

# MAPHM Symposium 2017

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Abstract Title:

## **Maternal Preconception intake of Folic Acid in Malta**

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### Abstract

**Background:** Neural Tube Defects (NTDs) are serious birth defects arising from abnormalities in neural tube development during the very early embryonic stages. Research has shown unequivocally that taking folic acid prior to and throughout the first 12 weeks of pregnancy will significantly decrease the occurrence of NTDs. In view of this many countries have issued guidelines advising women to take folic acid supplementation prior to conception; several countries have also implemented mandatory fortification of wheat with folic acid to increase women's intake of this vitamin. The prevalence rate of NTDs in Malta is 10.0/10,000 births, yet it has been documented that the rate of non-preventable NTDs can be brought down to 5-6/10,000 births. This study aims to investigate the maternal intake of preconception folic acid in Malta.

**Methods:** The National Obstetric Information System (NOIS) of the Directorate for Health Information and Research collects information on all births on the Maltese Islands. This register collects detailed demographic, pregnancy, delivery and infant outcome data. One of the variables recorded when women attend their first antenatal visit at hospital is whether they have taken folic acid before pregnancy. NOIS data for 2015 was used to analyse the maternal intake of preconception folic acid in Malta. Excel and Epi Info were used to analyse data.

**Results:** A total of 4385 women delivered a baby in 2015; of these 1123 (25.6%) women reported having taken folic acid before pregnancy. Univariate analysis showed that maternal age, parity, educational level, nationality, locality of residence, marital status, planned pregnancy and use of artificial reproductive technology were all significantly associated with taking preconception folic acid (p