

Chapter 2

Epidemiological Spread of HIV in Thailand

Since AIDS was first reported in the United States in the latter half of the 1970's, HIV which causes AIDS has rapidly spread all over the world. Until August 1983, about 2,000 people were registered as AIDS patients in the U.S.; 180 cases were registered in France in June of that year, and by the end of 1983 about 800 AIDS cases were reported from fifteen countries in Europe. (Grmek, 1993: 86-87, Japanese) Also in Japan and Australia, the first AIDS cases were reported in 1983. (Grmek, 1993: 88, Japanese) Since then, the number of AIDS patients in the whole world has gradually increased from 12,174 at the end of 1983 (Grmek, 1993: 86-88, Japanese) to 1,169,811 in June 1995. (WHO, 1995: 193-195)

The situation of the spread of HIV in each country has assumed a different pattern. For example, HIV first spread among gays in the U.S. who reportedly had homosexual intercourse with multiple partners. At present, however, HIV is spreading mostly among IDUs who belong to the poorest social class in the U.S. and their sexual partners. The majority of the people infected with HIV in the U.S. has changed from those homosexuals to the poor IDUs.

Whereas in Thailand the first spread of HIV was among homosexual males as in the U.S., the majority of people infected with HIV in Thailand at present are poor heterosexuals, both male and female. Moreover, there is geographic concentration of AIDS patients, as most have been found in the upper northern part of Thailand.

The different pattern of the spread of HIV in each country is considered to depend on the different characteristics of each society. Therefore, in this first chapter, the epidemiological spread of HIV in Thailand will be discussed in terms of the Thai social structure which has characterized the process of the spread of HIV in the country. Then, a description of the relation between the spread of HIV and the structure of Thai society will be given.

2.1 Present HIV/AIDS Situation in Thailand

According to the Ministry of Public Health (MoPH), there were 29,090 AIDS patients* and 12,108 symptomatic HIV patients** in Thailand as of 30 November 1995.

(Division of Epidemiology, 1995) Of the number of HIV-

* AIDS patients are defined as those in the 3rd full-blown stage, or the final stage of AIDS.

** HIV symptomatic patients are those who are in the 2nd stage of AIDS. Although each opportunistic disease is curable, the immunity of the body would gradually weaken the patients sending them to the final stage.

positive*, it is estimated that there were approximately 700,000** at the end of 1993.(Division of AIDS,1995) From the number of AIDS patients, 29,090 in November 1995, 26,901 of them (92.4%) became patients during 1993-1995. The number has sharply increased in recent years.(See Table 2.1 and the Figure 2.1)

Categorized by risk behavior, heterosexual intercourse is at present the primary cause of the transmission of HIV in Thailand. As of November 30 1995, more than 77.18% of AIDS patients were heterosexual males (66.23%) and females (10.95%) infected with HIV through sexual contacts.(Division of Epidemiology,1995:145-149)(See Table 2.2)

Classified by occupations, more than 66% were people engaged in agriculture (23.60%) and labor work (42.78%) belonging to the poor social class.(See Table 2.3) The other third were shop keepers (of 4.30%) except children and unknown. It is obvious that AIDS patients are concentrated among the working classes belonging to the low-class in society.

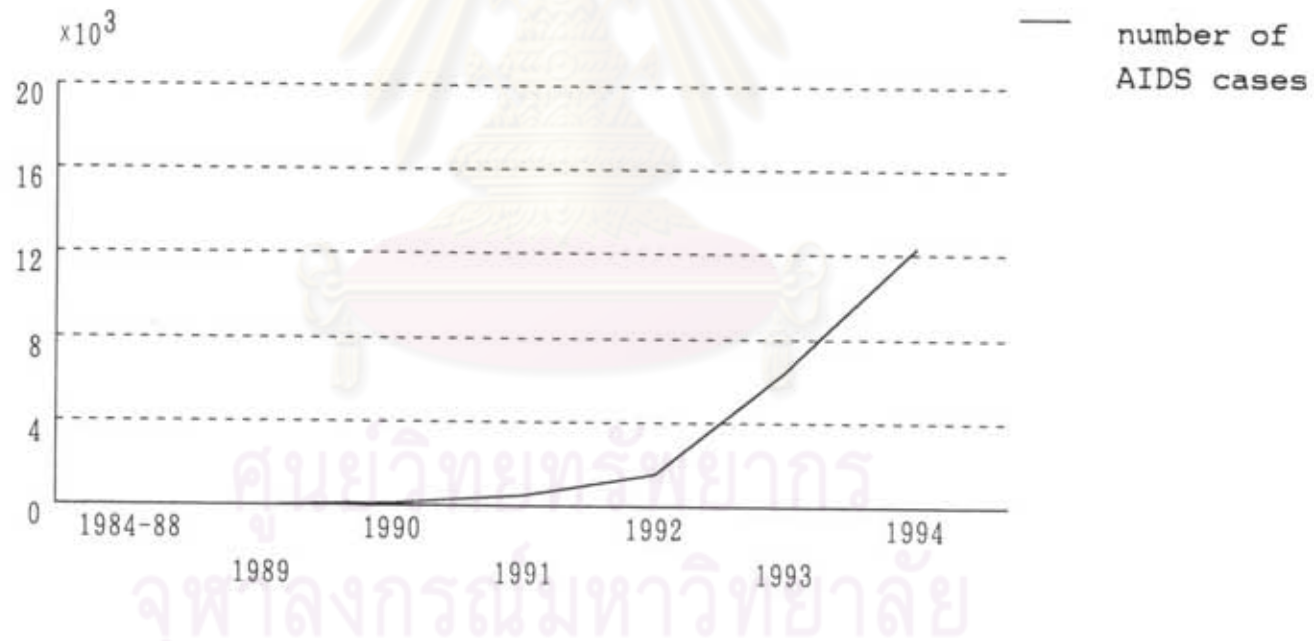
By region, 50.9% of the total number of AIDS patients have been found in the northern region. Within

* HIV-positives are those infected with HIV but no immediate symptoms detected are related to AIDS. They are in the first stage of AIDS.

** According to Professor Praphan Phanuphark, Program on AIDS of the Thai Red Cross Society, the number of HIV-positive at the end of 1994 was estimated at 750,000. (Division of AIDS,1995:2)

Table 2.1 Distribution of Reported AIDS Cases by Year of Diagnosis in Thailand, September 1984 - November 1995

Year	1984-88	1989	1990	1991	1992	1993	1994	1995*
Number of AIDS Cases	19	43	104	483	1,540	6,413	12,344	8,144



Remarks: * As of November 1995

Source: Division of Epidemiology, Ministry of Public Health, December 1 1995 (Thai)

Table 2.2 Distribution of AIDS Cases by Sex and Risk Behavior, As of November 30 1995

Risk Behavior	Number	Percentage
Sexual Intercourse	22,884	78.67
Homosexual/Bisexual Male	314	1.08
Heterosexual Male	19,266	66.23
Heterosexual female	3,185	10.95
Unknown	119	0.14
Intravenous Drug Use	2,019	6.94
Male	1,978	6.80
Female	41	0.14
Blood Transfusion	38	0.13
Male	24	0.08
Female	14	0.05
From Mother to Child Transmission	1,791	6.16
Male	956	3.29
Female	835	2.87
Unidentified	2,358	8.11
Male	2,048	7.04
Female	310	1.07
Total of Males	24,687	84.86
Total of Females	4,403	15.14
Grand Total	29,090	100.00

Source: Division of Epidemiology, Ministry of Public Health, 1995.

Table 2.3 Distribution of AIDS by Occupation, As of
November 1995

Occupation	Number of AIDS Cases	Percentage
Laborers	12,445	42.78
Agriculture	6,865	23.60
Shop Keepers	1,252	4.30
Govt. Officials	1,186	4.08
Housewives	724	2.49
Prisoners	484	1.66
Priests	416	1.43
Fishermen	392	1.35
Office Employees	151	0.52
Commercial Sex Workers	136	0.47
Students	89	0.31
State Enterprise Employees	77	0.27
Waiters/Waitresses	27	0.09
Business	24	0.08
Entertainers	21	0.07
Hairdressers	16	0.06
Others	30	0.10
Unemployed	716	2.46
Children	1,789	6.15
Unknown	2,250	7.73
Total	29,090	100.00

Source: Division of Epidemiology, Ministry of Public
Health, 1995.

this region, 86.9% were found in six provinces* in the upper northern part.(See Table 2.4 and Figure 2.1)

Divided by age, 79.2% of men and 66.7% of women who are AIDS patients are between 20 and 39, which is the most significant age with respect to the labor force.(See Table 2.5)

2.2 The Beginning of the Spread of HIV

Even before the detection of the first AIDS patient in Thailand, information about AIDS was available from 1983 but almost only for patients who visited some government's clinics for sexually transmitted disease for treatment. In 1984, medical tests of the lymphocytes was conducted for patients who were suspected of having contracted AIDS. (MoPH,1993:2,Thai)

The first Thai AIDS case was reported in August 1984. The patient was a 28 year-old man who had just returned from the U.S. after his two-year stay. He was believed to be infected with HIV through homosexual intercourse in the U.S.. He had medical treatment both in the U.S. and in Thailand. However, he died in November 1984 after a brief recovery in Thailand. The second case was reported in December of the same year. The patient was a foreign homosexual male and left Thailand soon afterward.

* Six provinces in the upper north are Chiang Mai, Lamphun, Lampang, Phayao, Chiang Rai and Mae Hong Son.

Table 2.4 Distribution of AIDS by Region, As of November 1995

Region	Number of AIDS Cases	Percentage	Rank
Bangkok	2,404	8.26	4
Vicinity of Bangkok	1,247	4.29	7
Central Region	776	2.67	8
Eastern Region	2,575	8.85	3
Western Region	1,779	6.12	5
Northeastern Region	3,847	13.22	2
Northern Region	14,826	50.97	1
Southern Region	1,636	5.62	6
Total	29,090	100.00	-

Source: Division of Epidemiology, Ministry of Public Health, December 1995.(Thai)

Table 2.5 Distribution of AIDS by Age, As of November 1995

Age	Number of AIDS Cases			Percentage (Total)
	Male	Female	Total	
0- 4	939	820	1,759	6.05
5- 9	19	19	38	0.13
10-14	5	5	10	0.03
15-19	198	198	396	1.36
20-24	3,159	965	4,124	14.18
25-29	7,194	936	8,130	27.95
30-34	5,596	671	6,267	21.54
35-39	3,611	367	3,978	13.67
40-44	1,723	166	1,889	6.49
45-49	867	111	978	3.36
50-54	479	54	533	1.83
55-59	366	42	408	1.40
60+	489	39	528	1.82
Unknown	42	10	52	0.18
Total	24,687	4,403	29,090	100.00

Source: Division of Epidemiology, Ministry of Public Health, 1995.

Figure 2.1 Geography of Thailand



Source: Thailand Public Health 1995 (Pocket), Alpha Research, December 1994

(Prasert,1989:17)

When the AIDS epidemic began in Thailand, HIV first spread among homosexual and bisexual males. According to the serological investigation conducted from April 1985 to April 1986 in Pattaya* among specific population groups including homosexual or bisexual males, female CSWs, and heterosexual males, all 35 of the 4,645 people tested were found to be infected were homosexual or bisexual males, and no infected case was found among the other 2,957 female CSWs and 309 heterosexual males. (Prasert,1989:19-20)(See Table 2.6) During 1986, an HIV screening test was given to 46,129 healthy Thai workers applying for Saudi Arabia visas,** no HIV positive case was found. This result supports the fact that HIV had not yet spread among the general Thai population at that time. Even though these serological surveys could cover only limited places and population groups, it can be said that the first population infected with HIV in Thailand were homosexual or bisexual males.

In 1987, HIV-infected cases began to be found among other population groups, especially IDUs, as 32 of 3,180 IDUs tested in Bangkok at that time were found to be infected.(Weniger,1991:S72-S73) From the results of the

* Pattaya is one of the famous beach resorts in Thailand, which is about two hours drive from Bangkok, the capital of Thailand.

** Saudi Arabia in 1986 issued new regulations requiring all workers who apply for entry visas to submit medical certificates to check against AIDS.

Table 2.6 Serological Survey among High Risk Groups:
Bangkok and Pattaya, From April 1985 to April
1986

Category	April 1985	October 1985- January 1986	April 23 1986
Homo/bisexual male	3 (127)	6 (720)	3 (532)
Female CSWs	0 (77)	0 (2,880)	-
Heterosexual male	-	0 (309)	-

Remarks: Figures in parentheses are those tested.

Source: Prasert, 1989:20.

blood screening for HIV tests conducted on IDUs at Thanyarak Hospital, the country's largest drug detoxification unit, in 1987, the number of HIV-infected cases found were very limited. (See Table 2.7 on page 24) In 1987, the infected rate among IDUs reached about 1%. However, in another survey conducted in Bangkok in 1987, none of a group of 319 IDUs tested were found to be HIV-positive.*

Among female CSWs at Pattaya, one out of 254

* HIV-positive is one of results of the blood test for AIDS. In case of a person infected with HIV, the test result is positive.

tested in 1987 was found to be HIV-positive, (Weniger, 1991: S74) which suggests the number was still limited. In fact, in a survey conducted in 1987 among 254 CSWs in Pattaya, 107 in Samut Sakhon, 60 in Bangsen, 40 in Chiang Rai, 101 in Chiang Mai, and 292 in Khon Kaen, no HIV-positive case was detected at all. (Weniger, 1991: S74)

In January 1987, blood screening for HIV was begun at the National Blood Center. According to a serosurvey for HIV of donated blood at the Thai National Blood Center from October 1987 to September 1988, 2 out of 17,807 (0.011%), 1 out of 22,821 (0.004%), and 2 out of 20,970 (0.009%) persons donating blood were found to test positive in October, November, and December 1987 respectively. (Prasert, 1989: 24-25)

As described above, the number of people infected with HIV in Thailand during the early stage of the epidemic was extremely limited. HIV-infected cases were detected almost only among limited groups, consisting of homosexual and bisexual males, IDUs, and CSWs, and the number for each group was still small except for IDUs which showed an increasing trend. It is obvious that HIV was not spreading widely especially not among the general public during this period.

Yet HIV was, however, spreading the among Thai population little by little, silently, and invisibly. The first explosive spread of HIV was soon to occur. However, at least until 1987, this could not be seen clearly.

2.3 First Epidemic among IDUs

In 1988 HIV infected cases suddenly began to increase among IDUs. At Thanyarak Hospital, the low rate of HIV-infection among IDUs remained at about 1% until January 1988. It then rose to 4.01% in February and jumped to 10.83% in March of the same year. (Prasert, 1989:26) (See Table 2.7) This was the first explosive spread of HIV in Thailand.* Concurrently, the rate of HIV infection at various clinics of the Bangkok Metropolitan Administration began to rise. In January 1988 the average infection rate was 0.80% but then dramatically rose to 24.5% in February. (Prasert, 1989:27) The 0.98% rate among HIV-infected IDUs between 1985 and 1987 increased to 6.45% in 1988. (Teera, 1989:11, Thai)

The northern part of Thailand is geographically a part of the "Golden Triangle" which extends into Thailand, Laos, and Burma, and there is a prevalence of the use of drugs, such as marijuana, opium, and heroin. Drug addicts in Thailand numbered about 100,000. (Teera, 1989:12, Thai) Another higher estimation said there were between 100,000 and 500,000. (Prasert, 1989:7) Moreover, another medical researcher estimated the number to be about 600,000 people. (Debhanom, 1988:63) Heroin is the most distributed

* Bruce G. Weniger et al. call this explosive spread of HIV among IDUs in Thailand "the first wave," in The epidemiology of HIV infection and AIDS in Thailand, 1991.

Table 2.7 HIV-Infection Rate among IDUs at Thanyarak Hospital, From August 1987 To December 1988

Year	Month	Number of Tested	Number of Positive	Percentage
1987	August	192	1	0.52
	September	850	9	1.06
	October	810	7	1.05
	November	735	9	1.22
	December	603	1	1.16
1988	January	768	9	1.17
	February	748	30	4.01
	March	877	95	10.83
	April	650	96	14.77
	May	667	129	19.34
	June	822	191	23.24
	July	629	181	28.77
	August	868	280	32.25
	September	807	252	31.23
	October	728	224	30.77
	November	657	193	29.38
	December	606	178	29.37
Total		12,017	1,897	-

Source: Ministry of Public Health, 1989:187-188, Thai.

and more than 60% of principal drugs are heroin. (Prasert, 1989:13) In most region, more than 80% or 90% of heroin addicts use the drug intravenously. *(Prasert, 1989:14) According to one study, the average rate of sharing needles among IDUs from 35 provinces was 33.23%. (Parichart, 1992:66, Thai) This sort of behavior among IDUs in Thailand is considered to be a major factor that contributed to the fast spread of HIV.

Furthermore, more than half of the drug users under treatment were former inmates of prisons where HIV transmission was facilitated by the widespread sharing of needles. (Weniger, 1991:S73) The fact that drug injecting was under loose control in prisons in Thailand might also have helped to spread HIV. In other words, this behavior and these circumstances crucially boosted the prevalence of HIV in Thailand.

In June 1989, the Sentinel Seroprevalence Surveillance System was started by the MoPH, and 14 provinces were covered by the first survey. The survey confirmed a continued high median rate, 39.0, of HIV-infection among IDUs. The highest rate found in a province in the central region reached 42.0. (MoPH, 1989:188, Thai) (See Table 2.8)

* Needle sharing is the main transmission mode of HIV among IDUs.

Table 2.8 Results from the First Sentinel Seroprevalence Survey June 1989, 14 Provinces (Median)

Region	Central	North	Northeast	South
IDUs	36.4-42.0	9.5-19.4	0-4.3	41.9
Female CSWs*	0- 5.0	0-44.0		0
Male CSWs**	4.1	1.7		-
New Prisoners				
- Male	5.0-37.1	2.0-26.7		3.0
- Female	28.0	0- 4.0		-
Prisoners to Release				
- Male	3.0-51.0	4.0-32.4		0
- Female	0	0		-
Blood Donors	0- 0.4	0.3- 1.0		-
STD*** Patients	1.0- 3.0	0-10.0		0
Pregnant Women	0	0- 1.0		0

Source: Ministry of Public Health, 1989:188, Thai.

Remarks: * The first sentinel surveillance among CSWs was conducted in 13 provinces.

** The surveillance of male CSWs was carried out in only 5 major provinces, that is, Bangkok, Chonburi, Chiang Mai, Phuket, and Songkhla.

*** STD : sexually transmitted disease

2.4 Second Epidemic among Female CSWs

The result of the first sentinel surveillance in June 1989 showed a surprising spread of HIV among female CSWs as well as among IDUs. Although the nationwide median rate of HIV-infection was 3.50, a very high infection rate 44.0%, was recorded among low-charge female CSWs in one province in the northern region. (MoPH, 1989:188, Thai) Before this, "all reported serosurveys of female prostitutes in Thailand detected nil HIV infection, or rates < 1%." (Weniger, 1991:573) Therefore, this 3.50 median rate was quite alarming. Such rapid spread of HIV were discovered against background of a thriving sex industry in Thailand which is made up of a large amount of female CSWs.

Female CSWs can be divided into two groups; CSWs in brothel-setting and CSWs in non-brothel setting. (Kumnuan, 1993:13-15) Generally, brothels directly sell inexpensive sexual services to low-class clients. Therefore, CSWs in the brothel-setting are also often called low-charge CSWs or direct sex workers. On the other hand, sexual services are also indirectly provided in the form of other services in non-brothel setting establishments, such as, massage parlors, coffee shops, restaurants, karaokes, etc, at high-charge. The CSWs in these non-brothel settings are often called high-charge CSWs or indirect sex workers.

The number of CSWs estimated in Thailand varied from 75,000 to 2.8 million, (Wathinee, 1994:29-38) though an official figure released by the MoPH in 1992 claims there were 75,376. (Wathinee, 1994:32) Wathinee Boonchalaksi and Philip Guest, authors of Prostitution in Thailand suggested that if the number of 175,000, estimated by Weerasit Sittitrai, an NGO activist, was correct, "this would constitute 2.1 per cent of all women aged 15-29 and around 7.3 per cent of urban women at these ages," and this high percentage is quite possible because the Police Department estimated the number of CSWs to be in the range of 150,000 to 200,000. (Wathinee, 1994:30-31) The Program on AIDS of the Thai Red Cross Society also estimated the number to be between 150,000 and 200,000. (The Nation, July 11 1993) In addition, child CSWs also exist. John Shattuck, U.S. Secretary of State For Human Rights, estimated that 800,000 women under the age of 18 were employed in the sex trade in Thailand as of 1994. (Bangkok Post, December 25 1994)

Thailand's thriving sex industry is also well known internationally. In 1993, the 'Longman Dictionary of English Language and Culture' described Bangkok as "the capital city and main port of Thailand...famous for its temples and other beautiful buildings, and is also often mentioned as a place where there are a lot of prostitutes." (The Nation, July 11 1993) Furthermore, in the same year, 'TIME' magazine used a photo of a Thai bar girl

being hugged by a male western customer on the cover, when it carried a special report on "Sex For Sale."

As these figures and incidents show, the commercial sex service in Thailand is regrettably but widely recognized internationally as one of the symbols of Thailand. Longman's case documented exactly how Thailand was seen by foreigners.

2.5 Third Epidemic among Heterosexual Males

According to results from the sentinel seroprevalence surveys conducted every six months starting from June 1989, the trend of the spread of HIV among the Thai population is quite clear. As Table 2.9 shows, the third population group hit by HIV in Thailand was sexually transmitted disease male patients. Due to their similar transmission modes, sexually transmitted diseases were considered to be one way to monitor the trend of HIV. (Kumnuan, 1993:12) The median rate of 0.00 in the second survey in December 1989 increased to 2.00 after only six months, in the third survey in June 1990.

However, the spread of HIV was also later detected among conscripts of the Thai Army, police applicants, and blood donors. These results may be considered to reflect the situation of HIV among general heterosexual men.

Since 1989, blood tests for HIV were conducted among 21-year-old men selected for conscription by lottery

Table 2.9 Results from Sentinel Seroprevalence Survey,
Thailand, 1989–1995

Population Group	1989 June	1989 Dec	1990 June	1990 Dec	1991 June	1991 Dec	1992 June
IDUs	39.00	27.75	31.36	30.59	30.00	35.69	38.24
Female CSWs							
-Low-Charge	3.50	6.93	9.30	10.53	15.24	21.83	22.97
-High-Charge	0.00	1.62	1.26	2.64	3.95	5.10	4.73
Male CSWs*	3.80	3.30	5.30	10.85	7.69	7.43	13.42
Male STD							
out-patients	0.00	2.00	2.82	4.47	5.05	5.67	5.71
Donated Blood	0.28	0.25	0.41	0.36	0.46	0.79	0.80
Pregnant Women	0.00	0.00	0.00	0.00	0.81	0.63	1.00

Population Group	1992 Dec	1993 June	1993 Dec	1994 June	1994 Dec	1995 June
IDUs	36.39	35.21	35.62	34.27	30.56	31.39
Female CSWs						
-Low-Charge	23.86	28.67	29.52	27.02	33.15	17.79**
-High-Charge	6.46	7.58	7.69	7.69	9.48	-
Male CSWs	10.53	9.82	12.75	18.00	-	-
Male STD						
out-patients	6.06	8.00	6.67	8.50	8.60	8.80
Blood Donors	0.95	0.74	0.80	0.68	0.89	0.63
Pregnant Women	1.00	1.39	1.50	1.78	1.61	2.29

Remarks: * The surveillance in this group was carried out in only 5 major provinces.

** Including low-charge and high-charge CSWs

Source: Division of Epidemiology, Ministry of Public Health, November 1995.

Table 2.10 Results of Blood Test for HIV among Army
Conscripts

1989 November	1990 May	1990 November	1991 May
0.5 (n=19,131)	1.7 (n=31,638)	2.1 (n=24,272)	2.9 (n=31,230)

Source: Weniger,1991:S76.

every May and November. According to the results, the rate of HIV-infection gradually increased as shown in Table 2.10. Most of the new recruits are considered as "men from rural areas with only 6 years in primary education," since "men with high education in high schools or universities can take some military" territorial defense courses "without being recruited." (Kumnuan,1993:15)

On the other hand, police applicants are of the same age as army conscripts. However, all applicants must complete their high school level which requires at least 11 years compared to only 6 years of education for most conscripts. (Kumnuan,1993:17) The rate of HIV-infection among police applicants was, therefore, considered to reflect the situation of higher educated men in Thailand.

Still, the prevalence rate increased from 0.68 in November 1990 to 1.83 in November 1992. (Kumnuan, 1993:17)

Furthermore, the steady increase in the infection rate of blood donors could also be regarded as the result of the spread of HIV among the general male population, because over 90% of blood donors were males between the ages of 20-49 years old. (Kumnuan, 1993:17) (See Table 2.9)

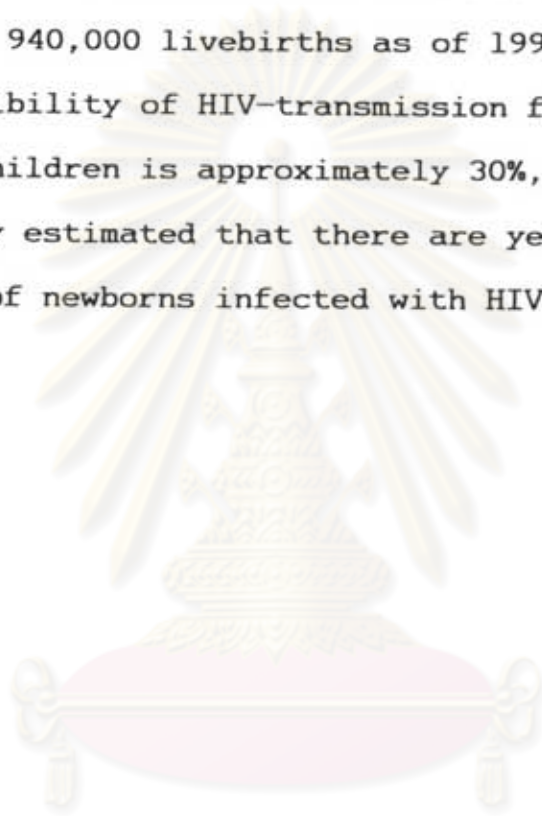
2.6 Latest Epidemic among Housewives, Newborns, and Others

Finally, HIV spread from husbands to house wives, and from those infected mothers to children. In June 1991, the former median rate of 0.00 among pregnant women was recorded at 0.81 in the fifth sentinel seroprevalence survey. "The median provincial rate among women attending public antenatal clinics reached 0.7% (range, 0-12%; n=70)." * "Rates among lower and middle-class women attending the antenatal clinic doubled from 0.6% (nine out of 1,395) in July 1991 to 1.2% (19 out of 1,617) in November 1991." (Weniger, 1991:S77)

According to the Division of Epidemiology, there were only 2 newborns who were AIDS patients between 1984 and 1989. However, 662 new cases were found between 1989

* "Range 0-12%" means that the lowest median rate was 0% and the highest was 12%, and "n=70" means that the number of provinces surveyed was 70.

and 1993. In 1994, alone, a further 698 new cases were added. As of November 30 1995, the number increased to 1,759 cases. This situation exactly followed the increase of HIV-infected cases of pregnant women, whose infection rate was recorded at 2.29% in June 1995. As there are yearly about 940,000 livebirths as of 1992, (Alpha, 1995:35) and the possibility of HIV-transmission from infected mothers to children is approximately 30%, it can be statistically estimated that there are yearly more than 6,000 cases of newborns infected with HIV from mothers in Thailand.



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