Detection of hearing loss among newborns in Italy

Luciano Bubbico, Gabriella Tognola and Ferdinando Grandori
Italian Institute of Social Medicine, Italy

Objective: The aim of this study was to provide data on the degree of implementation, coverage and protocols used in Universal Newborn Hearing Screening Programs (UNHSPs) in Italian maternity hospitals.

Methods: Data were collected through a questionnaire that was sent to all maternity hospitals in Italy in 2011. Questionnaires were filled in by the Chief of the hospital or by the UNHSPs coordinator.

Results: UNHSPs in Italy were activated in 411 (81.3%) maternity hospitals, with 78.3% (413,212) newborns screened in total. Most (91.8%) of the Italian maternity hospitals used a two-stage (testing and retesting) TEOAE screening. The personnel performing the screening were nurses in 72.4% of hospitals, paediatricians in 10.2%, technicians in 11.0%, audiologists in 2.2% and external staff in 4.2%. In 80.1% of maternity hospitals, the mean referral rate at first screening performed before discharge was below 5%.

Conclusion: The present study revealed that in the last three years screening coverage had a rapid growth from 60.6% in 2008 to 78.3% in 2011, without reaching UNHS coverage greater than 95%, as recommended in international guidelines. Results suggest that close cooperation between audiological centre’s and maternity units, together with an efficient protocol for collecting screening data, has a positive impact on the implementation of UNHSPs. It is also crucial to improve the training of screening personnel and provide information and education about newborn hearing screening to pediatricians, neonatologists, gynecologists, and general practitioners.

l.bubbico@tiscali.it