ID: 666340

# Medical resources consumption and indirect costs of otitis media in Portugal - An Internet survey

C. Cardoso, GlaxoSmithKline, PORTUGAL;

A. Speets, J. Wolleswinkel, Pallas Health Research and Consultancy, NETHERLANDS;

### **Objectivos (Objectives):**

This study's objective is to estimate resources consumption, and the societal impact of otitis media (OM) in children < 5 years old in Portugal.

Acute otitis media (AOM) is a mostly mild but one of the most common childhood diseases. By the age of three years, 50-85% of all children worldwide will have had at least one episode of AOM. Because of its frequency in young children, resources consumption as well as the societal impact of the disease is potentially large. Due to differences in health care and societal systems it is important to have those data on a country-specific level.

#### Metodologia (Methodology):

A survey questionnaire was developed and already implemented in other 7 European countries, covering the following domains: socio-demographic data, disease episode characteristics, medical resources use, productivity loss by caregivers and travel-related costs. The questionnaire was administered during March 2009 to 45,200 people from a local market research agency Internet panel, obtaining a sample of 2091 parents with children < 5 years old, and 1,769 had the necessary requirements to complete it. Respondents were asked to provide details about the most recent disease episode of their child <5 years old within the last 12 months. The questionnaire was generic; respondents could fill it out for all kinds of symptoms and diseases. From the symptoms list and diagnosis reported, episodes of medically confirmed OM (MD-OM) were defined: symptoms of earache or running ear, and/or a diagnosis of OM provided by a medical doctor (MD). All data were self-reported by the respondents. Direct medical, direct non-medical and indirect non-medical costs were calculated for individual cases.

Literature data from an epidemiological study on OM in Comunidad Valenciana (Spain), was used to extrapolate to our population and estimate 214,648 episodes of acute otitis media per year among children<5 years.

**Resultados (Results):** 

# 11º CONFERÊNCIA NACIONAL DE ECONOMIA DA SAÚDE PORTO, 8 A 10 DE OUTUBRO 2009, UNIVERSIDADE CATÓLICA PORTUGUESA

The respondents were representative of the general population in comparable age group with respect to gender and income. From 334 suspected OM cases, 46% consulted a paediatrician, 25% a GP, 34% an emergency department and 9,4% visited other medical specialties, showing that in several cases more than one doctor was visited. The respondents reported 203 recent episodes of MD-OM with a mean duration of 6.1 days (SD 7.5 days). Nine percent of these MD-OM episodes were the 4th to 10th episode in the previous year (recurrent OM). Hospital admission including overnight stay occurred in 9 cases, with a mean duration of 3.9 days (SD 3.6 days). The MD prescribed antibiotics in 92% of the MD-OM episodes, and drugs without prescription were bought in 49% of the MD-OM episodes. In 27% of the MD-OM episodes the caregivers lost days from a paid job for on average 19.8 hours (SD 23.0 hours) per episode. In 65% of the MD-OM episodes, caregivers who went to work during their child's illness reported productivity loss at work for on average 21.0 hours (SD 25.3 hours) per episode. The mean costs (direct medical, direct non-medical, and indirect non-medical) were estimated to be 334€/OM episode.

This would amount to an economic burden to Portuguese parents and major part of costs for Portuguese society, of around 72 million € per year, of which 39% is indirect non-medical costs.

## **Conclusões (Conclusions):**

This Internet survey proved to be an important assessment tool for knowledge acquisition on the impact of OM to society. The medical and economic burden of OM could be considerable in Portugal, and should be assessed by an epidemiological study to characterize its real impact for society. Simultaneously, it is expected that an intervention that would reduce the occurrence and/or duration of OM may have a major impact on families' QoL and societal costs.