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HALL A-25 Session 89 12:50-14:40

TP Thematic Poster Session : Methodological aspects of asthma and COPD epidemiology

P1018

Wireless mobile technologies facilitates home-based data collection and processing in large epidemiological surveys: results from the IMCA-HES feasibility study

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Introduction: Wireless mobile technologies (WMT) are still not being used to perform interviews and measurements in large epidemiological studies. **Objective:** To assess the feasibility of using WMT as a tool for performing interviews, home measurements, data collection and processing in large scale respiratory surveys. **Methods:** The study has a a population-based cross-sectional and multicenter design carried out in 5 European centres: Barcelona (Spain), Uppsala (Sweden), Ulm (Germany, Pisa (Italy) and Rome (Italy). The study included individuals from 6 to 65 years old. The GAL²LEN (adults) and ISAAC (children) questionnaires were used for interviews. Measurements and sensors: spirometry (NDD Easy One), blood pressure (UA-767BT, A&D Medical), pulse-oximetry (Nonin 400 Avant), height (Shoenle 5003) and weigth (UC-321PL). A new technological tool operating through a technological platform supporting chronic care was used for data collection and transmission. **Results:** A total of 431 were included (56% males and 44% females) with mean age 51±2.3. Asthma prevalence was 10,3%, wheeze in the last 12 months 12,5%, and 53,6% of asthmatic individuals are currently taking asthma medication. All individuals completed the questionnaire and 91,6 % accepted to perform the measurements at home. All results were transmitted in real time to the central database with 100% completeness and high high level of security and confidentiality. **Conclusions:** The new technological tool allows to succesfully use WMT in large epidemiological studies improving efficiency, acceptability and data completeness. Supported by DG SANCO (2005121).