genital group (15.9% and 15.9% respectively).

Conclusions: Due to the small sample size, no statistically significant difference was found between cases and controls. This is the reason why it is necessary to continue the study and obtain the collaboration of other hospitals in the same area.

THE EVOLUTION OF PRENATAL DIAGNOSIS IN THE EARLY DETECTION OF CONGENITAL ANOMALIES: DATA FROM 1997 TO 2016


Background: The Portuguese prenatal surveillance programme advises ultrasound screenings, in the first trimester of pregnancy in combination with the blood test, and between 20 - 22 weeks of pregnancy. Other tests are offered in pregnancies with an increased risk. The aim of this study is to assess the evolution of prenatal diagnosis in the detection of congenital anomalies (CA).

Methods: A cross sectional study was implemented using data collected between 1997 - 2016 by the Portuguese registry of CA (RENAC) a population base registry that follow EUROCAT guidelines. A case was defined with at least one CA potentially detectible by prenatal diagnosis. Descriptive analysis was performed using absolute and relative frequencies and bivariate analysis was conducted using chi-square statistics.

Results: The analysis included 13,566 cases reported with at least one CA. There was a statistically significant increase in the detection of CA through prenatal diagnosis compared to detection at birth or after birth (p<0.001). In addition, there was an increase of cases detected during pregnancy from 52.1% (1997-1999) to 62.9% (2009-2016) especially in cases detected before 14 weeks (7.9% to 28.9%). Comparing the same periods of time, the results also show a range of ultrasound screening from 27% to 55.8% and a decrease in invasive tests from 18.9% to 3% which was statistically significant (p<0.001).

Conclusion: The data show a positive effect on the percentage of cases with CA detected during pregnancy. These results show the importance of extending prenatal tests to all pregnant women and not only to those with specific risk gestations.

EUROLINKCAT: COMMON DATA MODEL

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Background: Over 130,000 children are born in Europe every year with congenital anomalies which are a major cause of infant mortality, childhood morbidity and long-term disability. Twenty-two EUROCAT registries in fourteen countries are participating in the EUReLInkCAT project assessing health and educational outcomes of children up to ten years of age with a congenital anomaly, born between 1995 and 2014. Each registry records anonymised, uniformly coded data on cases of congenital anomaly registered in their local population using the EUROCAT Data Management Program (EDMP).

Methods: While congenital anomaly data are already standardised across Europe, information on mortality, morbidity and educational outcomes are not. Information on potential risk factors for control children in the population also requires harmonisation. Creating a common data model is challenging as there are diverse coding classification systems, languages, healthcare and educational systems in Europe. In addition, individual case data cannot be shared. This means verification and validation of all derived variables, data transformations and proxy variables must be performed locally using centrally written syntax scripts to ensure correct interpretation of local data variables.

Discussion: As with many administrative datasets, the common data model is based on coded data rather than the often richer “free text” information. Nevertheless, the use of administrative datasets across Europe enables pooling of data on rare outcomes and allows hypotheses on the health and education of children to be investigated. This poster will outline the necessary pathway to create a common data model and the creation of a database of standardised variables available in all registries.

THE ITALIAN PROJECT FOR SURVEILLANCE PREVENTION AND HEALTH CARE PLANNING OF CONGENITAL ANOMALIES INCLUDING ZIKA VIRUS

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Background: Registries specific for Congenital Anomalies (CA) are important tools for surveillance, prevention, research and healthcare planning for these conditions. In Italy, there are regional registries, such as IMER and RTDC and others, active since the 1970s but there is not a national surveillance system covering the whole country. In 2017, a national law on registries of several human conditions was published (DPCM 3/03/2017). This framework supports also the establishment of the National Registry for CA, with specific focus to the surveillance of microcephaly and other disorders caused by Zika virus.

Methods: A Co-Ordination Team (CT), which includes scientists of the National Centre for Rare Diseases and the Department of Infectious Diseases (Istituto Superiore di Sanità), Representatives of the Ministry of Health and the Coordinators of IMER and RTDC, is committed to setting up the CA National surveillance, including the establishment of the National Registry. The Italian National Registry for CA will collect data coming from Regional Registries and it will be functionally linked to the Italian Registry for Rare Diseases. Scientific collaborations are envisaged with EUROCAT. The CT is tackling the following topics: a) definition of the data-set; b) data sources; c) epidemiological flows; d) infra-structure for data collection; e) data sharing; and f) Verification of data.

Results and Conclusions: We are developing a national surveillance system for CA in Italy. The National Registry will collect data from Regional CA registries so supporting Regional Health authority decision making and national surveillance. It aims to be interoperable with the National Registry for Rare Diseases and other healthcare databases.

THE LEVEL OF PRECONCEPTION FOLIC ACID INTAKE IN CRIMEA

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Background: Although the role of folic acid (FA) in the prevention of neural tube defects (NTD) is well documented in the literature, its optimal use is still low in most countries. The objective of this study was to estimate the level of preconception folic acid supplementation among pregnant women in Crimea.

Methods: In the cohort study, data collection was continuous and comprises all maternal hospitals in Crimea. We constructed the questionnaires, which contained items about FA usage and dosage during all studies of embryogenesis and before conception. We analysed questionnaire with multivariate logistic regression. The mothers were classified as group 1 (FA taken before pregnancy), group 2 (FA taken during pregnancy), which include subgroups according to pregnancies’ trimesters, group 3 (no FA intake, who could not remember taking FA or were not sure). The study included 206 females from different region of Crimea. Our explanatory variables were bad habits, vitamin and dietary supplement consumption (especially FA), employment, place of residence, age, education and preparation for pregnancy.

Results: In the preconception period, only 63 (30.6%) women received folic acid. Moreover, the supplementation was more frequent in those who were prepared for pregnancy compared to women who were not prepared. The medium dose of folic acid before pregnancy was 0.1 mg. In comparison with the WHO recommendation (0, 4 mg), it was low. Moreover, 143 (69.4%) refused from FA supplementation before pregnancy. It is important to note that when FA intake began is crucial for fetus. The first subgroup (1-13 weeks) comprised 58 (28.2%) females, the second subgroup (14-27 weeks) included 26 (12.6%) women, the third subgroup (28-42 weeks) consisted of 4 (1.5%) females. Additionally, 118 (57.2%) respondents refused from FA supplementation before pregnancy. The logistic regression model