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Influenza Vaccine Participation in South Burlington, VT

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Influenza Vaccine Participation in South Burlington, VT

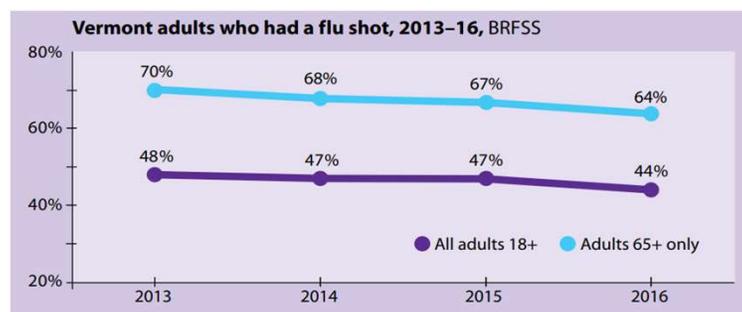
RIO BEARDSLEY, MS3

UVM FAMILY MEDICINE, OCTOBER - NOVEMBER 2019

WHITNEY CALKINS, MD

Background

- ▶ According to the Vermont Department of Health, only 44% of adults (18 years and older) in Vermont received the influenza vaccine in 2016
 - ▶ This is a decrease in overall adult flu shot rates compared to 2013 (48% of adults in VT received the flu shot in 2014)
- ▶ Vermont has some of the lowest overall vaccination rates compared to other states
 - ▶ Overall vaccine rates for children in VT have been increasing since 2013



Vermont Annual Immunization Report 2017, Vermont Department of Health

The Problem

- ▶ In 2016, hospital costs associated with influenza admissions totaled over \$2,500,000
- ▶ Total medical cost to Chittenden county in 2013 for untreated influenza was over \$4,000,000
- ▶ Increased morbidity and mortality associated with untreated influenza

Community Perspective

- ▶ “I don’t want to get the flu shot because it always makes me sick.”
– South Burlington community member
- ▶ “Patients think once they get the flu, they don’t need to get the flu shot.” – Katherine Mariani, MD
- ▶ “I don’t trust what the companies put in the vaccines.” – South Burlington community member and patient at South Burlington Family Medicine practice
- ▶ “I never get the flu so I don’t need the shot.” – Community member in South Burlington

Intervention

- ▶ *Part 1: Deploy a survey to assess beliefs and concerns regarding participation in the annual influenza vaccine (see attached file)*
 - ▶ Survey deployed at UVM Family Medicine practice in South Burlington, VT in the rooming process for all adult patients aged 18 years and older
 - ▶ Participation was voluntary and no identifying information was collected
- ▶ *Part 2: Provide CDC informational brochure “Flu & You” about the influenza virus and vaccine (see attached file)*
 - ▶ Brochure provided to all patients who participated, regardless of influenza vaccine participation

Results

- ▶ 108 patients participated in the survey
 - ▶ 55% female, 45% male
 - ▶ 34% 50-65 y/o, 22% 80 y/o and older, 21% 65-79 y/o, 17% 30-49 y/o, 6% 18-29 y/o
- ▶ 87% of participating patients (94 patients total) said they had received the flu shot in 2019 or were planning to receive the vaccine this year
- ▶ 13% of participating patients (14 patients total) said they had not received the vaccine and did not plan to get one this year

Results continued

- ▶ Of the 14 patients who had not received the annual influenza vaccine in 2019 and did not plan to get one said they declined the vaccine because:
 - ▶ “I get sick from it” – 71% (10 patients total)
 - ▶ “I’ve already had the flu” – 21% (3 patients total)
 - ▶ “I don’t want it” – 8% (1 patient total)
 - ▶ Other options not selected :
 - ▶ “I don’t need it”
 - ▶ “I need more information about the vaccine”
 - ▶ “I have an allergy/medical condition and the flu shot is not recommended”

From this small sample size, it is evident that misinformation and misunderstanding are key factors in the decision to decline the annual influenza vaccine

Evaluation and Limitations

- ▶ *Small Sample Size*
 - ▶ N=108, a larger sample size would have given the study more power
- ▶ *Selection Bias*
 - ▶ All participants were patients at the UVM Family Medicine practice in South Burlington – thus they are possibly a more health-conscious population than the VT population as a whole
- ▶ *Lack of collection of some identifying information:*
 - ▶ Race, ethnicity, and level of education might have provided the study more granularity and applicability

Future Projects

- ▶ *Did the brochure and information provided in this intervention make a tangible difference?*
 - ▶ Follow-up project to see if the CDC brochure impacted patients' beliefs and willingness to receive the annual flu shot
- ▶ *Do attitudes change over time?*
 - ▶ Explore how and if attitudes/beliefs about the influenza vaccine and participation fluctuate
- ▶ *Site-specificity of the intervention:*
 - ▶ Perform a similar study and intervention at non-clinical site and compare to possibly reduce the impact of selection bias

References

- ▶ CDC Website Data. https://www.cdc.gov/flu/pdf/freeresources/updated/flu-you-brochure_2019.pdf. Accessed November 10, 2019.
- ▶ Vermont Immunization Program Annual Report. https://www.healthvermont.gov/sites/default/files/documents/pdf/ID_IZ_RATES_annual_report_2017.pdf. Accessed November 8, 2019
- ▶ Vermont Department of Health Immunizations and Infectious Disease. <https://www.healthvermont.gov/disease-control/immunization/vaccination-coverage>. Accessed November 10, 2019.
- ▶ Grunvald, Miles W., "Attitudes Toward Influenza Vaccination" (2016). *Family Medicine Student Projects*. 216. <https://scholarworks.uvm.edu/fmclerk/216>