

Title **Current status of neonatal care with special emphasis on prenatal and neonatal screening in European countries**

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Objective

Aim of the Committee was to assess the neonatal care in European countries with the emphasis on prenatal and neonatal screening using questionnaires. We wanted to highlight the good examples to be followed and the points to be improved.

Description

At the beginning of the 21st century researchers, policymakers, and advocates have surprisingly few sources of analytic data concerning key issues in the healthy development and well-being of children and their families in Europe. Basic demographic tendency in the majority of European countries is represented by a relatively low and/or decreasing birth rate together with an unchanged rate of prematurity. The aim of neonatologists in all over the Europe is to save as many babies as possible without any acute and/or late somatic and mental damage. One of the most important tools in order to increase the number of survivors living in good quality of life is the prevention of the diseases.

The prenatal and neonatal screening is the field of secondary prevention with the aim of revealing the early symptoms of some inherited and/or acquired diseases in prenatal or neonatal life when the clinical manifestation of the diseases is still preventable using biochemical, genetic and/or imaging techniques.

Aim of the present study carried out by the Working Committee of ESP is to estimate the features of prenatal screening in various European countries using a questionnaire in order to assess the quality of screening programs in different countries and determine the points to be improved. My presentation is focused on prenatal screening while the other speakers of the session are going to talk about the neonatal screening of inborn errors of metabolism. Questionnaires were sent to 40 European countries. Twenty of them answered. Data were provided by National Institutes of Statistics or National Registers.

The prenatal screening is closely related to genetic counselling which is available in each country studied provided by geneticists (50%), gynecologists (23%) or both (17%). General prenatal screening including ultrasonography (100%), maternal serum AFP level (90%), cardiac ultrasonography (80%), serum choriogonin (70%) and pregnancy specific placenta protein (35%) is available in all countries excepted Turkey. This screening is indicated in all pregnant women in 40% of the countries, in those with positive familial history (10%), with positive gynecological finding (10%), positive counselling data (20%) and those with advanced maternal age (10%) respectively. All pregnant women with positive familial history and/or positive ultrasonographic finding (100-100%), those with advanced maternal age (mostly >35years, 91%) and with abnormal AFP level (70%) were referred for prenatal chromosome analysis. Pregnant women in all countries but Turkey are screened for isoimmunization with anti-D prophylaxis and in all but Bulgaria for hepatitis B infection. Other infections including Chlamydia, Streptococcus B, herpes virus and papilloma virus are screened with much lower frequency.

Result

Data analysis proved that there were great differences in neonatal care, some differences in prenatal screening among various European countries depending on the number of children population, economic system, political situation, financial sources etc. Despite the difficulties paediatricians in each European country make efforts to improve the quality of neonatal care and provide the necessary preventive measures in this very sensitive period of life.