HIV, childbirth and suicidal behaviour: a review

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Women who are both pregnant and HIV positive may be at particularly high risk of suicidal behaviour. This is important in view of recent guidelines recommending routine antenatal HIV testing. We present a case and review the relevant literature.

The risk of suicidal behaviour either in patients with human immunodeficiency infection (HIV) or in relation to pregnancy has been the subject of research, but there is little in the literature about the increasingly important group of women who are both pregnant and HIV positive. Guidelines issued in August 1999 by the Department of Health, stating that antenatal clinics in England should routinely offer HIV testing, highlight this predicament (Department of Health, 1999).

The unlinked anonymous HIV seroprevalence monitoring programme revealed a significant rise in the prevalence of HIV since 1990 among women giving birth in London. The prevalence of HIV among women giving birth in London rose from 1 in 530 in 1997 to 1 in 450 in 1998. In 1998 there were 232 births to HIV-infected women in London and 99 elsewhere in the UK. Sixty per cent of HIV-infected pregnant women having babies in the UK remain undiagnosed at the time of birth (Unlinked Anonymous HIV Surveys Steering Group, 1999), and 70% of those infections were diagnosed postnatally.

The new Department of Health guidelines have set national objectives to increase the uptake of antenatal HIV testing to 90% and to identify 80% of HIV-infected pregnant women and offer them advice and treatment during antenatal care, by December 2002. It is anticipated that this will result in 80% reduction in the incidence of vertical transmission by the end of 2002.

However, both having a positive HIV test and becoming pregnant are significant life events. Life events significantly increase the risk of mental disorders, particularly depression, which in turn lead to an increased risk of completed suicide. Paykel (1980) calculated a relative risk of 6.7 for deliberate self harm (DSH) in the 6 months following a life event.

It is important to develop an understanding of which HIV-positive pregnant women are at high risk for DSH and completed suicide in order to increase detection and offer appropriate interventions during pregnancy. This article reviews the relevant literature and describes a woman who took an overdose after testing HIV positive on a routine antenatal test (*Case report*).

HIV AND SUICIDAL BEHAVIOUR

Previous research has demonstrated that, in those who are HIV positive, suicidal ideas are most common soon after initial HIV diagnosis and again following a diagnosis of acquired immunodeficiency syndrome (AIDS) (Sherr, 1995). The risk of DSH in people with HIV infection is higher in individuals with a previous history of DSH, a past psychiatric history and current psychiatric disorders (Gala et al, 1992). Precipitants for DSH include bereavement, relationship problems, inability to cope with HIV/AIDS, waiting for the result and trauma at the time of testing (Sherr, 1995). The method used by approximately 80% of those attempting suicide is overdose (Catalan et al, 1995; Sherr, 1995). The majority of this evidence, however, is from studies focusing on homosexual men and it is not clear how well this generalizes to women. James et al (1991) found that attempted suicide in HIV-positive pregnant women was more common in those who were drug dependent.

Completed suicide has been studied mostly in relation to individuals with AIDS, rather than

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those who are asymptomatic. Again the focus has been on homosexual men and intravenous drug abusers who probably have a higher risk of suicide than the general population. There is good evidence to indicate an increased risk of completed suicide in people with HIV infection, although it has been suggested that its incidence has declined recently possibly in association with improvements in the treatment of HIV infection (Mitchell, 1999).

PREGNANCY AND SUICIDAL BEHAVIOUR

Research has shown a similar prevalence of DSH in pregnant and non-pregnant women (Whitlock and Edwards, 1968; Rayburn et al, 1984). Studies have compared pregnant and non-pregnant women admitted to hospital following DSH, but few or no significant differences have been reported. Whitlock and Edwards (1968) found that pregnant women tended to be younger, but did not differ in other demographic characteristics, psychiatric diagnosis or method of DSH. The pregnancy was the main precipitant for DSH in 17% and a contributory factor in another 27%.

Lester and Beck (1988) found no difference in depression, feelings of hopelessness or suicidal intent between pregnant and non-pregnant women, although pregnant women were more likely to report a history of suicide or attempted suicide in a close relative, partner or friend. Common themes were prior loss of children, fear of losing partner and desire for abortion. Self poisoning is the most common method (as for non-pregnant women). Results have been inconsistent in terms of the timing of DSH during pregnancy. Several studies have found the highest rate during the first trimester (Whitlock and Edwards, 1968; Rayburn et al, 1984; Czeizel et al, 1999).

Maternal mortality investigations have identified lower rates of completed suicide than expected for comparable populations (Barno, 1967; Sachs et al, 1987; Syverson et al, 1991). Series of female suicides have been studied to determine the proportion of pregnant women among them, with results ranging from 0% to 13.5% (Appleby, 1996). In a retrospective study based on national population data for England and Wales from 1973 to 1984 (Appleby, 1996), the suicide rate during pregnancy was found to be one twentieth of the expected rate. Similar to the HIV population, the majority of cases had a previous psychiatric history, often with previous DSH. Elective termination of pregnancy has been associated with an increased suicide risk (Perera, 1983).

IMPLICATIONS FOR MANAGEMENT OF HIV-POSITIVE PREGNANT WOMEN

The above review of research suggests the presence of two opposing trends in relation to completed suicide. While being HIV positive may increase the risk of suicide, pregnancy acts as a protective factor. The situation regarding DSH is different as both HIV and pregnancy may increase the risk.

It is important to consider not just the appropriate management of the pregnancy, delivery and perinatal care in terms of maternal and

CASE REPORT

A 37-year-old woman of African origin was referred for psychiatric assessment following an overdose when she was 26 weeks pregnant. She described an 18-month history of depressive symptoms, precipitated by problems in her marriage, particularly the discovery that her husband was having an extramarital affair. Her symptoms significantly worsened following the discovery that she was pregnant. Neither she nor her husband wanted a child and her husband encouraged her to have a termination. She decided to proceed with the pregnancy because of her strong religious beliefs. At 12 weeks gestation routine antenatal tests revealed that she was HIV positive. This was totally unexpected as her husband had been her only sexual partner and neither of them had thought he might be HIV positive. She became increasingly depressed and hopeless, felt very guilty about her lack of maternal feelings, and developed suicidal ideas. At 26 weeks she took an overdose, and at the time had serious suicidal intent. Immediately following the overdose, however, she felt extremely guilty and made herself vomit. She later admitted her self harm to the HIV health advisor who requested a psychiatric assessment.

In terms of background history, her parents separated when she was young and she had little contact with her father. Her first husband was physically abusive. She had two sons from this marriage, who had lived with their father since her divorce 5 years previously. Following the divorce she was treated with fluoxetine for a depressive illness. She had been married to her second husband for 3 years. At the time she became pregnant she was a full-time student, but as her depressive symptoms worsened she had found the course increasingly difficult. Her mother and two brothers, who were aware she was HIV positive, were close and very supportive.

At the time of the initial psychiatric assessment a diagnosis of depression was made. She had a very negative attitude towards the pregnancy, consistent with the typical negative cognitions which occur in depressive illness. She was commenced on fluoxetine and continued supportive counselling with the health advisor. Close liaison between psychiatric, HIV and obstetric services was instigated. Marital therapy was also suggested but refused. She was advised about measures to reduce the likelihood of her child becoming HIV positive and continued antiretroviral therapy throughout the pregnancy.

She responded to the antidepressant medication within 6 weeks and began to make plans for the baby. She separated from her husband when she was 34 weeks pregnant. At 38 weeks, following elective caesarean section she gave birth to a healthy baby girl who she did not breastfeed.

This woman has remained well on antiretroviral medication. She has been able to discontinue fluoxetine and there has been no recurrence of depressive symptoms. She has returned to live with her husband and has resumed her university studies. She is coping well with looking after her daughter, who has not been infected with HIV.

child physical health, but also the psychological welfare of these HIV-positive women.

Identifying those at increased risk of suicidal behaviour

Although more research is needed to determine which HIV-positive women are at particular risk and at which time during their pregnancy, the information above suggests a number of high risk indicators. Women with a history of psychiatric illness or DSH, current mental disorder or drug dependency and those diagnosed HIV positive on antenatal tests, particularly during the first trimester, may be at increased risk.

Other risk factors for both DSH and completed suicide in the general population, particularly social isolation, should be considered. Women who terminate their pregnancy, particularly if this is because of their HIV status and fear of vertical transmission, also present cause for concern.

Mental health interventions

Adequate psychological support and easy access to psychiatric assessment are essential. Psychiatric disorder should be identified and treated. Even without a specific psychiatric disorder women may benefit from psychological interventions to address a variety of issues and to help develop coping and problem-solving skills.

Women must adjust not only to being HIV positive, but also to being pregnant, whether planned or unplanned, which in itself is a major life event. Decisions about whether to proceed with an unplanned pregnancy are likely to be more difficult for HIV-positive women. Relationship difficulties may be an issue, with anger towards a partner who has infected them, guilt regarding their responsibility for infecting their partner or disagreement about whether to proceed with pregnancy. Complicated feelings of guilt towards the unborn child, and fear about the woman's own health and mortality and the implications this may have for the child, may also arise.

Women may be faced with multiple bereavements as a result of HIV infection and may have to care for a number of sick family members. Many of these women will have pre-existing psychopathology which may impair their adjustment to these various consequences of being infected. Ybarra (1991) describes loss, guilt, self blame and hatred as common themes arising in counselling of pregnant HIV-positive women.

Physical management

The risk of vertical transmission and current strategies to minimize this risk are reviewed by Low-Beer and Smith (1999). They state that in developed countries maternal HIV infection is associated with spontaneous abortion but no other adverse pregnancy outcomes, no increased risk of congenital abnormality and no increased risk of accelerated immunosuppression. The overall vertical transmission rate in the UK is 25–30%. This is reduced to 15% if breastfeeding is avoided (Peckham and Gibb, 1995) and to approximately 5% if zidovudine is given to mother and baby (Connor et al, 1994; Mayaux et al, 1997; Intercollegiate Working Party Recommendations, 1998). Elective caesarean section and combination therapy can reduce the risk further.

Educating women about factors associated with an increased risk of vertical transmission, and involving women in decisions regarding the management of their pregnancy and delivery may enhance feelings of control and reduce hopelessness and guilt. However, making decisions regarding the relative benefit of interventions to mother and baby, for example the use of antiretroviral medication in early pregnancy, can be extremely stressful.

It is vital that there is good communication between the various teams involved in the care of pregnant HIV-positive women, including HIV, psychiatry, obstetrics, paediatrics, GP, drug dependency and social services. If risk factors for DSH and suicide could be identified, all members of these teams could be made aware of women who are at high risk so that early signs of distress and difficulty coping could be recognized and early intervention offered.

CONCLUSIONS

Routinely offering antenatal HIV tests is likely to have significant benefits in terms of reducing vertical transmission. However, the psychological impact of a positive HIV test during pregnancy must not be overlooked. Both pregnancy and being HIV positive increase the risk of DSH. More research is needed to confirm which HIV-positive pregnant women are at highest risk of suicidal behaviour in order that they can be identified early and offered appropriate mental health interventions. HM

Conflict of interest: none.

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KEY POINTS

- Human immunodeficiency virus (HIV) infection and pregnancy both increase the risk of deliberate self harm (DSH).
- HIV increases the risk of completed suicide but pregnancy is a protective factor.
- The risk of suicidal behaviour in HIV-positive pregnant women may be greatest during the first trimester, soon after HIV positive diagnosis and in those with a past history of psychiatric illness or DSH, or a current mental disorder.
- More research is needed to confirm which women are at highest risk
- Easy access to psychological and psychiatric assessment and treatment should be available for HIV-positive pregnant women.
- Close liaison between obstetric, HIV medicine, psychiatric, drug dependency and social services is important.