Saunas programme: an outreach approach to diagnose and prevent hepatitis in a vulnerable population of the city of Barcelona

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THE CITY OF BARCELONA: BACKGROUND INFO

• 1,602,386 inhabitants 2014 (758,316 m; 844,070 w)
• 66% aged 15 to 64 yo
• 17 % foreign born
• Surveillance of mandatory notifiable diseases:
  - passive through health care workers notification
  - active through further information search
    contacting doctors, cases, laboratory...
  - epidemic outbreaks also included
  - viral hepatitis are included among
    mandatory notifiable diseases
Hepatitis C in Barcelona according to sex, 2000-2014

Incidence x 100,000
Review articles

**VIRAL HEPATITIS AMONG MEN WHO HAVE SEX WITH MEN, EPIDEMIOLOGY AND PUBLIC HEALTH CONSEQUENCES**

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Date of submission: 07 October 2009
Hepatitis A in Barcelona according to sex, 2000-2014

Incidence x 100,000


![Graph showing incidence of Hepatitis A in Barcelona by sex from 2000 to 2014. The graph includes data for total, men, and women.]
Hepatitis A among men who have sex with men in Barcelona, 1989-2010: insufficient control and need for new approaches

Cecilia Tortajada1,2, Patricia G de Olalla1,2, Elia Díez2, Rosa M Pinto4, Albert Bosch4, Unai Perez4, Milagros Sanz3 and Joan A Caylà1,2, for Saunas Working Group

Abstract

Background: Men who have sex with men (MSM) are a known group; this group are frequent. In Barcelona, vaccination for MSM has been recent. Vaccination campaign among preadolescents was implemented and began in 2004. Objective: to assess the incidence of hepatitis A in adults evaluate the outbreaks among MSM including all genotypes involved.

Methods: All cases of acute hepatitis A among young adults notified from 1989 to 2010 were included for analyses. We calculated the annual male-to-female (M:F) as a marker for MSM. Spearman's coefficient was used to evaluate the correlation between years and the number of cases.

Rapid communications

Outbreak of hepatitis A among men who have sex with men in Barcelona, Spain, September 2008 – March 2009

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Between 1 September 2008 and 9 March 2009, 150 cases of hepatitis A were reported in Barcelona, representing a threefold increase compared with the same period in the previous two years. The majority of the cases occurred in adult men, including 87 who reported having sex with men. This indicated the possibility of an outbreak ongoing in the population of men who have sex with men (MSM) and emphasised the need to target this community with more effective vaccination programmes.

Introduction

In Spain, hepatitis A is a reportable disease defined by acute hepatitis symptoms combined with the presence of immunoglobulin M antibodies to hepatitis A virus (IgM anti-HAV) [1]. Physicians and laboratories report cases to the local public health agencies.

Methods

For the purpose of the outbreak investigation, a case was defined as a man over 18 years old who had sex with men, was resident in Barcelona city and had symptoms of acute hepatitis with onset from 1 September 2008 and positive result of IgM anti-HAV test.

To identify cases according to the above definition, all reported hepatitis A patients who were male and older than 18 years, resident in Barcelona city and had symptoms onset from September 2008 were interviewed with a modified questionnaire based on the standard questionnaire for hepatitis A of the Health Department of the Government of Catalonia but with additional questions on sexual behaviour. The interviews were done by telephone or e-mail. Cases that had been reported before the outbreak alert but could
GAY SAUNA (BATHHOUSE) USERS

- Hidden population of men who have sex with men (MSM) with limited access to health care resources
- 11% are “heterosexual” publicly, don’t seek LGTB support (NGO’s...)
- 28% are sex workers
- Alcohol and other drugs use
SAUNAS PROGRAMME

Due to 2002-2003 HA outbreak, an outreach intervention was started among sauna users

Objectives:
• to detect HIV and syphilis infection (hepatitis C since 2015)
• to link them to health system to confirm diagnosis and treatment
• to offer these users hepatitis A-B vaccination along with counselling, condoms and lubricant
SAUNAS PROGRAMME: what is done

Nurses, psychologists and medical doctors provide:

• Hepatitis C, HIV and syphilis test offering
• Hepatitis A and B vaccine offering
• Pre-test counselling
• Results given at Epidemiology Service confidentially.

Post-test counselling
• If test is reactive, the individual is referred to a health center for confirmation and start of treatment
• If test is not reactive, participants are offered to be part of a cohort, with regular screening and counselling visits
Bathhouses
Rapid testing + pretest counseling

ASPB
Results + postest counseling

Hospital or UITS
Confirmation & follow up

Family doctor
NGO
ASPB
SAUNAS PROGRAMME: screening

- 2726 tests (1901 individuals). 9.2% reactive tests (1 false positive)

- 2454 tests (1682 individuals). 4.5% reactive tests

Hepatitis C (tests from February to December 2015)
- 229 tests, 3 of them reactive (1.31%). One of them already knew he was +
- 84 had already taken the test. Of these 74 had information about result (2+)
- Mean age of all people tested: 36.8
- Age of new +: 27 and 30, from Romania. Sex workers
SAUNAS PROGRAMME: HA vaccines delivered

Number of 1st doses

2003 2004 2005 2006 2007 2008 2009 2010 2011
SAUNAS PROGRAMME: HB vaccines delivered

Number of 1st doses

- 2003
- 2004
- 2005
- 2006
- 2007
- 2008
- 2009
- 2010
- 2011

Graph showing the number of 1st doses delivered from 2003 to 2011.
## COLLABORATION WITH NGO’S

Delivered vaccines to NGO, 2013-2016

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<th>Year and Vaccine</th>
<th>Number delivered</th>
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<tr>
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<td><strong>3439</strong></td>
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</table>
### COLLABORATION WITH NGO’S

Administered vaccines at NGO, 2013-2015

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<th>Number administered</th>
<th>Year and Vaccine</th>
<th>Number administered</th>
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<tr>
<td><strong>2013</strong></td>
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<tr>
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<tr>
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<td>Hepatitis A+B</td>
<td>920</td>
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<td>920</td>
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<tr>
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<td>123</td>
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<tr>
<td><strong>2014</strong></td>
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<td><strong>2016</strong></td>
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<td><strong>TOTAL</strong></td>
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</table>
HEPATITIS A OUTBREAKS AMONG MSM IN BARCELONA – An overview


- Sauna users: 47-60% vs 20% (p<0.01)
- Sex workers: 6.5 vs 0% (p<0.01)
- HIV infection: 28.1-23.3% vs 17% (not significant)
- Vaccination (1 dose): -- Vs 5% (not significant)

SAUNAS PROGRAMME: FINAL REMARKS

• It reaches a hidden population of MSM with limited access to health care resources
• It creates a link between them and the health care system and support resources
• No impact on the general MSM population
• Significant impact among sauna users and sauna sex workers in the 08-09 HA outbreak
• >10 years of intervention* → many already vaccinated

* Also, vaccination at school (12 year old children) since 1998-1998. Since 2014, vaccination at 1 y.o.