

HIV, Heroin and Pregnancy

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I thank you so much for your invitation to participate in this seminar. The fact that I am here demonstrates that I am also struggling to achieve your ideals.

Let me briefly introduce myself. I work on the French Riviera, a region heavily affected by both drugs and AIDS. I am the operational chief in Nice, in the lone university medical department on the Riviera, and I have gained a significant deal of experience, given that, since the beginning of the AIDS epidemic, we have treated roughly six hundred pregnant women who tested positive for HIV.

My presentation is divided into two parts. The first regards the problem of drugs, in particular heroin, and pregnancy. In the second part I will address – the two subjects are interrelated – HIV infection and the problem of pregnancy.

To perform a study on drugs and pregnancy is no easy matter. One must first take into account that pregnancies are quite rare, and, when they do occur, at least in France, a large number of the women drug addicts who find themselves pregnant opt for abortion. Then there is the difficulty involved in determining the effect of a drug on the pregnancy or on the child, given the frequent presence of multiple toxic substances. A situation that is compounded by the generally precarious nature of the pregnancy as the result of poor conditions of hygiene, malnutrition and, finally, anaemia.

Further complications include the use of tobacco and alcohol, whose effect on pregnancies and infants are well known. Psychotropic drugs are the principal toxic substances used in France, often in combination with heroin. One also observes the use of cannabis and cocaine, though it is difficult to evaluate the levels of consumption at the moment. In our region we have little experience with the use of cocaine, unlike the situation in the region of Paris, where a significant number of cases have been recorded.

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What is the affect of a pregnancy on a woman's attitude toward her addiction? More often than not, a woman who is addicted to drugs will not stop taking them during her pregnancy. Viewed as an event of marginal importance, the pregnancy is given little attention by such women.

Three different types of behaviour can be identified with regard to pregnancy. The distinguishing characteristic of women who take heroin is a total indifference towards the pregnancy, meaning that there is practically no medical surveillance leading up to the birth. Quite often, the woman arrives in the delivery room without ever having seen an obstetrician. Certain pregnant drug addicts view their pregnancies as illnesses. Finally, there are the extremely rare cases in which the pregnancy serves as an occasion for social rehabilitation, with termination of the drug addiction. Pregnant drug addicts present numerous risk factors: the presence of multiple toxic substances, the use of tobacco and alcohol, the consumption of psychotropic drugs and poor living conditions.

Case histories of pregnant drug addicts essentially involve a specific sector of the population presenting a low level of social and economic wellbeing, poor conditions of hygiene and, as I just mentioned, prenatal care which is either lacking or extremely irregular.

Supervision during the pregnancy is a very difficult matter. There are a large number of social problems, including the general lack of interest on the part of the pregnant women, as well as the unstable nature of their way of life. This often leads to situations in which they are examined only at the very end of the pregnancy, just before giving birth. These patients frequently have menstrual problems, which explains the high rate of infertility. If they become pregnant in any case, deciding to go through with the pregnancies (I mentioned above that a large number of women drug addicts opt for abortions), then the figures show that, in 15-30 percent of the cases the delivery is premature. Also, in 30 percent of the cases the infant is underweight. This is not because of the use of heroin or other toxic substances, but rather on account of malnutrition. Quite often, for that matter, the dominant problem is hepatitis B or C, or sexually transmitted diseases, in particular HIV infection.

One observes cases of fetal deprivation in utero during pregnancies. When readings of the fetal heart beat are recorded in women who have just taken heroin, an alteration in the fetal cardiac rhythm is observed, with specific symptoms of cardiac deceleration and, on the other hand, modifications characteristic of a lack of oxygen to the brain. Drug ad-

diction to heroin is not automatically a reason for abortion, unless HIV infection is also involved. In cases of pregnant women with HIV infections, abortion is advisable, given the risk of transmission of the virus from the mother to the fetus. The extremely grave prognosis for a contaminated child is well known.

The pregnancy of a woman addicted to heroin must be followed with particular care, given that the fetus can, at times, be subject to the risk of death in utero, as well as to problems of growth or premature birth. Ultrasound controls are necessary. Then there is the problem of withdrawal from the mother, which can lead to a specific set of complications, with the need for hospitalization in a specialized setting. It is absolutely indispensable that a paediatrician be present in the delivery room when a woman addicted to drugs gives birth. The newborn may present deficiency symptoms, making it necessary to hospitalize the infant in a newborn intensive care unit. Quite often women who are drug addicts present hepatitis-B infections. In our hospital service, 70 percent of the drug addicts giving birth have hepatitis-B, confirming the figures presented by our Italian colleague. As regards hepatitis-C, 80 percent of women drug addicts in Nice are carriers of the infection. Of even more importance, and this is the subject of the second part of our report, is the fact that women drug addicts are often carriers of HIV. As we currently know, the risk of transmission of the virus from the mother to the fetus in the course of the pregnancy is 20 percent.

HIV infection does not lead to malformations of the fetus, and there would not appear to be any evidence that the onset of pregnancy results in an aggravation of the condition of women infected with HIV. Pregnancy does not lead to complications in the on-going development of the HIV syndrome. One of the most important problems, at least for our obstetricians, is the risk of transmission of the disease between the mother and the fetus, estimated at 15-20 percent in France. We do not have much experience in our country with the use of methadone to treat pregnant women; our main finding is that such treatments can lead to delays in the growth of the newborn. Infants born of women who have taken heroin present lower than average weights at birth, suffer from respiratory problems, and, in a significant number of cases, suffer from withdrawal symptoms. To give an example, here are the statistics we have personally recorded for a group of 60 infants: 36 percent weigh less than 2500g; in 28 percent of the cases the infants

are premature (pre-term labour), while 35 percent of the children born are small-for-date. In 10 percent of the cases the infants suffer from respiratory problems.

To conclude, in the case of women who are addicted to heroin or take drugs, pregnancy is a pregnancy at risk, calling for care on a multi-disciplinary basis.

I will now move on to the second part of the presentation, that regarding HIV. It is important to know, as has been demonstrated since 1991, that treatment with AZT during pregnancy makes it possible to achieve significant reductions in the transmission of the virus between the mother and the fetus.

I work in the region of the Maritime Alps, which is considered to be the second region after Paris in terms of HIV infection. In 1987, of all the pregnant women presenting the HIV infection in the Paris-Ile de France region, 66 percent had been contaminated through drug use, while the percentage was 29 percent in 1992. Therefore there was a decrease in the contamination of pregnant women caused through drug use. At the same time, the records show a rise in the contamination of pregnant women from sexual activity, with the rate going from 12 percent in 1987 to 49 percent in 1992.

In our region of Nice, we have noted a certain stability in the rate of contamination of pregnant women through drug use, nevertheless with a corresponding rise in contamination through sexual activity. The figure went from 10 percent in 1987 to 32 percent in 1992. The effect of pregnancy on the illness has not yet been determined. We know that there is no marked worsening of the illness following the onset of pregnancy in women infected with HIV. The major problem, therefore, is represented by transmission of the disease between the mother and the fetus, with the current approach to preventing such transmission by treatment with AZT. The resulting drop in the rate of contamination has been demonstrated in our hospital service, with the transmission percentage falling from 20 to 5-6 percent thanks to the prescription of AZT. In our service, and within the framework of a national research program, we are now employing a dual therapy with pregnant women, coupling AZT (retrovir®) and 3TC (epivir®).

The preliminary results allow us to hypothesize a situation in which the transmission rate of the virus is practically reduced to a level of 2 percent.

I will now offer you a rapid overview of the latest statistics from my service, and from the CHU service in Toulouse, regarding approximately 800 pregnant women infected with HIV. The research was carried out in collaboration with the hospital centre of the University of Toulouse. We had a total of 985 pregnancies in women testing positive for HIV. If we break down this statistic by year, we see that it has been on the decline. In 1991 the two hospital services together, Toulouse and Nice, registered 107 cases, while at present, as of 1995, there were only 70. So there has been a drop in the number of pregnant women with HIV observed by these two services. In 27 percent of the cases these women have a professional activity; 45 percent of them are single and 20 percent are married. Natives of the region account for 74 percent of the group, while from 6 to 8 percent have moved here from outside, meaning that the majority of the pregnant women with HIV in this personal research test group come from our region. In terms of the way in which pregnant women were contaminated by HIV, 60 percent were infected by taking drugs intravenously, and 28.5 percent through sexual activity. What should be kept in mind is that the majority of the infected women did not contract HIV intravenously, but rather from a partner, who was undoubtedly a drug addict.

HIV and Pregnancy

With regard to the influence of pregnancy on the development of the illness, I believe that, at present, there is no evidence demonstrating that pregnancy worsens the course of the HIV syndrome. The main problem in cases involving both HIV and pregnancy is the risk of transmission between the mother and the fetus; in other words, the danger of contamination on the part of the infant. In a few exceptional cases, when the viral count is exceptionally high, and when there is also a significant deficiency in the immune defence, with the illness well under way, then there might be the risk of the mother's condition deteriorating even further. In our service we did observe three women who died of pulmonary complications (pneumocystosis), a condition specifically related to AIDS, which set in during the pregnancy or in the aftermath of the delivery. That is the response to the first question.

Concerning the behaviour of pregnant women addicted to drugs

one does note, from time to time, a decrease in the use of drugs during pregnancy and following the birth of the infant. There can even be a change in the mother's behaviour which results in a full termination of drug use proving to be almost definitive, or occasionally so. However, it should be noted that it is extremely difficult to monitor these women, and that, unfortunately, and in the majority of cases, the women continue to take drugs during the pregnancy. The pregnancy may turn out to be a particularly favourable occasion for stopping drug use. One finds cases in which the desire to have a child leads the woman to stop consuming drugs, with the pregnancy having been the event that sparked the rehabilitation.