17% for menarche to occur and puberty to proceed.⁴ In this case primary amenorrhoea was almost certainly due to the intensive training. Once the patient was forced to stop training her percentage body fat rose and menarche occurred. This in turn accelerated the closure of the epiphysis.

The risks and benefits of intense training in adolescence are much debated. There is concern about the risks of stress fractures, osteochondrosis, and epiphyseal disorders in young athletes.⁵ A slipped upper femoral epiphysis is of particular concern because of its possible role in the development of osteoarthritis in later life. Female athletes with primary amenorrhoea

and pubertal delay are probably at high risk of these disorders.

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Awareness of AIDS in India: effect of public education through the mass media

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Public education aimed at preventing behaviour that predisposes to the spread of HIV infection is the main strategy for controlling AIDS, and many countries including India have used the mass media to disseminate information.¹⁻³ To assess the extent of the awareness of AIDS thus created we conducted a survey in Vellore among patients attending a medical outpatient department and a clinic for sexually transmitted diseases and among women prostitutes.

Subjects, methods, and results

After obtaining their informed consent we interviewed all the prostitutes attending a custodial care institution for prostitutes and all the patients attending a clinic for sexually transmitted diseases at the district hospital during one week; we also interviewed 231 of the 250 patients attending the medical outpatient department at this hospital over two days. We assessed awareness of AIDS and socioeconomic⁴ and demographic details with a special form.

The table gives the results for the two groups of patients. Most subjects in all three groups were ignorant of AIDS (patients attending outpatient department, 133/231 (58%); patients attending clinic for sexually transmitted diseases, 103/134 (77%); and prostitutes, 68/71 (96%)). Among the patients attending the outpatient department ignorance about AIDS was associated with female sex, living in a rural area, illiteracy, and lower socioeconomic state. To exclude female sex as a confounder we analysed men

and women separately. The lack of knowledge among men was associated with illiteracy ($p<0.05$), lower socioeconomic class ($p<0.05$), and living in a rural area ($p<0.05$); among women it was associated with illiteracy ($p<0.001$) and lower socioeconomic state ($p<0.001$).

The lack of awareness about AIDS among patients with sexually transmitted diseases was associated with illiteracy and lower socioeconomic state. All 71 prostitutes were from the lowest socioeconomic class, 67 (94%) were illiterate, and only three (4%) had heard about the disease.

Newspaper and radio were the commonest channels of information, but even these had reached only about a quarter of the sample. Subjects who were aware of the sexual mode of transmission of HIV, the seriousness of AIDS, the lack of treatment, and preventive measures formed a minority.

Comment

This study showed that the efforts at health education before our survey were inadequate and had not reached the vulnerable and the high risk groups.⁵ Most of the Indian population is illiterate and poor and lives in rural areas; these people do not have access to most channels of mass communication. Thus new strategies for public education on AIDS and its prevention are urgently needed in developing countries.

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Awareness of AIDS and sociodemographic variables among patients attending medical outpatient department and clinic for sexually transmitted diseases

	Sex		Area of residence		Literacy		Socioeconomic class		Total
	M	F	Urban	Rural	Illiterate	Literate	I-III	IV, V	
<i>Patients attending medical outpatient department</i>									
No of patients	107	124	90	141	71	160	79	152	231
Aware of AIDS:									
Yes	62 (58)	36 (29)	48 (54)	50 (36)	11 (16)	87 (54)	56 (71)	42 (28)	98 (42)
No	45 (42)	88 (71)	42 (47)	91 (65)	60 (85)	73 (46)	23 (29)	110 (72)	133 (58)
χ^2	18.9**		6.5*		28.9**		38.1**		
<i>Patients attending clinic for sexually transmitted diseases</i>									
No of patients	108	26	118	16	69	65	18	116	134
Aware of AIDS:									
Yes	28 (26)	3 (12)	26 (22)	5 (31)	3 (4)	28 (43)	13 (72)	18 (16)	31 (23)
No	80 (74)	23 (89)	92 (78)	11 (70)	66 (96)	37 (57)	5 (28)	98 (85)	103 (77)
χ^2	1.7		0.3		26.1**		25.1**		

* $p<0.05$, ** $p<0.001$.