

emerged as important factors in the measles epidemic, this study aimed to assess the prevalence of measles IgG antibodies among immigrant workers.

Methods:

The cross sectional seroprevalence survey was conducted in Gyeongsangnamdo province, Korea. Because the representative sampling frame could not be possible, the voluntary foreign workers who have agreed informed consents with a translated format into the native language, participated in this study. IgG antibodies of measles was examined by ELISA using the automation equipment (BEP III- ELISA). This study obtained the approval of Dong-A University Clinical Research Ethics Review Committee.

Results:

364 people of foreign workers participated in the study. Regional distribution for study participants was composed of 30 people in Vietnam (16.5%), Uzbekistan 71 people (19.5%), Thailand 70 people (19.2%), China 60 people (16.5%), Philippines 36 people (9.9%), and Indonesia 32 people (8.8%). The average age was 33.0 ± 6.9 years old and 86.5% of the total was men. High school or higher education accounted for 74%. 93.7% showed positivity (95% CI: 95.7-98.9%) for measles IgG antibody and 3.6% showed equivocal.

Conclusions:

The measles seropositivity among immigrant workers in Korea was considered to be at the recommended level.

Key messages:

- The measles seropositivity among immigrant workers in Korea was considered to be at the recommended level.
- International cooperation is needed to prevent global measles epidemic.

Determinants of influenza vaccination uptake among Polish school teachers

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Background:

School settings place teachers at risk for influenza infection. Polish National Immunization Program recommends influenza vaccination (IV) for this occupational group. The study objective was to assess teachers' knowledge and attitudes regarding IV, to determine 2018/2019 uptake and factors influencing the IV receipt; this has never been performed before in Central/Eastern Europe.

Methods:

Between March-April 2019 teachers from 5 randomly selected primary schools (2 urban, 3 suburban) in West Pomerania, Poland, were surveyed with the use of the self-administered, anonymous questionnaire.

Results:

Response rate was 50.1%. Among 102 respondents (68.6% females, mean age 45.7 years, mean length of practice 20.3 years), 31.4% were chronically ill. Only 4.9% reported getting the 2018/2019 IV, 8.8% were willing to be vaccinated in the next season. Of the respondents getting the 2018/2019 IV, only one also re-reported getting the 2017/2018 vaccine. The most common source of information about the IV were: family doctor (55.9%) and TV (68.6%). Beliefs that the IV was not effective (40.2%) and concerns about the side effects (19.6%) were the most common reasons for not getting it. Only 44.1% of respondents believed teachers have heightened risk of contracting influenza. Regarding preventive methods, 83.3% teachers pointed at social distancing, 65.7% - at frequent handwashing, 65.7% - at vaccination; 38.2% believed that drinking tea with lemon could prevent influenza. More than a third of teachers (38.4%) thought influenza infection is always

symptomatic. Older age was the only factor independently associated with IV receipt ($p < 0.05$).

Conclusions:

Influenza vaccination coverage among Polish primary school teachers is disturbingly low. Future education strategies encouraging teachers to immunize themselves against influenza should tackle misconceptions about the IV and increase awareness. Interventions related to maximizing IV uptake should focus especially on younger teachers.

Key messages:

- This preliminary study showed that influenza vaccination coverage among Polish primary school teachers urgently needs improvement.
- Teachers should better understand the importance of influenza vaccination as a significant preventive measure and realize their role in infection prevention and transmission at the school setting.

Health professionals as parents are not immune to vaccine hesitancy – an Italian national survey

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Vaccine hesitancy is a growing concern in many European countries, including Italy, as instanced by alarming results from Eurobarometer 488 dated April 2019. In the view of the current magnitude of the phenomenon, our aim was to investigate its determinants among parents, with a specific view on those working as health professional.

In 2017, parents of children aged 3-84 months were recruited online. Based on self-reported vaccine status and timeliness of vaccinations, parents were classified as pro-, hesitant, or anti-vaccine. The association between baseline characteristics and hesitancy was investigated with logistic regression adjusting for child's and parents' age, prematurity, presence of older children, previous vaccine adverse reaction in the child at issue, parents' nationality, education and employment status, health profession of at least one parent, single parenting, vegetarian lifestyle and perceived economic security.

A total of 3,865 questionnaires were collected (64% pro-, 32% hesitant, 4% anti-vaccine). Families with at least one health professional as parent were 20% of the sample.

Vegetarian lifestyle (aOR 3.0; 95%CI 2.20-4.08), unsatisfactory perceived economic security (aOR 1.67 95%CI 1.08-2.58) and partially satisfactory perceived economic security (aOR 1.40; 95%CI 1.09-1.78) and previous vaccine adverse reactions (aOR 1.25; 95%CI 1.05-1.48) were associated with vaccine hesitancy, while having older children resulted as a protective factor (aOR 0.82; 95%CI 0.69-0.98). No significant association was found with other abovementioned variables, including parent employed as health professional (aOR 0.99; 95%CI 0.81-1.22).

Vaccine hesitancy seems to be part of a lifestyle choice and, to a smaller extent, associated with previous vaccine adverse reactions and lower socioeconomic status. Interestingly, parents' level of education and employment in healthcare do not affect vaccine acceptance. The latter poses a challenge, given their crucial role in promoting vaccination.

Key messages:

- Hesitancy is associated with lifestyle choices, experience of adverse reactions and socioeconomic status, while education and employment as health professional seem not to be relevant.
- Whether they are health professionals or not, parents' attitude towards their child's vaccinations is the same.