Bordetella pertussis causes serious illness among neonates and infants. Infants under 6 months of age have the highest rate of infection, compared to other ages, and ≥ 90% of pertussis deaths occur in infants under 3 months of age (1).

Strategies to prevent pertussis in this population include a booster maternal immunization during third trimester of pregnancy (transplacental antibodies transmission) and targeted immunization (“cocooning”) of infant caregivers (2).

Neonates, having an immature immune system, are at high risk for influenza infection, with clinical manifestations that vary from mild symptoms (respiratory tract) to severe illness, with lethal outcome (3).

In Greece, the National Immunization Schedule recommends that pregnant women receive influenza vaccination, at any time during pregnancy and Tdap vaccine at 27 - 36 weeks of gestation.

The main purpose of our study was to assess the knowledge, attitudes, beliefs, and factors associated with the antenatal vaccine uptake of pregnant women

A prospective cross-sectional study was conducted between January and June 2017 in six hospitals of Western Greece.

The study population consisted of pregnant women who attended obstetric outpatient clinics and inpatient women, who gave birth in the postnatal ward.

The study was conducted using a closed-ended questionnaire of 28 questions on demographics, knowledge and attitude towards antenatal vaccination.

RESULTS

- Few women even believed that maternal vaccination can cause birth defects (26, 5%) and autism (13, 2.5%).
- Only 76 (17.6%) of the study participants were aware that all pregnant women should receive influenza and pertussis vaccines.
- The majority of women (349, 80.8%) did not receive any recommendations from their obstetrician who is their major antenatal care provider.
- Only 26 (6%) of women had been offered the vaccines during current pregnancy.

A binary logistic regression analysis was performed to determine the factors that influence antenatal vaccine uptake taking into account the demographic characteristics, knowledge, and attitude regarding vaccine uptake.

We found significant impact to vaccine uptake ($\beta = 1.704, p = 0.000$), when participants had prior vaccine uptake, were aware of the National Immunization Schedule recommendation ($\beta = 1.286, p = 0.006$) and obstetrician’s recommendation ($\beta = 0.962, p = 0.049$).

CONCLUSIONS

- The knowledge and uptake of influenza and pertussis vaccines among pregnant women in Greece was found to be poor and significantly lower, compared to other European countries and the USA.
- There is substantial room for improvement among antenatal care providers in both patient education and offering the vaccine.

REFERENCES