CONSUMPTION OF ANTIBIOTICS IN EUROPE: RESULTS OF THE ESAC RETROSPECTIVE DATA COLLECTION
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OBJECTIVES: ESAC (European Surveillance of Antibiotic Consumption, granted by DG SANCO of the EC) is an international network of national surveillance systems, aiming to collect comparable antibiotic consumption data in Europe. During the first phase, data accessibility and validity, as well as strengths and weaknesses of national systems were assessed. METHODS: Quarterly data were to be collected retrospectively (1997–2001) from ambulatory (AC) and hospital care (HC) in 31 countries, using ATC/DDD classification (WHO, version 2001), and expressing results in DDD/1000 inhabitants per day (DID). RESULTS: AC use data were provided by 25 countries; 21 were suitable for international comparison. The remaining 3 were not comprehensive or not in a format enabling international comparison (TU). Quarterly AC data were delivered by 10 countries. HC use data were provided by 23 countries; 21 were suitable for international comparison, 14 of them were based on a limited sample. In 2001, AC use in Europe varied between 10.0 DID (NL) and 32.9 DID (FR). Other high consumers were (in decreasing order) GR, IT, LU, PT, BE and SK, all with a total use exceeding 24 DID. During the observation period of 5 years, consumption clearly increased in GR and PL and decreased in BE and ES. High seasonal fluctuations in AC were observed in BE, GR, PL and SI. Large regional differences could be observed in consumption patterns. Northern European countries (NO, SE, FI, DK, NL) are low consumers using commonly narrow spectrum penicillins while Southern European countries are high consumers using broad spectrum penicillins and exceptionally high proportions of cephalosporins, macrolides and quinolones. CONCLUSIONS: An intriguingly high variation in antibiotic use in Europe was observed and needs to be related to social, cultural and economic determinants of use as well as to variation in resistance patterns. Especially in AC, countries seem to cluster in regional consumption patterns.