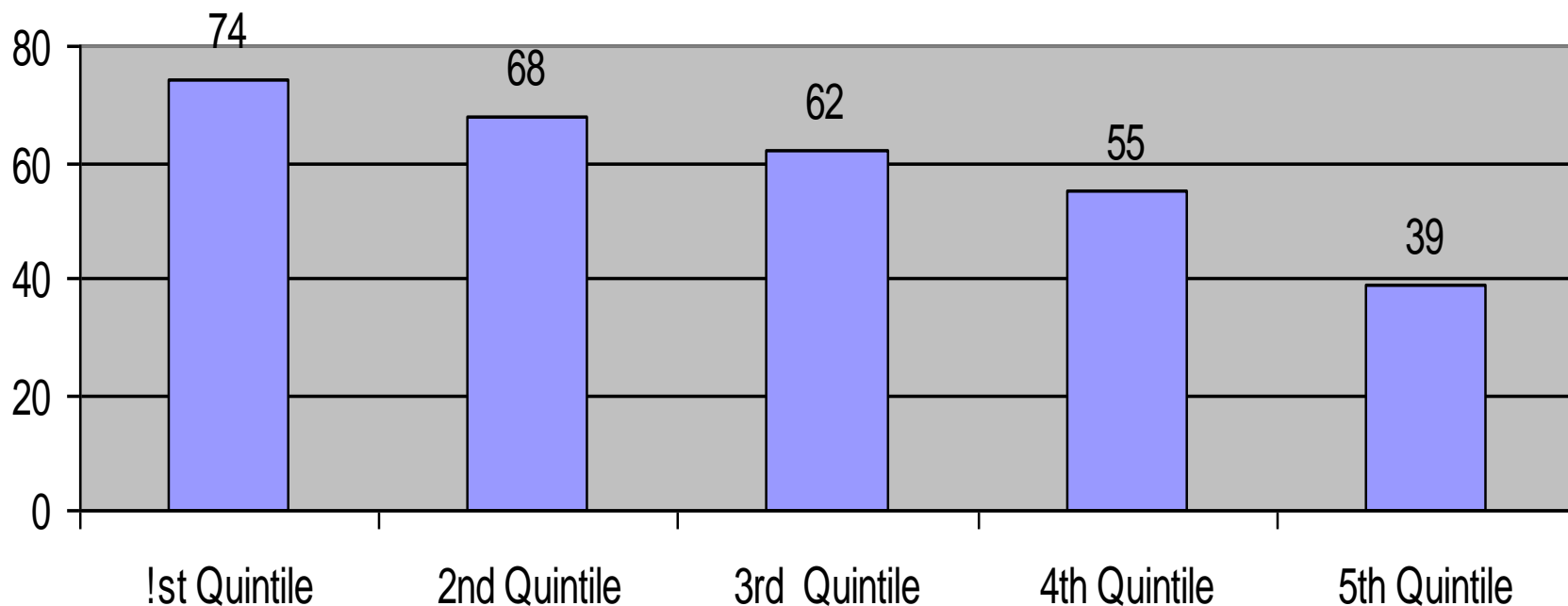


# Distributive impact of subsidies

- Are public subsidies progressive?
- Do they help reduce inequities in the society?
- Do they help reduce poverty?
- Do they contribute to the building of an equal opportunities society?
- Do they create human development?

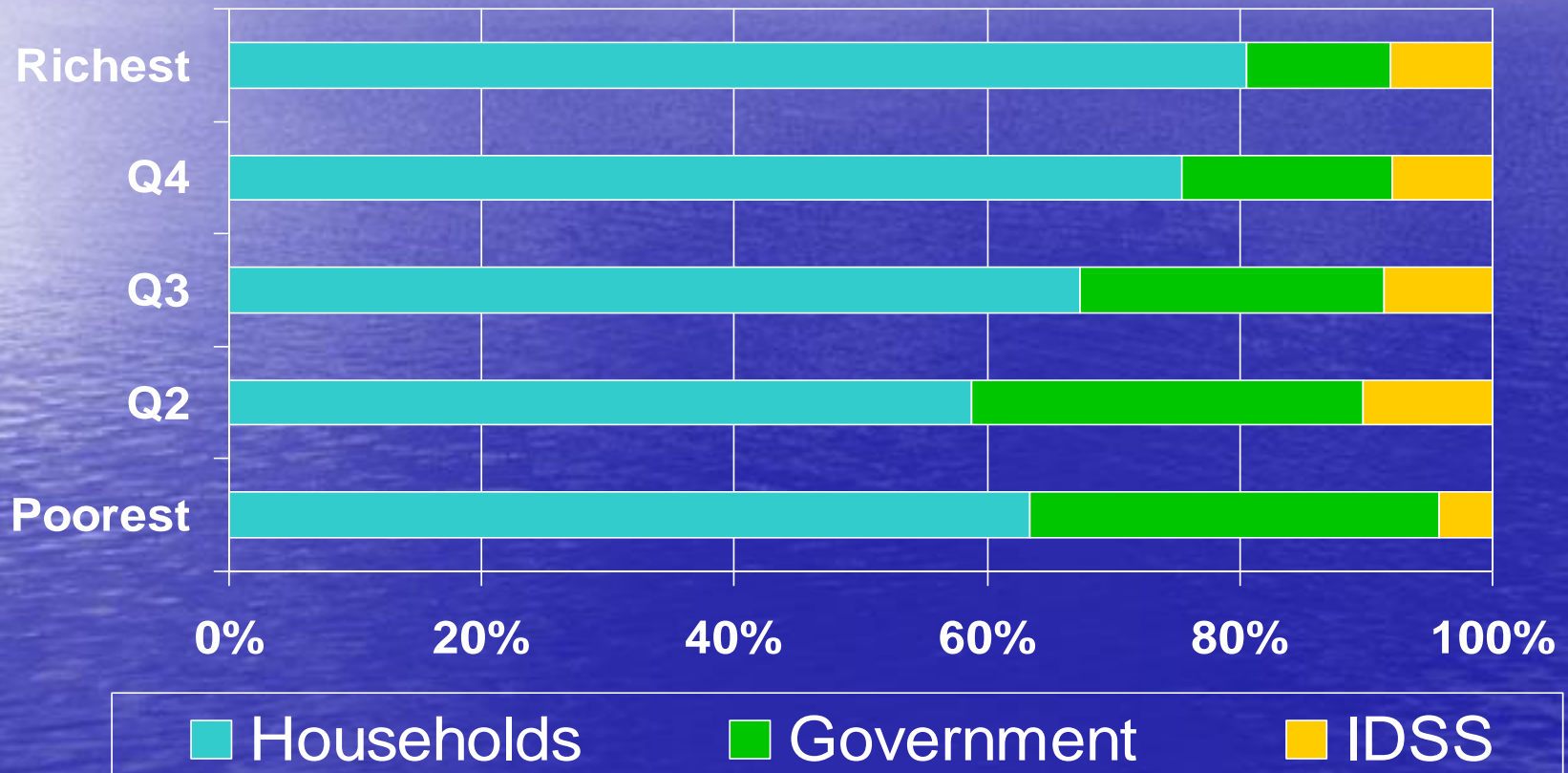
# Nicaragua: Preliminary indication of progressivity

**Nicaragua: Proportion of Population that Receives Free Health Services**



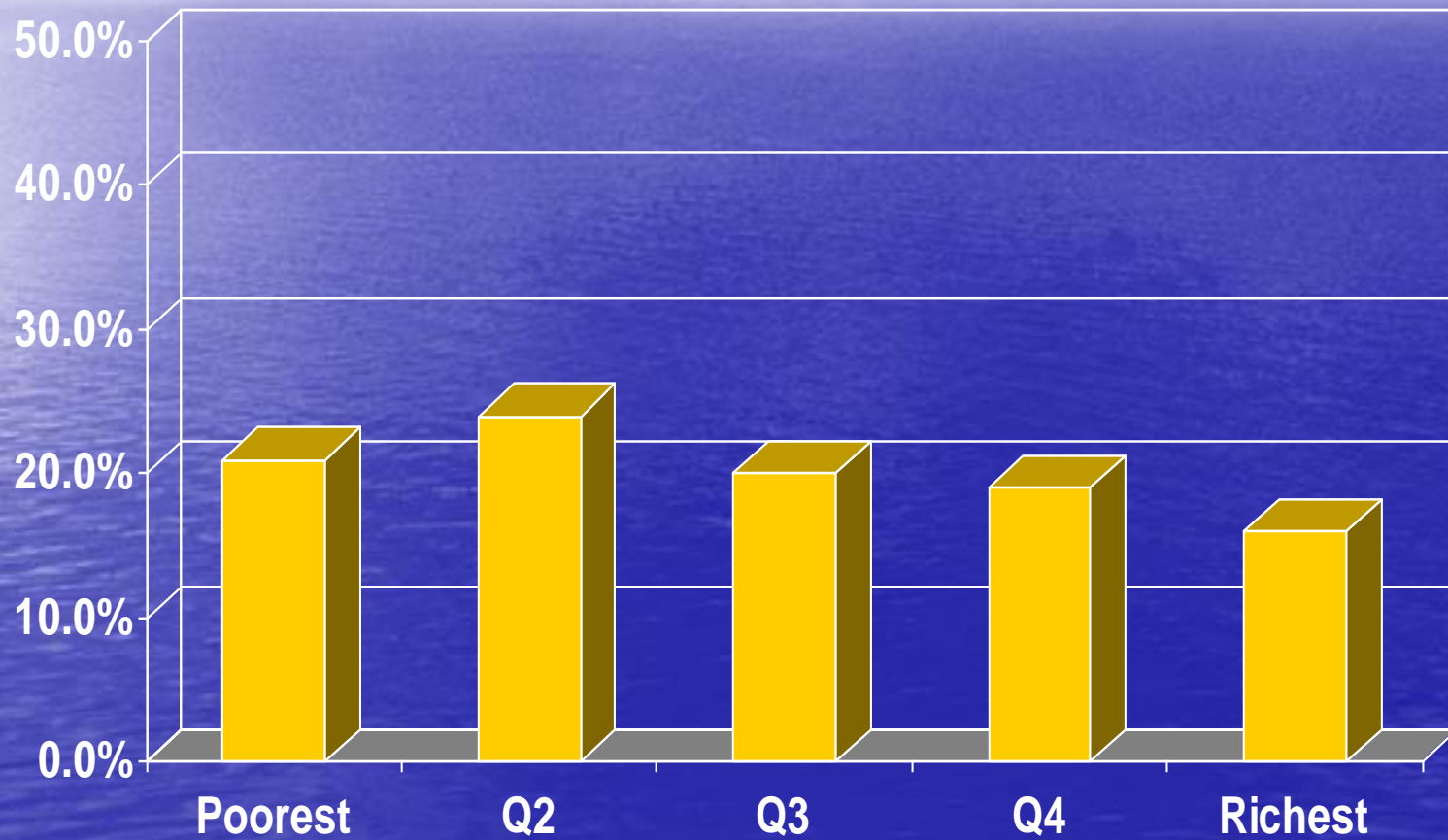
# DR: Who pays for health care?

## Household Health Consumption by Source of Financing and income quintile groups





# DR: Public Health Subsidy as a Percentage (%) of Income: slightly progressive



# Conclusions

- NHA data shows differences in health financing among countries, due to:
  - Difference in the financing scheme (e.i. private insurance in the DR vs. Social insurance in Mexico)
  - Methodological differences in calculating NHA (obstacle to international comparisons)



# Conclusions

- Inequity in all countries:
  - High out-of-pocket financing
  - Low public financing
  - Reduced social security coverage
  - High burden of health expenditure
- Very high OOP expenditures in drugs:
  - More analysis on this is required
  - Policy intervention on drugs' prices and regulations could have a major impact on health system equity.



# Conclusions

- Progressivity of public subsidies
- High potential of government intervention to:
  - reduce poverty
  - improve income distribution
  - increase opportunities
  - foster human development