

Hepatitis A and B Vaccination Perceptions among MSM

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Introduction

- Men who have sex with men (MSM) are at increased risk of hepatitis A (HAV) and hepatitis B (HBV) infection and should be vaccinated.
- Vaccination has been recommended for MSM since early 1980s (HBV) and mid 1990s (HAV); however, vaccination levels in this population are still inadequate.



Project Activities

The goal of this project is to increase the awareness of, positive attitudes toward, and knowledge about hepatitis A and B vaccination in the online MSM community through an online investigation and intervention by:

1. Measuring demographics, HAV and HBV knowledge, attitudes, risk activities and vaccination practices among MSM online;
2. Assessing perceptions of effective messages and campaign strategies among MSM; and,
3. Designing, implementing, and evaluating a comprehensive online health campaign.

Methods

- Conducted formative research including: comprehensive literature review, National Expert Advisory Panel review, cognitive interviews, and pilot testing for ~1 month.
- Revised the pilot survey by deleting 7 questions, moving 5 demographic questions to the end, and modifying/collapsing several answer categories.

Methods

- Final survey posted to www.GayHealth.com February 2005.
- For this analysis, valid pilot data (n=269) were added to final survey data (n=729) and analyzed in SPSS.
- Final N of 968 men categorized into three groups for HAV and HBV: prior infection, partial or complete vaccination, and susceptible to infection.



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Who We Are

This survey was designed for men who have sex with men and who are neither vaccinated against nor have antibodies to hepatitis A and hepatitis B. However, anyone can take this anonymous survey -- it takes about 5 to 15 minutes. Because of the sensitive topics, you don't have to answer every question. Questions about your rights as a participant? Email info@c2cirb.com. Questions about the survey? Email lisgil@ashastd.org.

- I would like to take this survey.
 - Yes
 - No

Required

 **OPINIONS!**

Results: Demographics (n=968)

- The majority of respondents were:
 - college grads or higher
 - lived in urban areas
 - Caucasian, non-Hispanic
 - ranged in age from 15 to 55+
 - had health insurance, a regular HCP, and had visited a HCP in last year
 - just over half discussed sexual activities with HCP

Results

- 33% reported 60+ lifetime male partners
- 56% reported having had \geq one female partner(s)
- 86% reported having had unprotected sex
- 83% reported prior testing for STDs
- 40% had been diagnosed with an STD



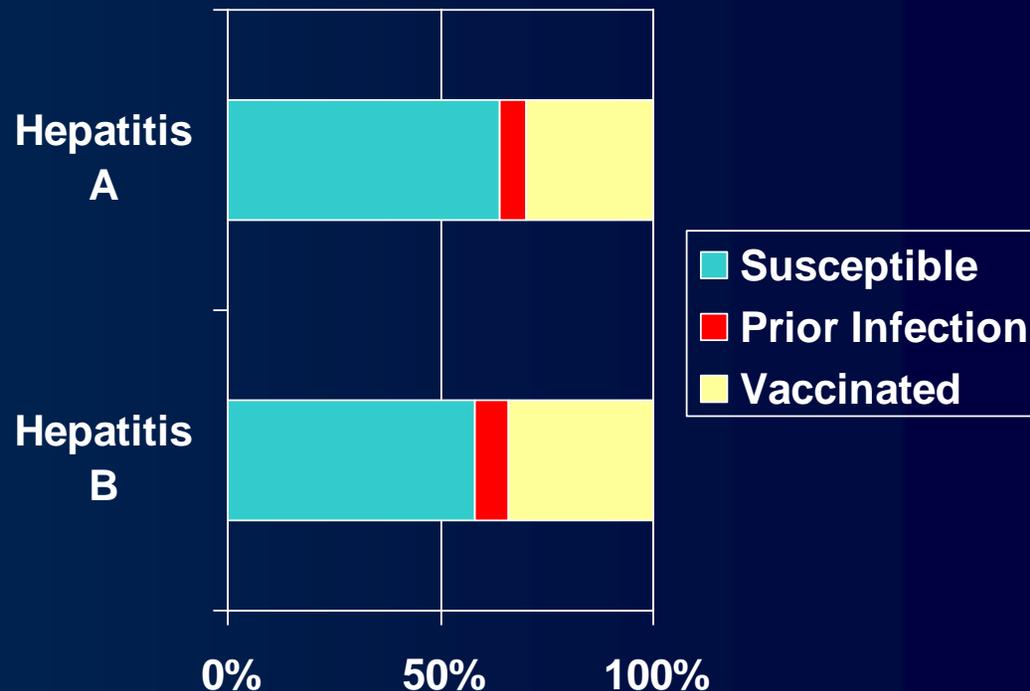
Results: HAV & HBV Immune Status

HAV Immune Status:

- 6% (56) reported prior infection
- 30% (288) reported ≥ 1 HAV shots
- 64% (624) susceptible

HBV Immune Status:

- 8% (74) reported prior infection
- 34% (332) reported ≥ 1 HBV shots
- 58% (562) susceptible



Results: Knowledge

“Hepatitis A and/or B can cause...”

- 42% - liver cancer
 - 51% - death
 - 61% - yellowing of eyes/skin
 - 65% - liver damage
-
- 61% “There is a vaccine that prevents hepatitis A.”
 - 67% “There is a vaccine that prevents hepatitis B.”
 - 19% “There is a vaccine that prevents hepatitis C.”

Results: Knowledge

“It is possible to get hepatitis A from...”

- 45% - having anal sex
- 51% - sharing needles
- 54% - eating contaminated food
- 58% - having oral-anal sex

“It is possible to get hepatitis B from...”

- 32% - eating contaminated food*
- 51% - having oral-anal sex
- 51% - having anal sex
- 55% - sharing needles

Knowledge & Attitudes by HAV Immune Status

Knowledge/Attitude	Prior Infection (56 total)	Vaccination (288 total)	Susceptible (624 total)	P
There is a vaccine that prevents hepatitis A.	79%	91%	46%	.000
There is a vaccine that prevents hepatitis B.	82%	89%	55%	.000
MSM are more likely to get hepatitis A than the general population.	73%	77%	68%	.05
Most MSM have been vaccinated for hepatitis A. [selected false correctly]	63%	53%	40%	.021
It would be very serious to get infected with hepatitis A.	65%	81%	71%	.013

Healthcare Characteristics by HAV Immune Status

Characteristic	Prior Infection (56 total)	Vaccination (288 total)	Susceptible (624 total)	P
Have health insurance.	88%	92%	79%	.003
Have regular healthcare provider.	86%	90%	80%	.000
Have seen a healthcare provider within last 12 months.	87%	90%	76%	.000
I discuss my sexual activities with my healthcare provider.	60%	62%	41%	.000
A healthcare provider recommended I get the hepatitis A vaccine.	28%	55%	9%	.000

Results: HAV Vaccination Intentions

“Are you planning on getting vaccinated against hepatitis A?”:

- 43% No, I don't plan to get vaccinated.
- 45% Maybe, I haven't thought about it or I'm not sure yet.
- 12% Yes...

Knowledge & Attitudes by HBV Immune Status

Knowledge/Attitude	Prior Infection (74 total)	Vaccination (332 total)	Susceptible (562 total)	P
There is a vaccine that prevents hepatitis B.	87%	94%	48%	.000
There is a vaccine that prevents hepatitis C.	5.4%	17%	21%	.003
MSM are more likely to get hepatitis B than the general population.	86%	78%	69%	.003
Most MSM have been vaccinated for hepatitis B. [selected false correctly]	71%	53%	31%	.000
It would be very serious to get infected with hepatitis A.	85%	94%	79%	.000

Healthcare Characteristics by HBV Immune Status

Characteristic	Prior Infection (74 total)	Vaccination (332 total)	Susceptible (562 total)	P
Have health insurance.	89%	91%	78%	.000
Have regular healthcare provider.	81%	90%	80%	.000
Have seen a healthcare provider within last 12 months.	88%	88%	76%	.000
Discuss my sexual activities with my health care provider.	63%	60%	38%	.000
A healthcare provider recommended I get the hepatitis B vaccine.	21%	61%	8%	.000

Results: HBV Vaccination Intentions

“Are you planning on getting vaccinated against hepatitis B?”:

- 45% No, I don't plan to get vaccinated.
- 47% Maybe, I haven't thought about it or I'm not sure yet.
- 9% Yes...

Conclusions

- Using the Internet to collect this information was effective in terms of cost, reach and anonymity.
- Limitations include:
 - Participants not randomly selected
 - Survey posted to a health-oriented site
 - Data collected were both cross-sectional and self-reported

Conclusions

- MSM possess higher levels of knowledge about HBV than HAV but there is confusion about transmission among different types.
- Most knew about the availability of vaccines, the increased risk of infection among MSM, the consequences of infection, and prevention methods.
- More than half were susceptible to either HAV and/or HBV infection (i.e., reported neither prior infection nor vaccination).
- Those who were susceptible had significantly different levels of knowledge, attitudes, and risk activities compared to those who were immune due to previous infection or vaccination.

Intervention Implications

- As indicated by small percentage of susceptible MSM who planned to receive HAV and/or HBV vaccination, interventions are vital for this high-risk online population.
- Interventions need to emphasize:
 - MSM's increased risk for HAV and HBV; the need for vaccination, and the number of MSM who have been vaccinated (making vaccination normative);
 - Modes of transmission and vaccination availability by hepatitis type;
 - Consequences of infection (e.g., liver cancer) and co-infection (with HCV or HIV);
 - Importance of discussing sexual activities w/HCP;
 - Lack of vaccine side effects, benefit-to-cost ratio, increase sense of safety with a sex partner, and decreased worry as a result of vaccination; and,
 - How to obtain vaccination: finding convenient locations, etc.

Intervention Implications

- Likely vehicle for increasing vaccine coverage among online MSM is, naturally, the Internet
- The Internet has proven effective in promoting other health behavior changes
- CDC Dear Colleague letter advised of the intervention potential of the Internet and, citing the continued high rates of multiple STDs among MSM, encouraged online disease-prevention and health-promotion efforts on this population.
- Interventions could take form of tailored, staged promotional messages that reach these susceptible persons where they are (i.e., online)



Research Implications

- More research is needed to determine why few of the susceptible men did not intend to receive A or B vaccine.
- Future studies might want to investigate theories or constructs that might influence vaccination intentions, such as:
 - perception of risk,
 - understanding of the importance of hepatitis vaccinations and infection, and
 - relative rankings of other health priorities.

Public Health Implications

- HCPs have a critical role in facilitating disclosure of personal information about sexual activities and encouraging vaccination during office visits.
- Few men susceptible to infection (compared to those vaccinated) said their HCPs recommended the vaccine.
- Differences highlight importance of vaccine recommendation by HCPs, expanding patient education messages to include hepatitis screening/vaccination, and encouraging atmosphere of disclosure.
- At same time, interventions for MSM should encourage men to seek culturally competent, supportive HCPs and to disclose sexual activities during visits to optimize receipt of appropriate care.

Next Steps

- Because vaccination rates are still inadequate despite public health guidelines, comprehensive hepatitis vaccination interventions are urgently needed.
- Next activity was to conduct qualitative research regarding perceptions of existing hepatitis campaigns, preferred approaches and persuasive messages (Activity #2, data presented next).
- Findings from these activities will aid in the design and evaluation of a hepatitis prevention campaign; and ultimately the design of an effective dissemination strategy.

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