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**Table 1.8** Reports of children born to HIV infected mothers by mothers' route of HIV acquisition: UK data to end of April 2000

Year of birth	England, Wales and Northern Ireland				Scotland				Total	Born abroad <sup>6</sup>	
	IDU associated <sup>2</sup>	Blood/blood factor associated <sup>3</sup>	Sexual Intercourse <sup>4</sup> abroad	Other <sup>5</sup> /undetermined	IDU associated <sup>2</sup>	Blood/blood factor associated <sup>3</sup>	Sexual Intercourse <sup>4</sup> abroad	Other <sup>5</sup> /undetermined			
1979-83	1	3	9	0	2	1	0	0	0	16	11
1984-85	6	4	20	0	3	23	0	0	0	56	18
1986-87	15	2	40	1	9	44	0	1	0	112	29
1988-89	29	6	62	2	7	31	0	2	0	139	45
1990-91	37	6	134	6	12	26	0	1	0	223	48
1992-93	26	6	179	5	15	18	0	0	0	250	26
1994-95	18	1	176	11	24	20	0	0	2	254	22
1996-97	22	0	221	5	38	11	0	4	2	305	13
1998-99	24	2	301	4	52	9	0	1	1	399	1
Total	178	30	1142	34	162	183	0	9	5	1754	213

1 Includes children who are HIV infected, uninfected or of undetermined status.

2 Includes 49 in England, Wales and Northern Ireland and 48 in Scotland whose mothers were sexual partners of injecting drug users.

3 Includes 20 whose mothers were sexual partners of blood/blood factor recipients.

4 No evidence of bisexuality, IDU, or blood/blood factor treatment in mothers' sexual partners.

5 includes 20 in England, Wales and Northern Ireland and 1 in Scotland whose mothers were the sexual partners of bisexual men.

6 Maternal exposure categories: IDU associated (10), blood associated (7), sexual intercourse between men and women abroad (187) or UK (1), and other/undetermined (8).

# Future therapeutic perspectives in the management of HIV disease

*Brian G Gazzard*

## **Introduction**

Current therapy for HIV is a dramatic tribute to the capacity of basic science to be harnessed to develop effective therapies in short periods of time. Thus the early development of the epidemic was accurately charted by the CDC in America (MMWR 1981) and the causative virus was discovered two years later (Montaner 1983). Over the succeeding few years more became known about this virus than any other animal or plant virus. The reverse transcriptase and the protease enzymes of the virus were both recognised early as targets for treatment. The development of a sophisticated network of clinical controlled trials in the United States (the ACTG) facilitated the rapid introduction of drugs and an exploration of their utility. Many of these developments were aided by a rapid and sophisticated understanding of the potential health impact of the HIV epidemic by the political leaders of the western world and considerable credit must also be given to individuals within the infected community who developed sophisticated lobbying systems to ensure the diversion of sufficient financial resources to allow this rapid and staggering scientific achievement.

Thus, recent improvements in antiretroviral treatment (ART) have resulted in a considerable decrease in short-term mortality and rate of occurrence of AIDS events (Ledergerber *et al.* 1999). Much, of course, remains to be done and this chapter attempts to chart some of the likely areas where improvement in care will occur over the next few years.

## **Adherence Issues**

Over the last year or so it has become clear that, with present therapies, the chief reason for drug failure is the inability to adhere to regimes which have a major impact on life because of toxicity, stringent timing of dosages, specific food requirements and a constant reminder of the underlying reasons for taking drug therapy (Paterson *et al.* 1999). Difficulties with adherence are by no means confined to longterm anti-HIV therapy but exist in all chronic treatments. The medical profession has been slow to understand the potential importance of adherence and study the reasons for difficulties with lifelong therapy, partly because such studies require 'construct validation' as a means of assessing their applicability and veracity. Nevertheless, the importance of adherence in HIV treatment has stimulated much new research. It is clear that drugs fail the patient rather than patients failing to take the drugs. Thus, one

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