

The Flu Vaccine: Why are our HIV-Infected Patients Saying NO?

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BACKGROUND

- People with HIV and AIDS are at high risk of serious influenza-related complications.
- Studies done before routine use of highly active antiretroviral therapy (HAART) suggested an increased risk for heart- and lung-related hospitalizations in people infected with HIV during influenza season compared to other times of year, and a higher risk of influenza-related death in HIV-infected people.
- Limited data exists regarding reasons why HIV-infected patients decline flu vaccinations.

STUDY AIM

To better understand reasons for flu vaccine declination in our HIV-infected patient population.

METHODS

Study design: Cross-sectional study

Setting: Statewide Ryan White-funded multidisciplinary Christiana Care HIV Community Program in Delaware

- Multiple sites in urban and rural areas, caring for >1600 HIV-infected persons
- This analysis limited to 3 primary sites (n = 1492)

Participants: Adult (≥18y) patients who declined flu vaccination during any clinic visit from 11/01/15 – 04/15/16.

Intervention:

- All patients offered flu vaccine at any clinic visit occurring during flu season
- From 12/01/15 – 04/15/16, we asked all adult (≥18y) patients declining flu vaccine to complete and sign declination form (Fig 1).
- Form included education specific to importance of flu vaccination in persons living with HIV
- Chart review performed to assess demographics, insurance type, CD4, viral load, acceptance of any pneumococcal vaccine, and refusal of any other vaccine

Data Collection:

- During intake process, if patient declined flu vaccine, declination form provided to patient by staff member.
- Forms were confidentially and systematically collected from all 3 sites over 5-month period.
- Chart review performed for all declining patients to ascertain:
 - Gender
 - Age
 - Race/ethnicity
 - Insurance type
 - CD4 count/viral load (most recent)
 - Acceptance/declination of any pneumococcal vaccine
 - Declination of any other vaccine

Analysis:

- Descriptive statistics
- Chi-square to compare declination group to overall clinic population

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Figure 1. Patient declination form.

RESULTS

Patient Characteristics	Study Population % (n=86)	Total Population % (n=1492)	P value
Gender			
Male	83	68	p < 0.01
Female	17	30	
Transgender	0	2	
Age			
18-44	36	32	p = 0.04
45-64	63	59	
≥ 65	1	9	
Race/Ethnicity			
Non-Hispanic White	24	35	p < 0.01
Non-Hispanic Black	73	60	
Hispanic	3	5	
Insurance Type			
Private	15	25	p < 0.01
Medicare	24	28	
Medicaid	61	40	
Uninsured	0	7	
Most Recent CD4			
< 200	8	-	p < 0.01
200 - 500	34	-	
> 500	58	-	
Most Recent Viral Load			
< 20	71	82	p < 0.01
Refused any other vaccine			
Yes	13	-	

Table. Patient characteristics

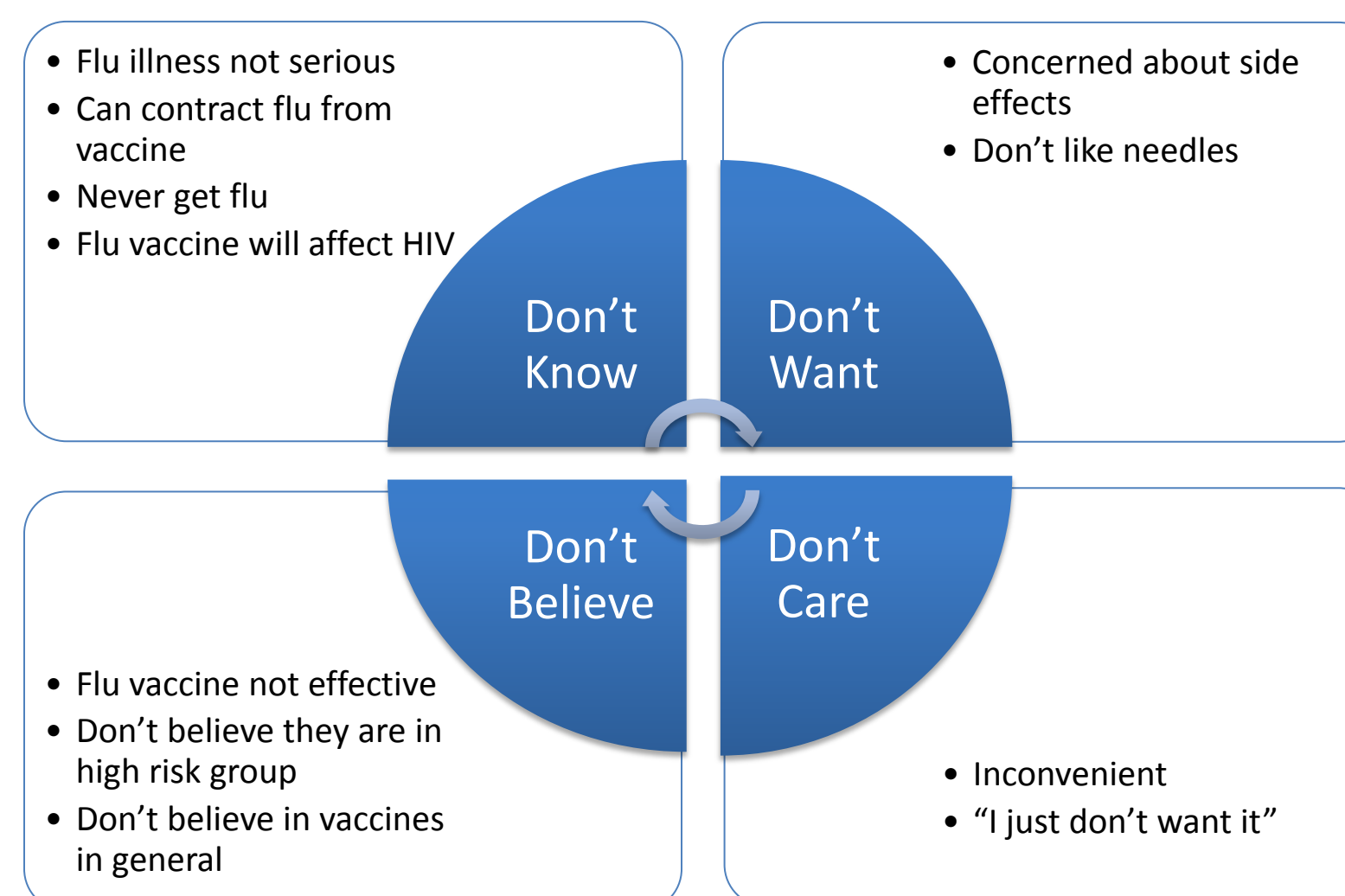


Figure 2. General Themes of Declination Reasons³

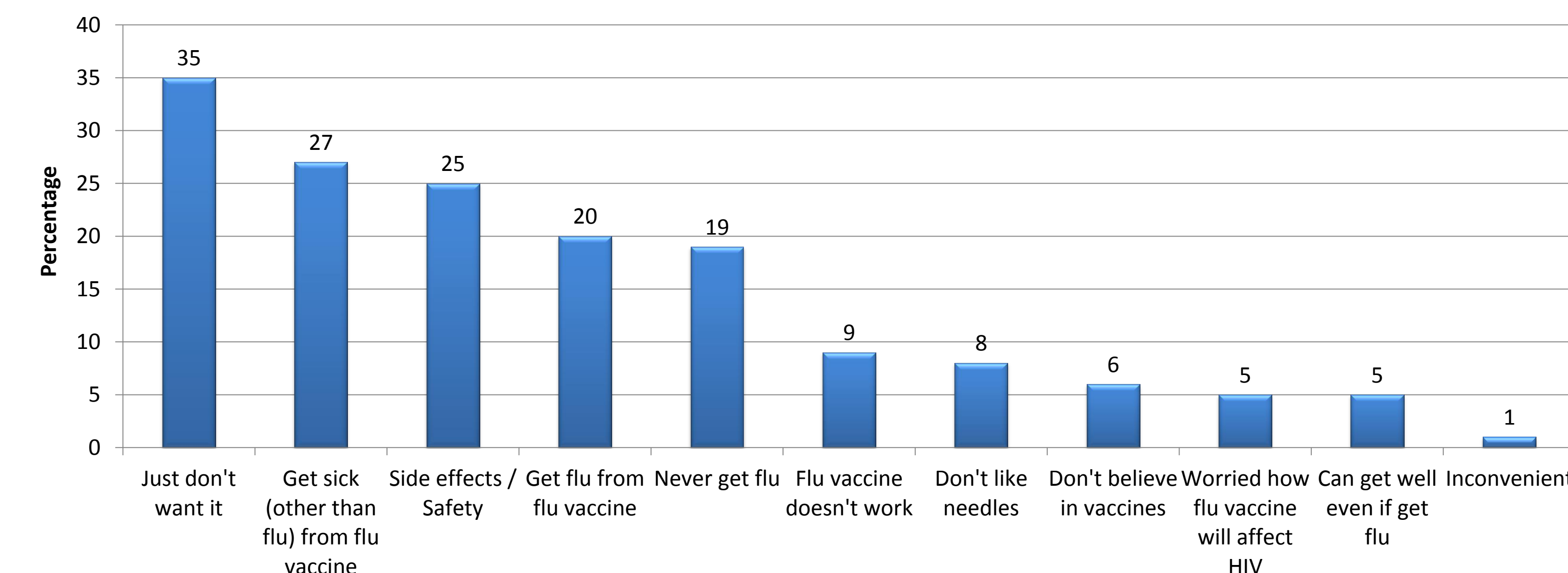


Figure 3. Reasons for flu vaccine declination in HIV-infected population (n=86). Patients could list >1 reason for declining.

DISCUSSION

- Overall, <6% of all HIV clinic patients declined flu vaccination.
- At all 3 sites, considerable training of staff was necessary to obtain buy-in to distribute the form to the appropriate patients.
- Compared to the general clinic population, patients who declined flu vaccine were more likely to be male, black and have Medicaid, and less likely to have an undetectable viral load.
- The most common reasons for declining were concerns about getting sick from the vaccine (including acquiring the flu, other illnesses and side effects) and “I just don’t want it”.
- Declination appeared to be largely flu vaccine-specific; the majority (80%) had received ≥ 1 pneumococcal vaccine, 4 of whom on the same day they declined the flu vaccine.
- 4 patients opted to accept the flu vaccine after receiving the education from the declination form.

CONCLUSIONS

- Reasons cited by HIV-infected persons for declining flu vaccine reflect those cited in other populations, including lack of perceived risk and fear of side effects/illness.
- Given the increased risk of flu-related complications in HIV-infected persons, further public health emphasis on vaccinating this high risk group is needed.
- Strategies to improve flu vaccine acceptance in the HIV-infected population are essential.
- Additional interventions are planned for the upcoming 2016-2017 flu season, including improved signage and vaccination events (e.g., incorporating vaccination into planned Women’s Health Day).
- Follow-up studies needed to determine whether these interventions are effective in increasing flu vaccination rates in this population.

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