

Case study

In the nineties of the previous century the University of Antwerp conducted a survey in the Red Lights district in Antwerp.

They interviewed 108 sex workers and took blood samples to have an idea of the prevalence of hepatitis B in this community. One third of the patients had a hepatitis B serology that is typical for a past infection. Their immunity system had been triggered by the hepatitis B virus and they had developed an immunological protection. One percent of this population had an active infection. The remaining 66 % had no protection, which means no immunity for hepatitis B. Data collected in other Belgian cities showed more or less the same results.

In general, sex workers are exposed to many health threats linked to their profession, without realizing it. The preventative as well as the curative health care system is not familiar with this problem. The organization of these systems is not adapted to the daily reality and needs of the sex worker.

Hepatitis B is one of the infections where prostitutes are exposed to and that can be prevented with vaccination. The virus can be found in vaginal secretions, in sperm, in the blood of people who carry the virus or people that have an acute infection. Individuals with multiple sex partners, like prostitutes, run an important professional risk through unprotected sexual contacts.

The idea grew to set up a vaccination program, specifically for this target group. In this program sex workers would be screened and if necessary vaccinated. At the same time a relationship of trust could be built up and extra information about health issues and health risks could be passed on. This way, through the vaccination program we could introduce the sex worker to a broader project of health education and prevention.

From the start we were very aware of the challenges of this project. Sex workers can be difficult to identify and to approach. It is not an easy task to inform this group and to motivate them to be vaccinated. Furthermore, this group is mobile which means a great risk of a drop out for this three-doses schema.

Action proposed

We chose to approach the sex workers through their profession and to consider Hepatitis B as an occupational disease.

Sex workers that are interested to participate in this project receive extensive information about Hepatitis B, about other Sexually Transmittable Infections (STI), about transmission of infectious diseases and risks related to these STI. We talk about safe sex and the importance of the use of a condom in their professional sexual relations.

After informed consent they can be screened (through a blood sample). When the serology shows that they do not have immunological protection against hepatitis B we can start with the vaccination protocol. One month after full completion of the scheme we take another blood sample to see whether the vaccines have been successful.

Note : Interpretation of Hepatitis B serology

Hep B c Ab neg – Hep B s Ab neg : no immunity, need for vaccination

Hep B c Ab neg – Hep B s Ab pos : immunity through vaccination

Hep B c Ab pos – Hep B s Ab pos : immunity through infection

Hep B c Ab pos – Hep B s Ab neg - Hep B s Ag neg : the individual has been in contact with the hepatitis B virus but hasn't developed immunity. One booster vaccination is given, after a month serological verification follows.

Hep B c Ab pos – Hep B s Ab neg – Hep B s Ag pos : active infection. Referral to hepatologist for further determination of the infectivity and possible liver damage.

Methodology

The collection of the data and the administration of the vaccine is done in several ways.

We see sex workers in **our offices**, located in the center of the **Red Light district of Antwerp**. Three times a week we have free consultations where sex workers can come and visit a doctor. The sex worker takes the initiative to consult a health practitioner. During the first contact we take a blood sample to test for HIV, syphilis, hepatitis C and hepatitis B. We give information about safe sex and inform the sex worker about the possibility of vaccination once the serology test for hepatitis B comes back as 'not-immune'. We also do outreaches in the red light district, during the day as well as during the night. This time it is the health worker who actively looks for patients. There is a high turn-over of sex workers, people leave to work elsewhere and new people arrive. Therefore it is important to raise awareness amongst new sex-workers about the existence of our medical services.

Also the sex workers that are active in **public places** visit our doctor's consultation. The majority of these sex workers comes from Nigeria. They don't have legal documents, no medical insurance and they lack a supporting social network. This makes them physically, socially and mentally a very vulnerable population. The clients of these sex workers are mainly Belgian men.

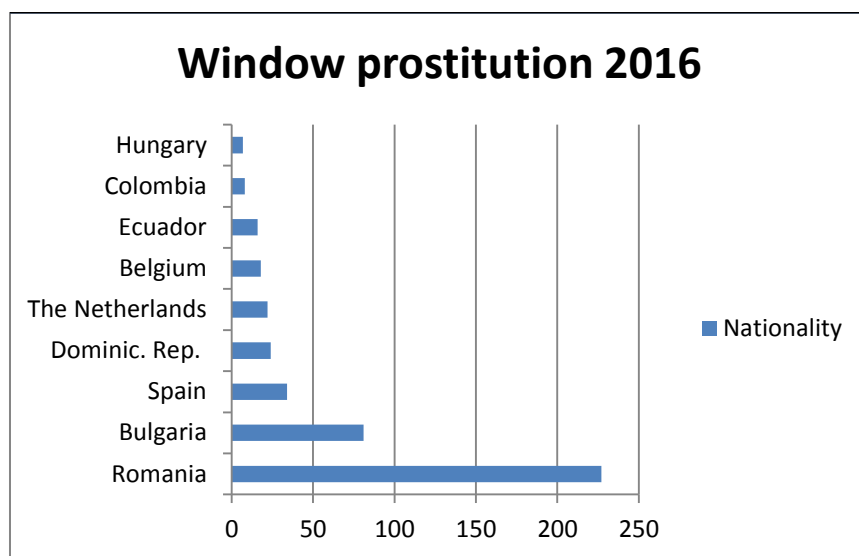


Figure 1 : nationality of sex workers in window prostitution, 2016