Survey of Influenza Vaccine Knowledge, Attitudes, and Beliefs Among Pregnant Women in the 2016-17 Season: Interim Analysis
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Background:
Routine influenza immunization has been recommended for all pregnant women since 2004 to prevent serious, life-threatening illness in both mother and fetus. Widespread campaigns by public health agencies have increased vaccination coverage among pregnant women, but rates have recently plateaued around 50%.

Objectives:
Interim assessment of knowledge, attitudes, beliefs and decisions regarding influenza vaccination among pregnant women during the 2016-17 season.

Methods:
Pregnant women were identified at four Vaccine Safety Datalink (VSD) health systems by ICD-10 codes for prenatal care visits occurring September 1 to December 31, 2016, to ensure eligibility for influenza vaccination. Women were sampled within strata defined by VSD site, trimester, and vaccination status. Recruitment included an introductory letter followed by up to 4 telephone calls. Enrolled women completed a 32 item, structured telephone survey regarding receipt of influenza vaccine, and knowledge, attitudes, and beliefs about its effectiveness and safety in pregnancy. The survey also assessed reasons for vaccination or nonvaccination. Responses from vaccinated and unvaccinated women were compared using chi-squared and t-tests.

Results:
For this interim analysis, 1696 were contacted from April to December 2017 and 456 (27%) completed the survey. 311 reported receiving influenza vaccine; 282 were vaccinated while pregnant. Of these, 271 (96%) were aware of the pregnancy when vaccinated and 198 (64%) had vaccinations administered in an obstetric setting. 153 (49%) of vaccinated women and 45 (32%) of unvaccinated women recalled that an obstetric provider recommended influenza vaccination (p=0.3). Vaccination was associated with primigravida status (p=0.003) and employment in health care (p<.0001). Unvaccinated women were significantly more likely to doubt the effectiveness and safety of influenza vaccination and to minimize the potential for harm from influenza.

Conclusion:
Pregnant women may need additional education on effectiveness and safety of influenza vaccination, and potential harm of infection to encourage vaccination.
An online survey of student attitudes and behavior regarding influenza immunization at a private midwestern U.S. university
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Background:
This survey was conducted in early fall 2017, at Creighton University, Omaha, Nebraska. All Creighton University students were surveyed, including campus/distance, full/part-time, and students from undergraduate, graduate and professional programs. Academic disciplines of arts and science, health sciences, business, and law were included. Health professions (HP) students included dentistry, medicine, nursing, pharmacy, occupational therapy, physical therapy. The study was approved by university IRB.

Objectives:
Students were surveyed about their opinions regarding influenza vaccination, vaccination in 2016-17, and intention for vaccination in 2017-18. Reported influenza-like illness (ILI) in 2016-17 associations were examined. HP students (influenza vaccination mandated) were asked about future intentions regarding personal vaccination and plans to recommend vaccination for their patients.

Methods:
The survey included 17 branched content and 7 demographic questions. It utilized an initial email invitation and two reminders over three weeks. Uni-variate and multi-variate data analysis was conducted using IBM SPSS, Vs 24.

Results:
There were 3277 (36%) usable responses. Response rates by gender, age, racial/ethnic, campus/distance, on/off-campus housing, and educational program were generally proportional to representation. Overall, 75% reported influenza vaccination in 2016-17; 89% of HP students. Vaccination rates varied by demographic group. Students also reported on preferences for vaccine promotion, with on-campus free clinics, posters, and email commonly indicated. Those not obtaining 2016-17 vaccine most commonly indicated “lack of need”, “no time” and “do not like vaccine/needles” as reasons. Of 1258 HP respondents, 97.5% planned to receive 2017-18 influenza vaccine. Of 1210 HP responses, 77% definitely or probably planned future vaccination even if no mandate, and 91% definitely or probably planned to recommend to patients.

Conclusion:
Higher proportions of students mandated to receive influenza vaccine were vaccinated versus those not mandated. Information obtained will guide future vaccine promotion efforts. Current vaccine mandates do not necessarily predict HP student plans for future action.