



INSTITUTO DE INFECTOLOGIA EMÍLIO RIBAS



Nine years of Meningococcal Disease – Retrospective Analysis in a Reference Hospital in São Paulo, Brazil

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BACKGROUND AND AIM

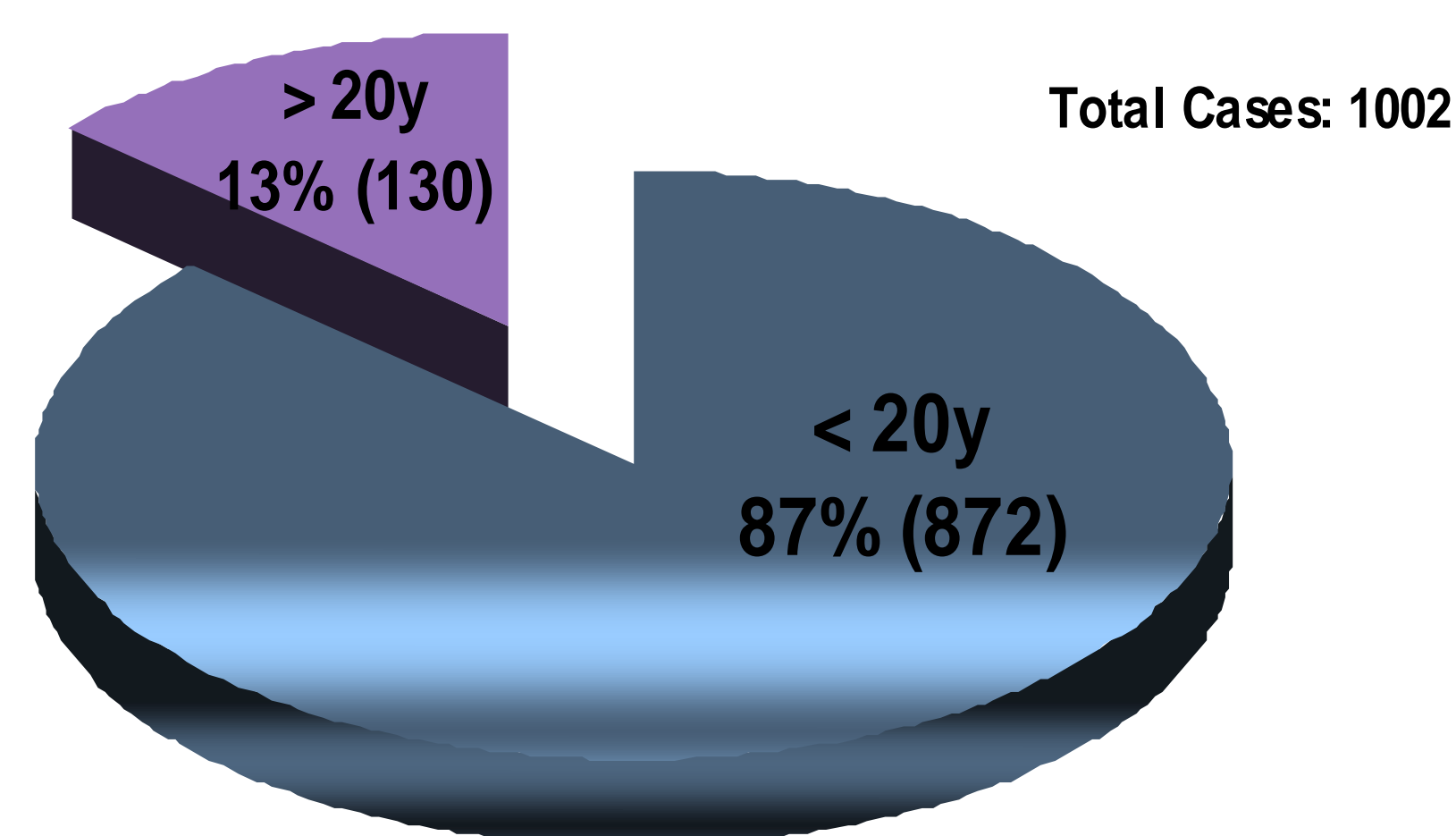
- Meningococcal disease (MD) is a severe disease and a public health problem. *Neisseria meningitidis* remains the bacteria most often associated with bacterial meningitis in Brazil, despite being vaccine-preventable disease.
- The aim of this study was to analyze the outcome of MD at the Institute of Infectious Diseases Emilio Ribas (IIER), state of São Paulo, Brazil, referral center for infectious diseases.

METHODS

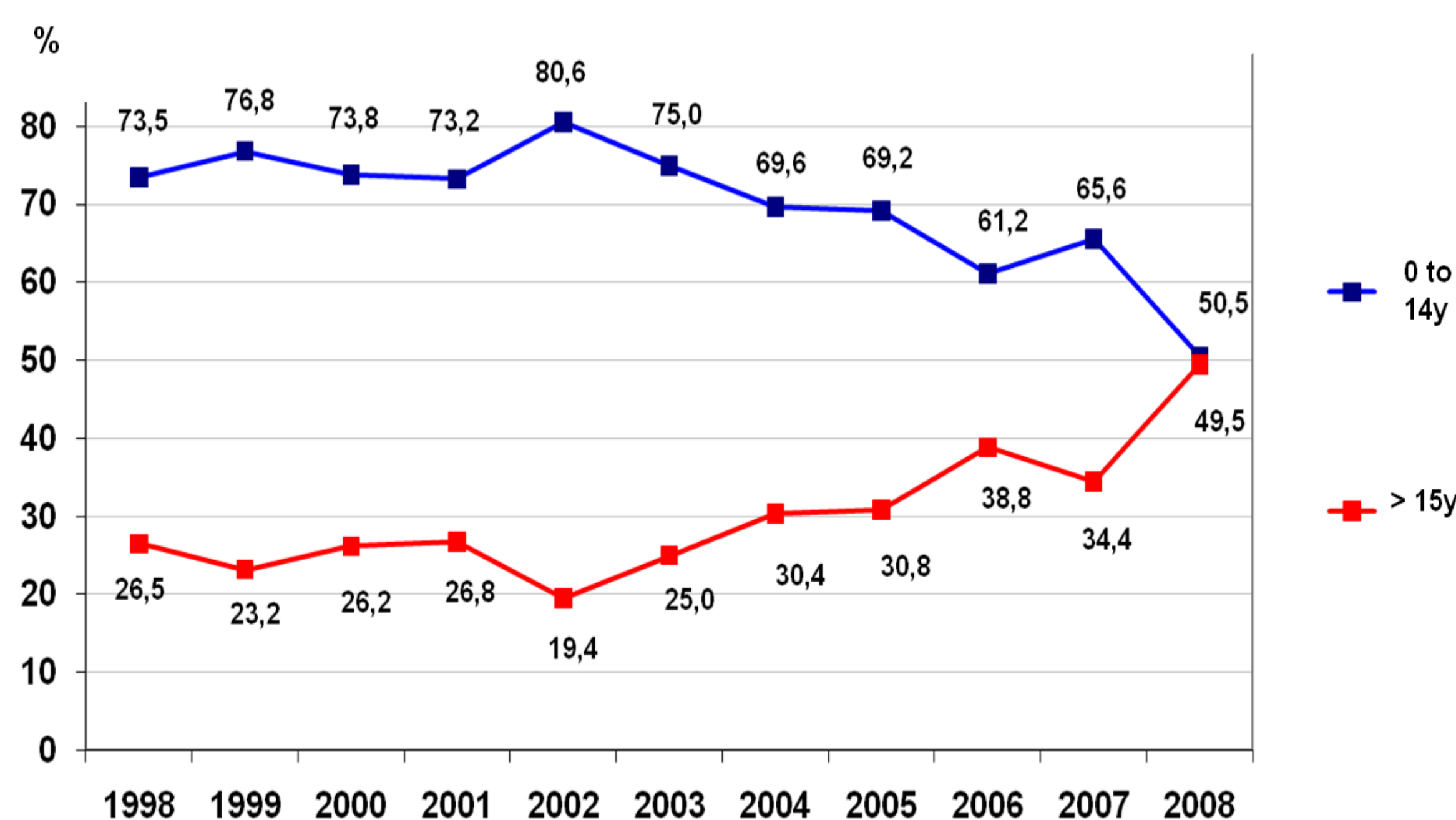
- This was a retrospective study, with analysis of medical records from January 2000 to December 2008. MD was classified as: Group 1: Meningitis (M), Group 2: Meningococcemia (MCC), Group 3: M with MCC. Analysed events: clinical presentations, the prevalence of serogroups and case fatality.

RESULTS

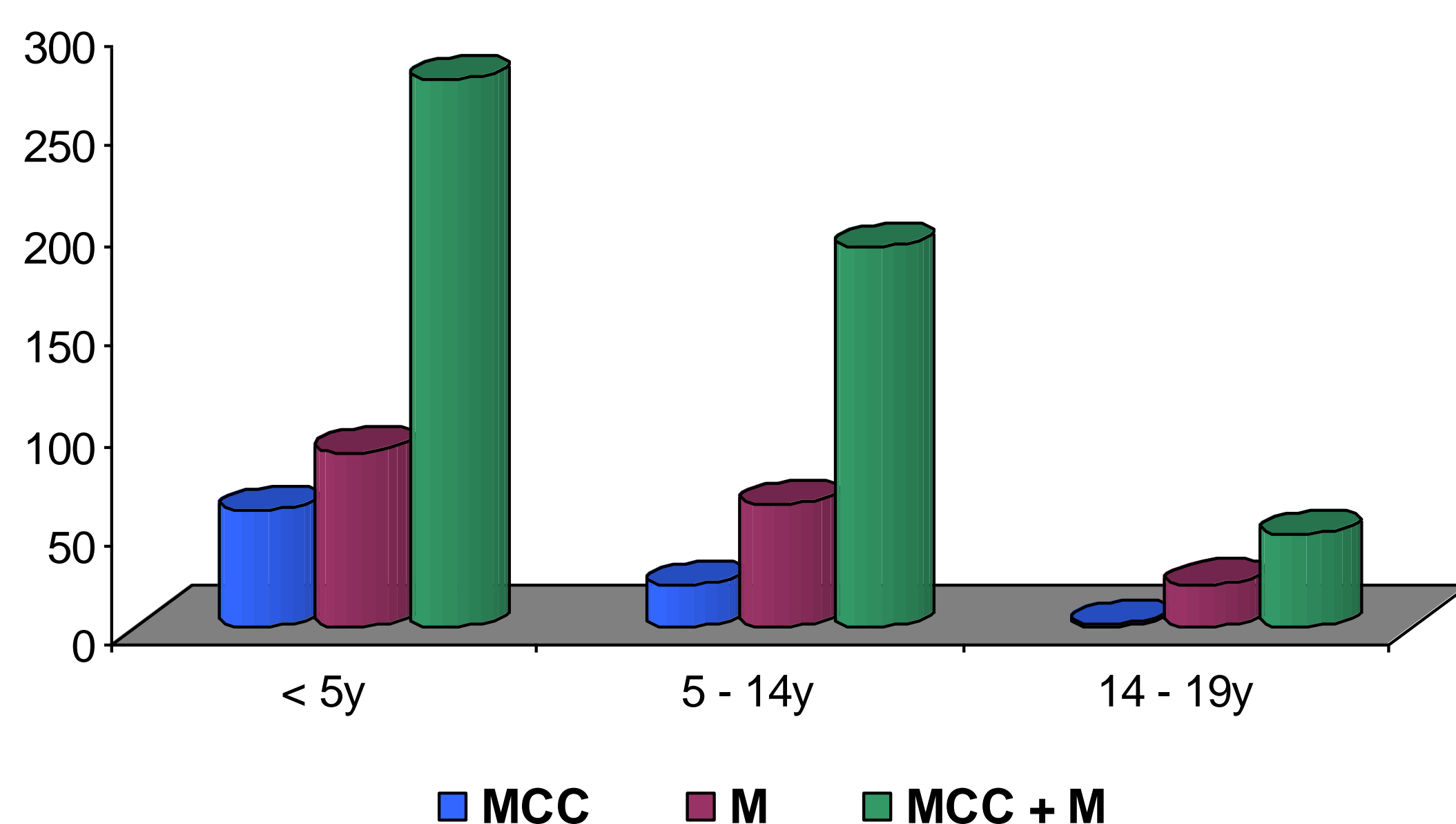
1. Total of hospitalized cases - IIER 2000 to 2008



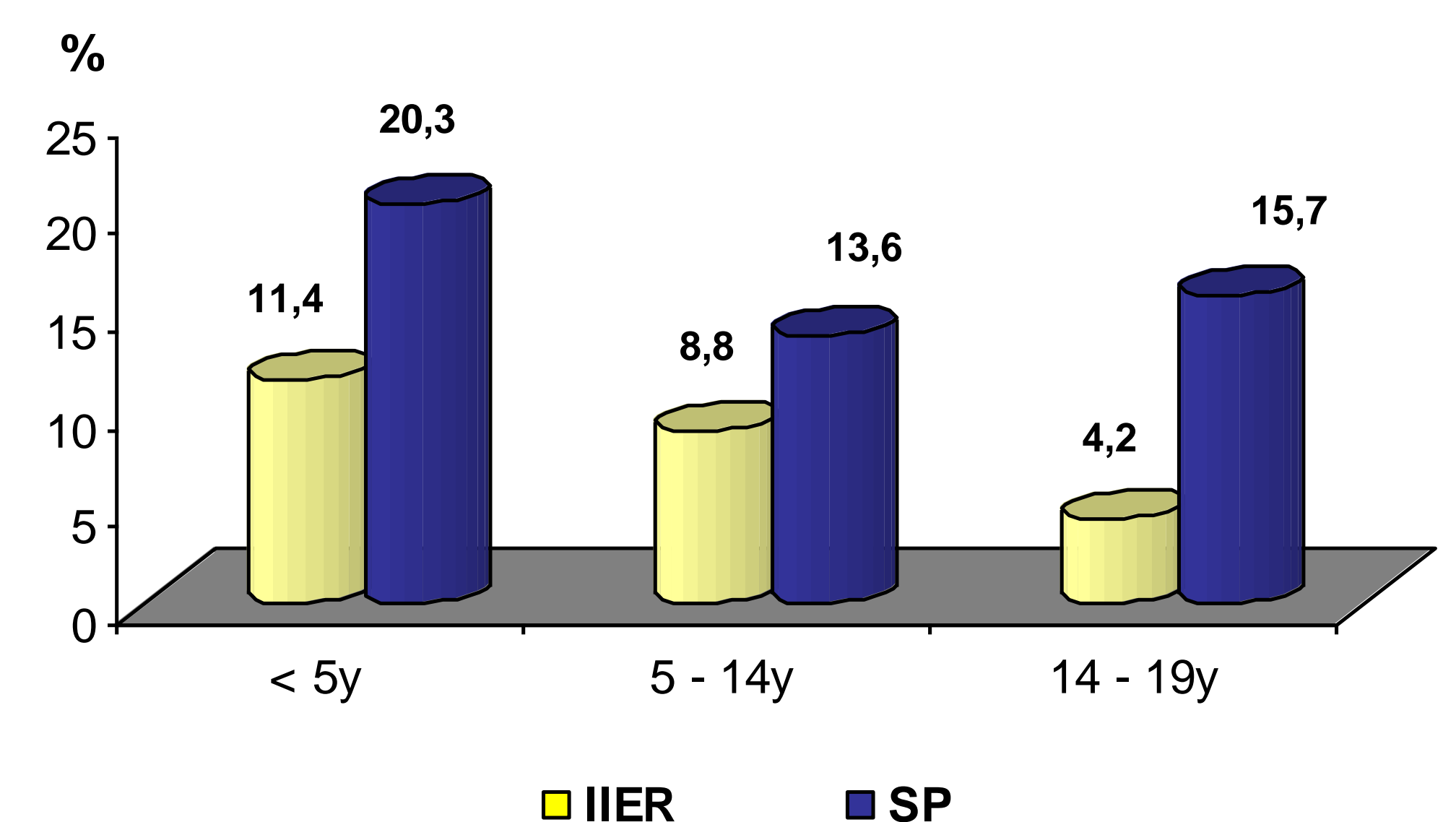
2. Proportional age distribution between cases of MD - IIER 1998 to 2008



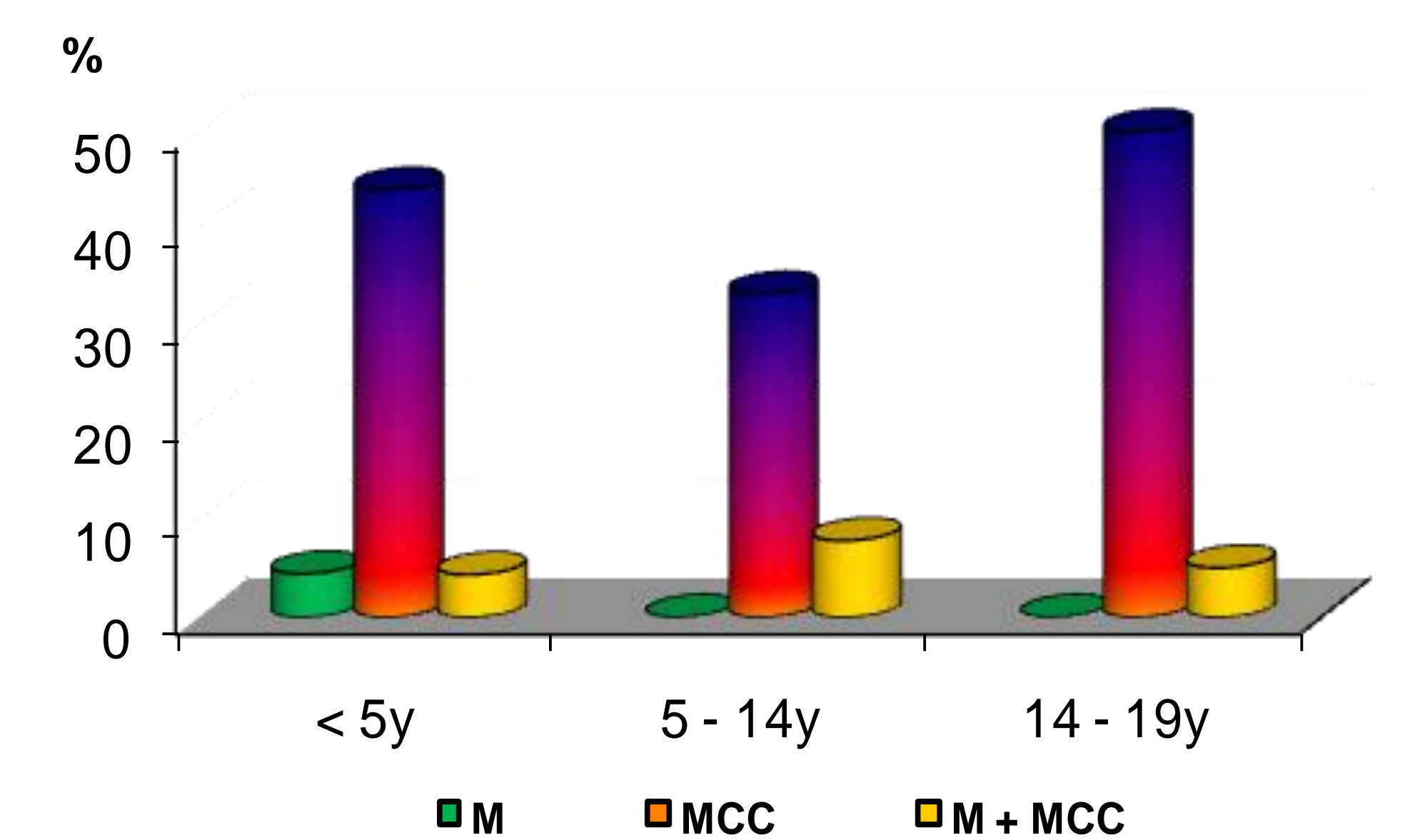
3. Clinical forms by age group - IIER 2000 to 2008



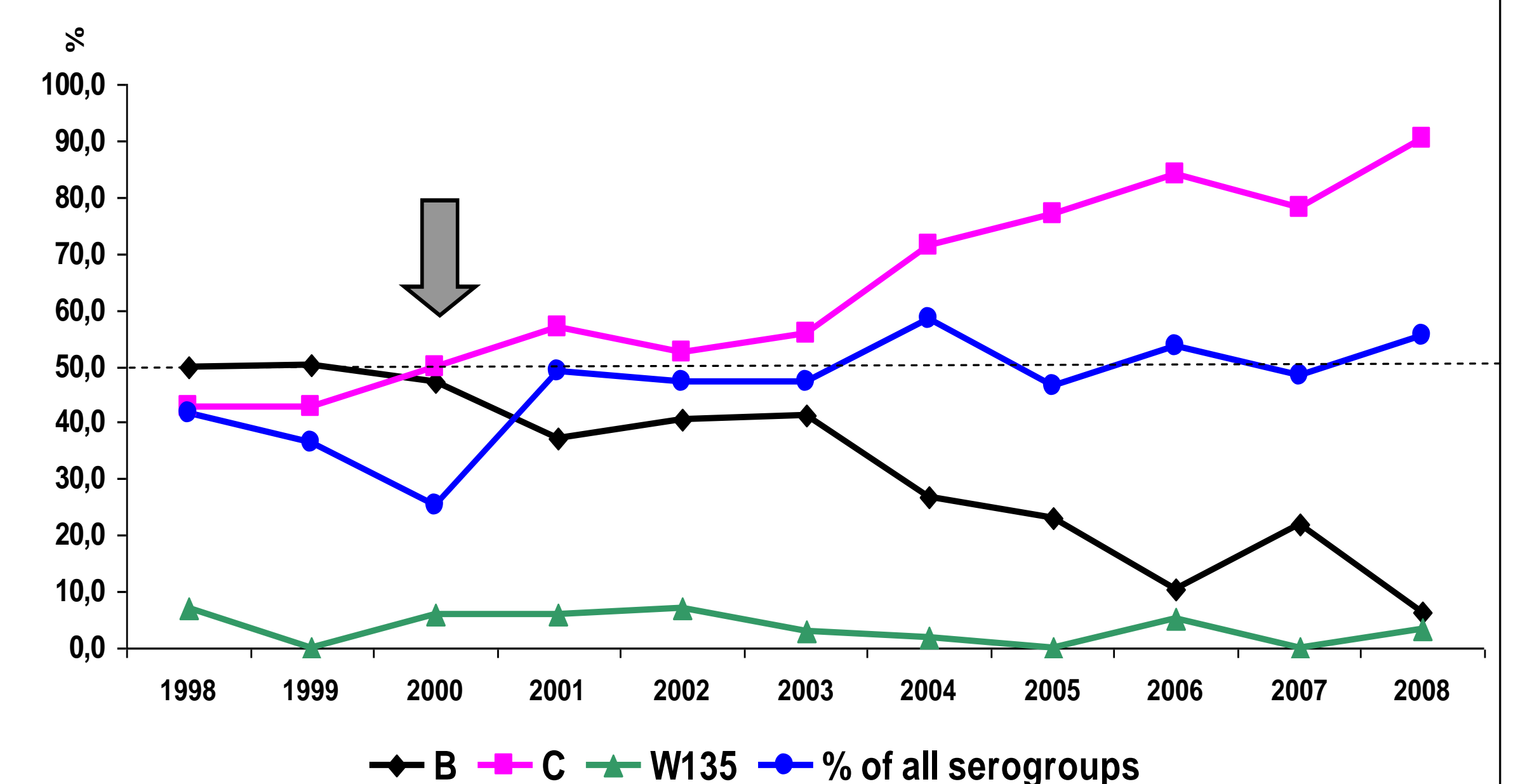
4. Case fatality ratio of MD by age group in IIER and state of Sao Paulo 2000 to 2008



5. Case fatality ratio in clinical presentations by age group - IIER 2000 to 2008



6. Identified serogroups and % all serogroups - IIER 1998 to 2008



1. Of the total admissions for MD 87% hospitalized patients were younger than 20 years old.
2. The proportion of cases from 1 to 14y and above 15y was, respectively, in 2000, 73% and 27% and in 2008, 50% in each group.
3. The group M + MCC was the clinical presentation more frequently seen.



4. The case-fatality ratio (CFR) MD showed an average 11,4% < 5y, and 8,8% from 5 to 14y in IIER. These rates were lower when comparing with those of the state of São Paulo.
5. These rates were higher in group 2 (MCC) between 14-19 years old.
6. Serogroup C predominated in 90,3% of the results in 2008, accounting for more than half of the cases since 2000.

CONCLUSIONS

In our study, MD occurred especially below the age of 14 y, although above this age the incidence has been increasing significantly in recent years. The case fatality ratio was higher < 5y, although the MCC showed higher CFR above 14y. *N.meningitidis* serogroup C predominates since 2000.

