

Feasibility of the Implementation of a Hepatitis B Vaccination Program in Men who have sex with Men and Transgender Women in Lima, Peru

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Introduction

Despite of it can be prevented by a safe and effective vaccine, hepatitis B (HB) virus infection is still a major health problem. This could be explained by a low coverage of immunization and lack of vaccination programs for population at risk. According many investigations among hard to reach populations, a better acceptability would improve vaccination coverage when prevention programs are included in sexually transmitted infections (STD) clinics. (1-3)

In Peru, core HB antibody seroprevalence has been estimated in 22.3% among men who have sex with men (MSM), while among general population reaches 5%. (4) We think that vaccination and prevention programs tailored for MSM and transgender women (TW) should be implemented in Peru.

Objective: To explore the feasibility of implementing a HB vaccination program in MSM and TW in Lima, Peru.

Chart 1. Characteristics of participants. N=523. Lima-Peru, 2011

Characteristic	N = 519 (%)
Education, level	
• Primary school	89 (17.1)
• High school	204 (39.3)
• Higher education	226 (43.5)
STIs the last 12 months	202 (38.9)
Sexual Self-Identification	
• Homosexual	228 (44.0)
• Bisexual	159 (30.7)
• Heterosexual	28 (5.4)
• Transgender	103 (19.9)
Sexual role	
• Insertive	146 (28.2)
• Receptive	166 (32.0)
• Versatile	206 (39.8)
HIV infection	58 (11.1)
Syphilis	94 (24.8)

Methods and Materials

A cross sectional study among MSM and TW who attend an STD clinic in Lima, Peru.

A survey was used to measure 06 items:

- Perception of barriers to HB vaccination (BR),
- Perception of benefits to HB vaccination (BF),
- Compliance to HB vaccination,
- Communication with the primary care physician (CM),
- Perception of severity to HB infection,
- Perception of susceptibility to HB infection.

Associated factors were identified through multivariate analysis.

Results

- 523 MSM were recruited, and among them 103 were TW. The median age was 26 years.
- 87.1% perceived benefits, 85.7% would be compliant, 89.2% considered hepatitis B infection as serious, 42% could not get the vaccine, 68.8% did not have a primary care physician, and 53.5% feel not being at risk.
- Receptive sexual role was associated to vaccination barriers (OR 1.88), low compliance (OR 1.78), and perceived poor vaccination benefits (OR 1.78).
- Age <25 years (OR 1.6) and history of sex on drugs (OR 1.56) were associated with difficulties in communicating with the primary care physician.
- History of sex under the effects of alcohol (OR 1.68) was a factor for perception of no vaccination benefits.
- Insertive sexual role was associated (OR 1.57) to perception that hepatitis B is not severe.
- Self-definition as heterosexual was a significant factor (OR 3.16) for perceiving them at no risk to be infected.
- Education, self-definition as sexual worker, condom use with MSM, and exchanging sex for money were not associated.

Variable	BR	CM	BF
Age <25 years		1.6 [1.1-2.3]	
Sexual role			
Receptive	1.8 [1.2-2.9]		1.6 [1.0-2.5]
Sex and drugs		1.6 [1.1-2.3]	
Sex and alcohol			1.7 [1.0-2.7]

Chart 2. Characteristics associated with barriers, poor communication with health provider and perception of benefits of hepatitis vaccination. Multivariate analysis. N 523. Lima-Peru, 2011

Discussion

Our study shows that it is feasible to implement an optimized program of vaccination against HBV infection for MSM and TW in Peru. The success of the program would increase accessibility and adherence to standard vaccination schemes and impacting long term in the reduction of morbidity and mortality associated with hepatitis B sexually acquired.

We provide evidence that this population recognizes benefits of vaccination, knows the severity of hepatitis B, intends to be adherent and comply with the doses of vaccination. However, a considerable proportion has a perception of low susceptibility to infection and presents tangible and psychological barriers to access vaccination.

Most of participants included in the study had high-risk sexual behavior, which makes them hard to attract and retain through health programs. Consequently, its coverage means a greater impact on public health than that which occurs in low risk sexual behavior MSM (5). Identification of variables associated with low vaccination acceptability will be useful to determine MSM subpopulations and address the counseling of risk reduction towards specific problems (3).

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