

# Drug Addicts Treatment for Ten Years in Thanyarak Hospital (1989-1998)

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## Abstract

The problem of drug addicts has increased over the past 3-4 years. A retrospective descriptive study of inpatient drug addicts at Thanyarak Hospital was done. Data from the record pool from October 1989 to September 1998 was reviewed for demographic information, diagnosis, HIV infection and the outcome of treatment. The study showed that the total number of patients increased from 7,595 cases in 1989 to 10,661 cases in 1995, but decreased in the next three years to 7,633 cases in 1998. Males constituted more than 91.5 per cent in each year. Mean ages decreased from  $31.1 \pm 8.8$  to  $26.5 \pm 9.3$  years. Most of the patients were labourers or were unemployed. The number of students also increased. Initially, students constituted only 1.3 per cent but in the last 3 years this increased to 4.0, 8.0 and 17.1 per cent, respectively. The education level has gradually increased. Heroin addiction was approximately 80.6-92.4 per cent in the first 8 years but markedly decreased to 38.0 per cent in the last year. Opium addiction decreased from 3.8 per cent to 1.0 per cent. Methamphetamine addiction markedly increased from 0.4 per cent to 51.5 per cent. The outcome of the treatments showed that patients who attended the 2-3 weeks detoxification treatment program was 30.9-43.5 per cent but patients who joined the therapeutic community rehabilitation program was only 0.8-4.2 per cent. The mortality rate increased from 2.1 per thousand to 5.2 per thousand and more HIV infected patients died than non-HIV infected patients. This rate varied from 1.7 times in 1989 to 8 times in 1995 and 4.5 times in 1996. We conclude from this study that drug addicts changed from heroin to Methamphetamine especially among young students in the last 2-3 years. HIV infection was still high in old cases (about 40%).

**Key word :** Drug Addict, Treatment, Thanyarak Hospital

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In the past 4-5 years, there has been an increasing number of drug addict related problems (1,2). Amphetamines and Methamphetamine have spread across the country in the last 2-3 years. There is evidence of a significantly increasing number of adolescent addicts(3). Efforts have been made to clarify the situation and to find the right way to deal with the problem. We were determined to make a retrospective study of the inpatients at Thanyarak Hospital, the largest addiction hospital in Thailand and half of the inpatients in the country(4). It has 670 beds in the inpatient ward, divided into 410 beds for the first 2-3 weeks of the detoxification period(5) for all types of drug addicts and 260 beds for the rehabilitation period which takes 1-1.5 years in the therapeutic community(6) program for all types of drug addicts.

## MATERIAL AND METHOD

In this retrospective study, data was collected from October 1989 to September 1998. These inpatient records were obtained from the record pool of the statistics information center of the hospital. The statistical analysis is percentage, per thousand, mean and standard deviation.

## RESULTS

In 1989, there were 7,599 cases, and the number increased every year to 10,661 cases in 1995 but decreased in the next three years to 7,633 cases in 1998. The significant points of this study are as follows.

### 1. Epidemiological data

Most of the patients (>91.5%) were male. Females made up 292 cases (3.8%) in 1989 and this increased to 647 cases (8.5%) in 1998.

#### Age

The average age markedly decreased from  $31.1 \pm 8.8$  years in 1989 to  $23.9 \pm 10.1$  years in 1998. (Fig. 1)

#### Occupation

24.3-60.8 per cent were labourers and 15.1-44.9 per cent were unemployed. The number of students had markedly increased. During 1989-1992, that number was below 1.3 per cent, but from 1996-1998, the numbers were increased to 4.0 per cent, 8.0 per cent and 17.1 per cent.

#### Education

Levels of education among addicts during 1989-1998 rose. In 1989, the number of patients who had graduated from secondary school was 35.9 per cent. In 1998, the number increased to 56.3 per cent, and education higher than secondary school was 10.5 per cent in 1989 then the number increased to 18.1 per cent in 1998.

### 2. Type of drug use

The initial rate of heroin addiction was around 88.2-92.4 per cent but there was a marked decrease in the last year to 38.0 per cent. Opium addiction markedly decreased from 3.8 per cent in 1989, to 1.0 per cent in 1998. Methamphetamine

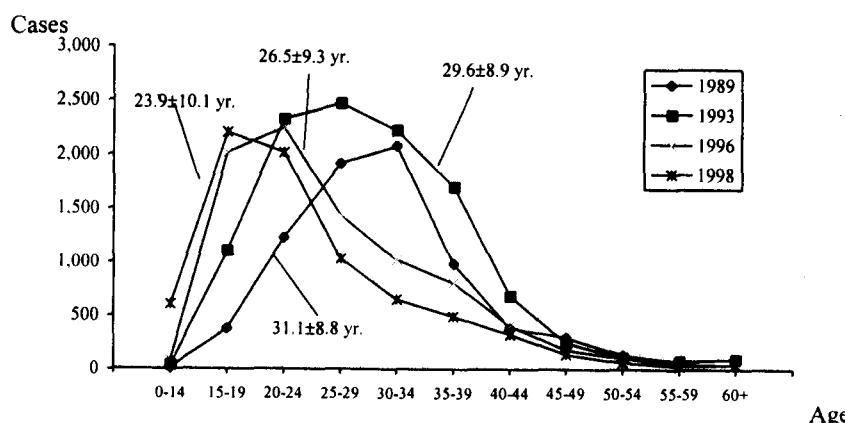


Fig. 1. Number of cases in each age-group year.

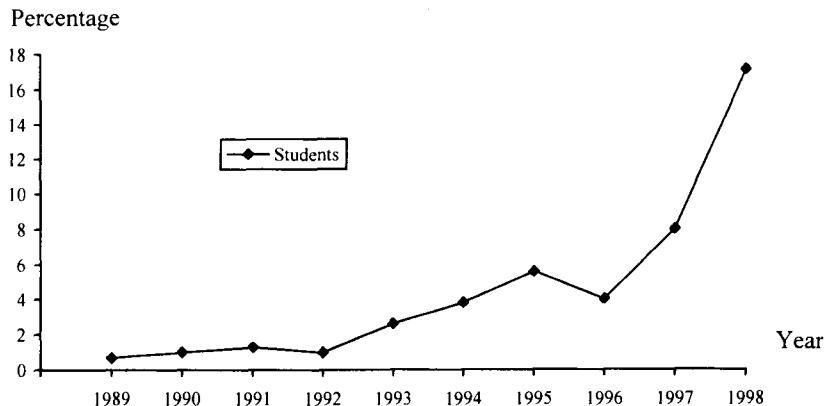


Fig. 2. Percentage of students (including college level) each year.

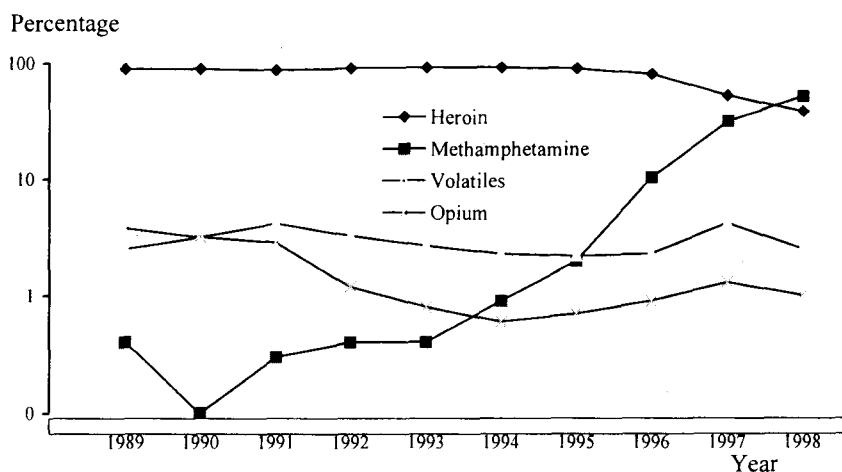


Fig. 3. Percentage of the patients classified by the type of addicted substance (logarithmic scale).

use increased from 0.4 per cent in 1989 to 10.3 per cent in 1996, 31.6 per cent in 1997 and then rapidly increased to 51.5 per cent in the last year. Volatile substance use was below 4.2 per cent. (Fig. 3)

### 3. Treatment outcome

The percentage of patients who attended the completed 2-3 weeks course of detoxification treatment varied from 30.9 per cent to 38.9 per cent, and the percentage of patients who joined the therapeutic community rehabilitation program was 0.8 per cent to 4.2 per cent. Mortality rate was 0.21-0.52 per cent

### HIV infection and mortality rate

HIV infection among addicts was 32.0 per cent in 1989 and this decreased to 20.9 per cent in 1998. Comparing old cases and new cases of drug addicts the prevalence of new cases decreased in the latter three years, from about 20 per cent to 16.1 per cent, 14.9 per cent and then 10.9 per cent (Fig. 4) The mortality rate of the inpatients has been divided into 2 periods. During the first period of 1989-1992, the rate increased from 0.21 per cent to 0.48 per cent. During the second period of 1993-1995, it increased from 0.25 per cent to 0.52 per cent. The mortality rate of the HIV infected group

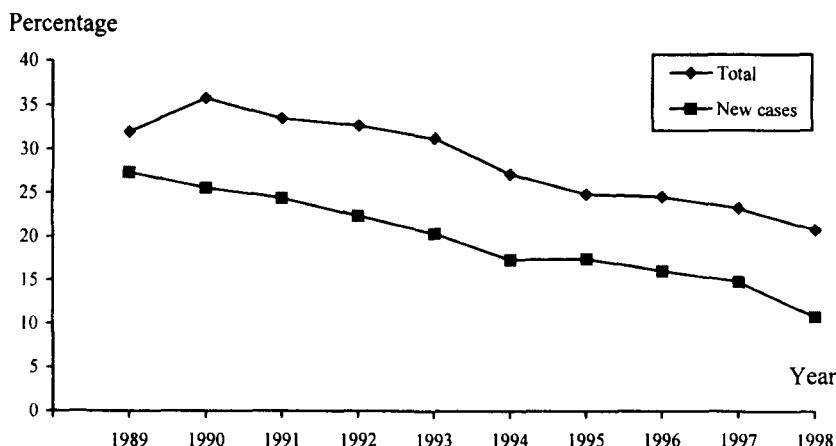


Fig. 4. Percentage of HIV infection.

Table 1. Percentage of the outcome of treatment in each year.

|                  | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|------------------|------|------|------|------|------|------|------|------|------|------|
| 2-3 weeks Detox. | 36.6 | 38.9 | 31.9 | 34.5 | 30.9 | 32.6 | 31.1 | 35.0 | 35.6 | 39.6 |
| T.C. Rehab.      | 0.9  | 0.8  | 1.1  | 0.9  | 0.8  | 1.0  | 2.0  | 2.5  | 3.1  | 4.2  |
| Dead             | 0.21 | 0.31 | 0.33 | 0.48 | 0.25 | 0.31 | 0.52 | 0.44 | 0.52 | 0.39 |

increased from 1.7 times in 1989 to 8 times in 1995 and 4.5 times in 1996.

## DISCUSSION

The study revealed an annually increasing number of drug abuse inpatients to more than 10,000 cases in 1995 but decreasing to 7,633 cases in 1998. Though, 91.5 per cent of the inpatients were male, the proportion of female patients also increased from 5.4 per cent to 8.0 per cent in the last 2 years, respectively. The most important and serious point was the increasing number of adolescent addicts (less than 20 years old). These numbers increased from a maximum of 7.1 per cent in 1989-1991 to 25.0 per cent, 28.9 per cent and 36.9 per cent in the last 3 years, respectively. This made the mean ages drop from 30.5-31.1 years old to 23.9 years old in 1998. This showed that there was a new broadening of addiction among adolescents also including younger females.

Occupation statistics also pointed out that there was a spreading of addiction among adole-

scents. This can be seen in the increasing number of student addicts from not more than 1.3 per cent in the first 4 years up to 4.0 per cent, 8.0 per cent and 17.1 per cent in the last 3 years, respectively. This finding suggests that measures to prevent adolescent substance abuse should be performed especially in secondary schools and age-group oriented treatment should be considered. An appropriate approach to adolescent addicts is the 2-3 week treatment camp program.

This study also revealed evidence of a higher education level among addicts. In 1998, 74.4 per cent of the addicts had a higher education. This challenged the old belief about educational effects on addicts' behavior.

Cataloging the types of drugs used revealed that heroin addiction was the original substance among addicts (90.6% in 1995). In the last year heroin addiction began to significantly decrease to below 40 per cent, and the new widespread substance was Methamphetamine(7).

The methamphetamine group sharply increased, especially in the last 2 years, and

became a serious major problem among addicts. It went from 0.4 per cent in 1993 to 31.6 per cent in 1997 and 51.5 per cent in 1998, and adolescents were the more rapidly increasing group(8). Inhalants have remained constant and only opium use has decreased (from 3.8% to 1.0%). The reason was probably the difficulty of finding opium(9).

HIV infection levels were the same in the first 4 years (32.0-35.8%) and decreased in the last 3 years (24.6%, 23.3% and 20.9% respectively)(10). New drug addict cases with HIV decreased from 27.4 per cent in 1989 to 10.9 per cent in 1998, and old drug addict cases with HIV were highest in 1990 (44.2%) but decreased in the last 3 years (39.4%, 37.5%, 37.9% respectively). The reasons for the decreased number were the high mortality rate among these addicts and the low HIV infection in the new methamphetamine addicts(11).

Successful treatment remained low in the 2-3 weeks treatment course (30.9%-39.6%). In rehabilitation, although the therapeutic community program(12) was efficient it took more than one year, so the number of patients who joined this program was only 2-3 per cent. In our outpatients, the methadone maintenance program in heroin IVDU succeeded in about 22 per cent(13). The mortality rate increased, especially in the HIV infected group (8 times in 1995 and 4.5 times in 1996). The course of death was studied in 1995 and 1996 showed that pulmonary infection (Pneumonia, TB and PCP) was about 66 per cent. Septicemia (Foci of infections not found) was about 25 per cent(14). Others were endocarditis, HIV wasting syndrom and congestive heart failure.

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## การบำบัดรักษาผู้ป่วยยาเสพติดของโรงพยาบาลธัญญารักษ์ ในช่วง 10 ปี (พ.ศ. 2532-2541)

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ปัญหาการใช้ยาและสารเสพติดได้เพิ่มความรุนแรงขึ้นมากในช่วง 3-4 ปี ที่ผ่านมา มีผู้ป่วยอายุน้อยเพิ่มขึ้นมาก จึงได้ทำการศึกษาข้อมูลจำเพาะของผู้ป่วยของโรงพยาบาลธัญญารักษ์ ที่เป็นผู้ป่วยติดยาเสพติด ตั้งแต่เดือน ตุลาคม พ.ศ. 2532 ถึง กันยายน พ.ศ. 2541 เป็นเวลา 10 ปี พบว่า จำนวนผู้ป่วยในแต่ละปี จากเดิม 7,595 คน ในปี พ.ศ. 2532 เพิ่มขึ้นเป็นลำดับ เป็น 10,661 ราย ในปี พ.ศ. 2538 ต่อมาลดลงในช่วง 3 ปีหลังเป็น 7,633 รายในปี 2541 โดยส่วนใหญ่มากกว่าร้อยละ 91.5 เป็นชาย ผู้ป่วยหญิงพบเพิ่มขึ้นเป็นร้อยละ 8.5 อายุเฉลี่ยลดลงอย่างมากจากอายุ  $31.1 \pm 8.8$  ปี เป็นอายุ  $23.9 \pm 10.1$  ปี อาชีพส่วนใหญ่เป็นแรงงาน แต่พบว่ามีนักเรียนนักศึกษาเพิ่มขึ้นอย่างมากโดยในช่วงแรกพบต่ำกวาร้อยละ 1.3 แต่ในช่วง 3 ปีหลังเพิ่มขึ้นเป็นร้อยละ 4.0, 8.0 และ 17.1 ตามลำดับ การศึกษาพบว่ามีการศึกษาสูงขึ้นเป็นลำดับ ยาและสารเสพติดที่เสพ ติดเชื้อโรคอันดลลงมากจากร้อยละ 80.6-92.4 ใน 8 ปีแรก ปีหลังสุดลดลงเหลือเพียงร้อยละ 38.0 ติดผิดนิดลดลง จากร้อยละ 3.8 เหลือร้อยละ 1.0 การติดเมทแอมเฟตามีนค่อนข้างมากในปีแรก จากร้อยละ 0.4 เป็นร้อยละ 10.3 และเพิ่มขึ้นอย่างมากในปีสุดท้ายเป็นร้อยละ 51.5 การติดเชื้อโรคเอดส์ พบว่า ลดลงจากร้อยละ 32.0 เป็นร้อยละ 24.5 ผลการบำบัดรักษา ผู้ป่วยอยู่ครบ 21 วันเพียงร้อยละ 30.9-43.5 และเข้ารับการพื้นฟูสมรรถภาพในรูปแบบชุมชนบำบัดต่อ ร้อยละ 0.8-4.2 อัตราตายของผู้ป่วยจากอัตราพัณล 2.1 เป็นพันละ 5.2 ในปี พ.ศ. 2539 และผู้ติดเชื้อโรคเอดส์เสียชีวิตมากกว่าผู้ป่วยไม่ติดเชื้อเอดส์ จาก 1.7 เท่า เป็น 8 เท่า ในปี พ.ศ. 2538 และ 4.5 เท่าในปี พ.ศ. 2539

คำสำคัญ : ยาเสพติด, การบำบัดรักษา, โรงพยาบาลธัญญารักษ์

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