Uptake of medical interventions in women with HIV infection in Britain and Ireland

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Objective: To determine the uptake of medical interventions amongst women known to be HIV positive and in contact with service providers.
Subjects: 400 HIV positive women from 15 STD/HIV clinics in Britain and Ireland recruited to the MRC collaborative study of HIV infection in women between June 1992 and August 1994.
Methods: Data obtained prospectively through direct questioning of all women by a physician or research nurse and review of medical and laboratory records. Data recorded on standardised forms and analysed centrally.
Results: Nearly one quarter (24%) of women with an AIDS diagnosis had never received *Pneumocystis carinii* pneumonia prophylaxis, and 24% had never received any antiretroviral therapy. Fewer than two-thirds of black African women had had a chest radiograph. Only one woman had received Pneumovax and only 4% of women had ever taken part in a clinical trial.
Conclusions: A substantial proportion of women with HIV infection did not receive interventions of proven benefit, and participation in clinical trials was very uncommon. The reasons for such poor uptake should be explored among both health care workers and women with HIV infection.
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Keywords: HIV; women; intervention

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Introduction

An advantage of early diagnosis of HIV infection is the opportunity for patients to benefit from interventions shown or believed to reduce morbidity or mortality. It is recommended that all HIV positive patients with CD4 counts of less than 200 cells/mm^3, and those with unexplained fevers or oral thrush should receive primary prophylaxis against *Pneumocystis carinii* pneumonia (PCP).[1] Zidovudine has been shown to reduce mortality and morbidity when given to patients with AIDS or severe symptomatic disease.[2] Pneumovax is recommended for all HIV positive patients.[3] It is recommended that women who are HIV positive should be offered initial cytological and colposcopic screening with subsequent annual cytology until CD4 counts fall to less than 200 cells/mm^3 when further colposcopy should be offered.[4] The Centers for Disease Control, Atlanta advises annual cytology but does not advocate routine colposcopy. For patients originating in tuberculosis endemic areas, the opportunity to screen for tuberculosis by chest radiography and so provide early treatment may improve survival.[5] A further perceived benefit to some patients is the opportunity to partake in clinical research and to receive new anti-retroviral treatments in controlled trials. However, the extent to which patients who are diagnosed HIV positive are offered or take up these interventions is not known.

Uptake of medical interventions in women with HIV infection in the British Isles

Intervention	*Women with indication for intervention*	*Women receiving intervention (number)*	*%*
PCP prophylaxis	CD4 < 200 n = 153	122	80
	AIDS diagnosis n = 90	68	76
Antiretroviral therapy ever	AIDS diagnosis n = 90	66	73
Antiretroviral therapy at recruitment	AIDS diagnosis n = 90	36	40
Pneumovax	All women n = 400	1	0
Cervical cytology ever	All women n = 400	390	98
Cervical cytology in past year	All women n = 400	271	68
Chest radiograph	Black African Women n = 114	72	63
Clinical trials participation	All women n = 400	15	4

Subjects, methods and results

Treatment histories were collected onto standardised proformata for 400 HIV positive women at recruitment to the natural history MRC Collaborative Study of HIV Infection in Women conducted in 15 genitourinary medicine clinics and HIV units within Britain and Ireland.[6] Two hundred and fifty eight women were white, 114 were black African and the remainder described themselves as of other ethnicities (table). Eligible women not on PCP prophylaxis were found in all participating centres. Although 73% of women with an AIDS diagnosis had received antiretroviral therapy at some stage, only 40% were on therapy at recruitment to this study. Only one woman had received Pneumovax. Ten women had never had cervical cytology performed and 129 had not had cervical cytology within the past year. Of these women 3 were known to have had a hysterectomy. Forty two of 114 (37%) black African women had not had a

chest radiograph. Only fifteen women (4%) had participated in a clinical trial. Of these women only one was infected through needle sharing. There was no significant difference in uptake of PCP prophylaxis, antiretroviral therapy or cervical cytology according to ethnicity or presumed mode of transmission.

Thirty one women (8%) were first diagnosed HIV antibody positive at or after their first AIDS defining diagnosis. Of these, nine presented with PCP. Fourteen of these women (45%) were black African.

Discussion

At the time of recruitment the women described represented 13% of the total reported HIV-infected population of women in Great Britain and Ireland and were broadly representative in age and likely route of HIV transmission. It is not possible from these data to distinguish between a failure to offer treatment or it being declined by the patient. However, that 20% of the susceptible women were not protected from the commonest AIDS diagnosis is of concern. The use of anti-retroviral therapy is more contentious and since the Concorde study failed to show any clinical benefit of zidovudine administration to asymptomatic patients, many patients have become more disillusioned. There has been considerable debate about the appropriateness of the current advice on the use of Pneumovax[7] and physicians are clearly not recommending it. Although the precise nature of the interaction between HIV infection and invasive cervical cancer is not known, cervical intraepithelial neoplasia is more common in immune suppressed women[8] and increased surveillance is often considered justified despite the difficulty in obtaining data to show that this reduces mortality. Of the 400 women participating in this study 394 were attending centres that also recruited to MRC clinical treatment trials. All of these trials are open to women, providing those of child-bearing age are employing an adequate contraceptive method. Although some opiate using women may have been ineligible for some trials, recruitment is poor amongst all groups regardless of ethnicity or presumed mode of transmission.

Although late diagnosis may be related to ethnicity[6 9] we did not find evidence that uptake of medical interventions after diagnosis was significantly associated with presumed mode of acquisition of the virus or ethnicity.

The low uptake of medical interventions in this group of HIV positive women is a matter of concern. It may indicate that medical issues are not a primary concern for infected women. Health care worker or patient related barriers to the uptake of medical interventions and recruitment into trials require further investigation.

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