Drug addicts treatment for eight years in Thanyarak Hospital (1989-1996)

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Objective: To review drug addicts treatment in Thanyarak Hospital
Setting: Thanyarak Hospital, Department of Medical Services, Thailand
Design: Retrospective description study
Subjects: Inpatient drug addicts from October 1989 to September 1996
Methods: Data from the record pool was reviewed for demographic information, diagnosis, HIV infection and outcome of treatment.

Results: The study showed that the total number of the patients increased from 7,595 cases in 1989 to 10,661 cases in 1995, but decreased in the last year (1996) to 8,409 cases. Males constituted more than 92.9% in each year. Mean ages markedly decreased from 31.1 ± 8.8 to 26.5 ± 9.3 years. Most of the patients were labourers or were unemployed. The number of students also increased. Initially, students constituted only 1.3% but in the last 3 years this increased to 3.8, 5.6 and 4.0%, respectively. The education level gradually increased. Heroin addiction was the most prevalent drug addict problem. Heroin addiction was stable at around 88.2–92.44% but

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decreased to 80.6% in the last year. Opium addiction markedly decreased form 3.8% to 0.9%. Amphetamine addict increased rapidly in the last year from 2.0% to 10.3%. HIV infection decreased from 32.0% to 24.5%. The outcome of the treatments showed that patients who attended the full 21 day treatment program was 30.9–38.9% but patients who joined the therapeutic community rehabilitation program was only 0.8–2.5%. The mortality rate increased from 2.1 per thousand to 4.4 per thousand and HIV infected patients died more than non-HIV's infected patients. This rate varied from 1.7 times in 1989 to 8 times in 1995 and 4.5 times in 1996.

Key word: Drug addicts.

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วิโจน วิชัย, สิโรทัย ศิริวิศวัชัย, อัษฎา กิจวิท, ศรัณย์ ลักษะกิจชัย. การนำบัตรกลางผู้ป่วยยาเสพติดของโรงพยาบาลสัญญาบัตร ใหม่ช่วง 2 ปี (พ.ศ. 2532-2539). จุฬา-
ลงกรณ์ราชวิทยาลัย 2540 ก.พ.;41(2): 133-40

วัตถุประสงค์ : เพื่อศึกษาการนำบัตรกลางผู้ป่วยยาเสพติดของโรงพยาบาลสัญญาบัตร
สถานที่ที่ทำการศึกษา : โรงพยาบาลสัญญาบัตร กรมการแพทย์
วิธีการศึกษา : รวบรวมสถิติข้อมูลทั้งไป และผลการรักษา
ผลการศึกษา : พบว่า จำนวนผู้ป่วยในแต่ละปี จากเดิม 7,595 คน ในปี พ.ศ. 2532เพิ่มขึ้นเป็นล้านครับ เป็น 10,661 ราย ในปี พ.ศ.2538 แต่ในปี พ.ศ.2539จำนวนลดลงเป็น 8,409 ราย โดยส่วนใหญ่มากกว่าร้อยละ 92.9 เป็นชาย ผู้ป่วยหญิงหญิงเพียงครึ่งเป็นร้อยละ 7.1 อายุเฉลี่ยลดลงอย่างมากจากเดิม 31.1±8.8 ปี เป็นอายุ 26.5±9.3 ปี อาร์ทิฟ จำนวนผู้ป่วยจาง
และวางแผน แต่พบว่าเป็นนักเรียนนักศึกษาเพิ่มขึ้น โดยในช่วงแรกมัน
ต่ำกว่าร้อยละ 1.3 แต่ในช่วง 3 ปีหลังเพิ่มขึ้นเป็นร้อยละ 3.8, 5.6 และ 4.0 ตามลำดับ การศึกษา พบว่าการศึกษาสูงขึ้นเป็นล้านครับ หมาย
และสารเสพติดที่เสพ ส่วนใหญ่ผู้ติดยาในแต่ละส่วนค่อนข้างคงที่ ร้อยละ 88.2-92.4 มีเพียงป่วยสูงลดลงเป็นร้อยละ 80.6 ติดต่อมัธยมสูงมาก
จากเริ่มต้น 3.8 เหลือร้อยละ 0.9 การติดยาที่มั่นคงเพิ่มขึ้นจากเริ่มต้น 0.4 เป็นร้อยละ 2.0 และเพิ่มขึ้นอย่างมากในปีสุดท้ายเป็นร้อยละ 10.5 การติดยาเสพติดด้วย พบว่า ลดลงจากเริ่มต้น 32.0 เป็นร้อยละ 24.5 ผลการนำบัตรกลางผู้ป่วยอยู่คู่กัน 21 วันเพิ่มที่ร้อยละ
30.9-38.9 และข่มขู่การเพิ่มสูงมากภายในรูปแบบรูปรูปแบบผู้นำบัตรต่อ
ร้อยละ 0.8-2.5 อัตราตายของผู้ป่วย จากอดราวันละ 2.1 เป็นพันละ 4.4
ในปี พ.ศ.2539 และผู้ติดยาเสพติดด้วยกันมากกว่าผู้ไม่ติดยาเสพติด
โรเบ็กซ์จาก 1.7 เท่าเป็น 8 เท่า ในปี พ.ศ.2538 และ 4.5 เท่า ในปี พ.ศ.2539
In the past 2-3 years, there has been an increasing numbers of drug addict related problems. Street drug use, such as amphetamines and volatile substances have spread across the country in these last 2-3 years. There is evidence of a significantly increasing number of adolescent addicts. Efforts had been made to clarify the situation and to find the right way to deal with the problem. We determined to make a retrospective study of the inpatients at Thanyarak Hospital, the largest addiction hospital in Thailand. It has 670 beds in the inpatient ward, divided into 410 beds for the first 21 days of the detoxification period for all types of drug addicts and 260 beds for the rehabilitation period which takes 1.5 years in therapeutic community program for all types of drug addict too.

Materials and Methods

In this retrospective study, data was collected from October 1989 to September 1996. These records were obtained from the record pool of the statistics information center of the hospital. The statistical indexes in this study are percentage, per thousand, mean and standard deviation.

Results

In 1989, there were 7,599 cases, and that number increased every year to 10,661 cases in 1995 but decreased in the last year (1996) to 8,409 cases. The significant points of this study are as follows.

1. Epidemiological data

Most of the patients (>92.9%) were male. Females made up 292 cases (3.8%) in 1989 and this increased to 599 cases (7.1%) in 1996.

Age The average age markedly decreased from 31.1±8.8 years in 1989 to 26.5±9.3 years in 1996 (Figure 1).

![Figure 1. Number of cases in each age group per year.](image-url)
Occupation 40.2–60.8% were labourers and 15.1–39.7% were unemployed. The number of students markedly increased. During 1989–1992, that number was below 1.3%, but from 1993–1995, the numbers were increased to 2.6%, 3.8% and 5.8% and slightly decreased to 4.0% in the last year.

Figure 2. Percentage of students (include college level) each year.

Education Levels of education among the addicts during 1989–1996 rose. In 1989, the number of patients who had graduated from secondary school was 35.9%. In 1996, the number increased to 46.4%, and higher than secondary school was 10.5% in 1989 then the number was increased to 16.5% in 1996.

2. Type of drug use.

The initial rate of heroin addiction was around 88.2–92.4% but this decreased in the last year to 80.6%. Opium addiction markedly decreased from 3.8%, in 1989 to 0.9% in 1996. Amphetamine use increased from 0.4% in 1989 to 2.0% in 1995 and then rapidly increased to 10.3% in the last year. Volatile substance use was 2.5% in 1989. It reached its peak of 4.2% in 1991 and then slowly decreased to 2.3% in 1996 (Figure 3).

Figure 3. Percentage of the patients divided by the type of addictive substance (logarithmic scale).
3. Treatment outcome the percentage of patients who attended the full 21-day course of treatment varied from 30.9% to 38.9%, and the percentage of patients who joined the therapeutic community rehabilitation program was 0.8% to 2.5%. Mortality rates were 0.21–0.52%.

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

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<td>21 days</td>
<td>36.6</td>
<td>38.9</td>
<td>31.9</td>
<td>34.5</td>
<td>30.9</td>
<td>32.6</td>
<td>31.1</td>
<td>35.0</td>
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<td>Rehabilitation</td>
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<td>0.8</td>
<td>1.1</td>
<td>0.9</td>
<td>0.8</td>
<td>1.0</td>
<td>2.0</td>
<td>2.5</td>
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<tr>
<td>Dead</td>
<td>0.21</td>
<td>0.31</td>
<td>0.33</td>
<td>0.48</td>
<td>0.25</td>
<td>0.31</td>
<td>0.52</td>
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**HIV infection and mortality rates**

HIV infection among addicts was 32.0% in 1989 and this decreased to 24.5% in 1996. Comparing old cases and new cases of drug addicts the prevalence of old cases decreased in the latter three years, from 42.4% down to 39.4%, 37.5% and then 37.9% (Figure 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% to 0.48%. During the second period of 1993–1995, it increased from 0.25% to 0.52%.

The mortality rate of the HIV infected group increased from 1.7 times in 1989 to 8 times in 1995 and 4.5 times in 1996.

![Figure 4. Percentages of HIV infection.](image)

**Discussion**

This study revealed an annually increasing number of drug abuse inpatients to more than 10,000 cases in 1995 but decreasing to 8,409 cases in 1996. Though, 92.9% of the inpatients were male, the proportion of female patients also increased from 5.4% to 6.2% and 7.1% in the last 3 years, respectively. But the most important and
serious point was the increasing number of the adolescent addicts (lower than 20 years age). These numbers increased from a maximum of 7.1% in 1989-1991 to 16.4%, 22.7% and 25.0% in the last 3 years, respectively. This made the mean ages drop from 30.5-31.1 years to 26.5 years in 1996. This showed that there was a new spreading of addiction among adolescents, including younger females also.

Occupation statistics also pointed out that there was a spreading of addiction among adolescents. This can be seen in the increasing number of addicted students from not more than 1.3% in the first 4 years up to 3.8%, 5.6% and 4.0% in the last 3 years, respectively. This finding suggests that measures to prevent adolescent substance abuse should be increased 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 higher education levels among addicts. In 1996, 63.0% of the addicts had some higher education. This challenged the old believe about education effects on addiction behavior.

Cataloging the types of drugs used revealed that heroin addiction still played the major roll among addictive substances (90.6% in 1995). The adolescents had high numbers for heroin addiction. In the last year heroin addiction began to significantly decrease to 80.6%, probably due to the expensive of heroin.

The amphetamine use group sharply increased, especially in the last 2 years. It went from 0.4% in 1993 to 2.0% and 10.3%, and adolescents still the more rapidly increasing group. Inhalant use remained constant and only opium use decreased (from 3.8% to 0.9%). The reason was the probably difficulty of finding opium.

HIV infection levels were the same in the first 4 years (32.0-35.5%) and decreased in the last 3 years (25.2%, 24.8% and 24.5%, respectively). New drug addicts with HIV decreased from 27.4% in 1989 to 14.3% in 1996, and longer term 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 likely reason was the high mortality rate among these addicts.

Successful treatment remained low in the 21 day treatment course (30.9%-38.9%). In the 14 day course, the percentage increased to 45%. In rehabilitation, although the therapeutic community program was efficient it took more than one and a half years so the numbers of patients who joined this program was only 1-2%. 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) were about 66%. Septicemia (Not found foci of infections) were about 25%. Else were Endocarditis, HIV wasting syndrome and Congestive heart failure.
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