

Increasing Trend of Illicit Drug Abuse in Thai Parturient at Siriraj Hospital

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Abstract

Objective : To report the magnitude of the problem and to evaluate the outcome of maternal illicit drug use in Thai parturients.

Design : Retrospective case-control study.

Setting : Department of Obstetrics and Gynecology, Faculty of Medicine Siriraj Hospital, Mahidol University.

Subject : The subjects were 44,640 parturients who had deliveries at Siriraj Hospital from January 1998 to December 2001 and were divided into two groups. The study group consisted of 66 parturients with a history of illicit drug use and the control group consisted of 44,574 parturients without a history of illicit drug use.

Intervention : Medical records of 66 parturients with a history of illicit drug use were reviewed. Obstetric statistics of the department were retrieved from the computerized database in the Division of Obstetric and Gynecologic Registry. The data were analyzed using descriptive statistics.

Main outcome measure : Characteristics of parturients, pregnancy outcome, type and incidence of illicit drug.

Results : Within the study period, 66 cases of maternal illicit drug use were identifiable during the intrapartum period; 65 cases used amphetamine or derivatives and 1 case used an opioid derivative. The number had risen from 1 case in 1998 to 58 cases in 2001. Mean age of the patients was 23.30 ± 6.04 years. Compared to the control group which included 44,574 parturients, the patients had a lower incidence of antenatal care (ANC rate = 21.21% vs 94.35%; RR = 0.23, 95% CI = 0.14-0.26), a higher incidence of HIV infection (10% vs 2%; RR = 6.09, 95% CI = 2.83-13.12), a higher incidence of birth before arrival (BBA rate = 9.09% vs 1.06%; RR = 8.59, 95% CI = 3.98-18.51), and a lower cesarean section rate (10.60% vs 26.36%; RR = 0.40, 95% CI = 0.20-0.81). There were no serious intrapartum, immediate postpartum and neonatal complication. Fetal outcome included a higher incidence of low birth weight infants (22.73% vs 10.23%; RR = 2.22, 95% CI = 1.42-3.46) and a smaller head circumference than the normal range of Thai fetal biometry (31.85 ± 1.47 cm).

Conclusion : There is an increasing trend of illicit drug use in Thai parturients. Although the present case series of drug abuse in Thai parturients cannot give the whole picture of maternal drug abuse in the Thai population, the dramatic increase in the identifiable cases during the past 4 years is very alarming. Currently, the outcome of pregnancy in case detected during intrapartum is not much different from that in the general population. However, there are potential risks for the patients and their babies. All medical staffs should be aware of this condition. Careful clinical data gathering and laboratory testing are suggested for prevention of complications and the potential hazards of this problem.

Key word : Illicit Drug, Amphetamine, Narcotic, Pregnancy Outcome

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During the past decade illicit drug abuse has become a major public health concern in Thailand. This issue rapidly casts the problem to people in all socioeconomic strata, ages, and sexes. The problem is a complex biopsychosocial issue that requires attention from the entire society including policy makers, politicians, health care providers, social service providers and researchers⁽¹⁾.

There are 2 major groups of illicit drugs, i.e. CNS stimulants and narcotics. The CNS stimulants include cocaine, and amphetamine and its derivatives; the latter are a crisis in Thailand. The narcotics include morphine and its derivatives (opioid substances). Adverse effects of these drugs are well known NRfu⁽²⁾. Acute toxic effects can cause life-threatening conditions such as hypertension, tachycardia, stroke, and myolysis in the CNS stimulants, or cardiorespiratory arrest in narcotics. Both groups can cause long-term permanent damage of the central nervous system. Intravenous drug abuse, usually found with narcotics and occasionally in CNS stimulants, adds extra adverse effects. The patients who administer drugs *via* this route are at high risk of sexually transmitted diseases (e.g. HIV infection, types A, B and C hepatitis, etc.) and other medical complications (e.g. phlebitis, pneumonia, bacterial endocarditis, etc.) as a result of needle sharing and unsafe sexual practices⁽¹⁾.

Although drug abuse is currently a well-recognized problem in Thailand, precise epidemiologic data are not available. The epidemiologic data of maternal drug abuse are even more difficult to obtain since most studies rely on self-reporting⁽²⁾. Drug-abused women usually suffer from multiple psychosocial problems, including single parenthood, poverty, homelessness, low education, domestic violence, childhood rape, and sexual abuse⁽¹⁾. These lead to social and emotional problems including depression, poor self-esteem and poor interpersonal relationships. The majority of women who use illicit drugs are of childbearing age⁽³⁾. Pregnancy in maternal drug abuse is at high-risk. Both the gravida and her baby would be affected by the short-term and long-term adverse consequences of the drug^(4,5). Moreover, they are at risk of serious obstetric and fetal complications. Special obstetric care is needed for the entire course of pregnancy in order to prevent an acute life-threatening condition and long-term permanent neurological damage^(6,7).

Although drug abuse in pregnancy is a rapidly emerging problem in Thailand, so far there is a lack of information. Information from Western countries may not always be applicable to patients in Thailand. For example, the major problematic drug in the USA is cocaine⁽⁸⁾ but the current crisis in Thailand is mainly from amphetamines and their derivatives⁽⁹⁾.

Therefore, more local research is needed for the better care of the patients.

The objective of this study was to report the magnitude of the problem and to evaluate the outcome of maternal illicit drug use in Thai parturients.

MATERIAL AND METHOD

This study was performed in the Department of Obstetrics and Gynecology, Faculty of Medicine, Siriraj Hospital. The patients' information was obtained by a retrospective review of medical records of and from computerized discharge data in the Division of Obstetric and Gynecologic Registry. All parturient who were admitted from January 1998 to December 2001 were analyzed. During the study period there was no universal screening program for maternal illicit drug abuse. Only suspected cases or cases that gave a history of drug abuse underwent toxicology tests, i.e. urine testing for amphetamines, morphine, and cannabis accordingly (the first 24 cases). Not until July 2001 were all three tests performed in each patient (another 42 cases). The urine toxicology tests were performed in the Department of Forensic Medicine Laboratory.

The illicit-drug-use parturients were defined as parturients who gave a history of illicit drug use and had at least one positive toxicology test. The data extracted from the medical records included the characteristics of the parturients (i.e., age, antenatal care status, gravidity, parity, number of abortions, status of labor at admission), maternal outcome of pregnancy (route of delivery and complications of labor), and neonatal outcome of pregnancy (birth

weight, 1- and 5-minute APGAR score, and head circumference). All data were analyzed by descriptive statistics and presented as number of patients, percentage, mean \pm SD as appropriate. During the same period, obstetric statistics of the department including similar parameters were obtained from the Division of Obstetric and Gynecologic Registry and presented in parallel to the illicit-drug group. Comparative analysis was performed in some parameters using the odds ratio (OR) and 95 per cent confidence interval (95% CI).

RESULTS

From January 1998 to December 2001 there were 66 cases of illicit-drug-used parturients in Siriraj Hospital. During the same period there were 44,515 deliveries with 44,640 newborns (including those of drug abusers).

Fig. 1 shows the annual number of identifiable cases. The number exponentially increased from 1 case in 1998 to 58 cases in 2001. The incidence had risen from 0.1 case/1,000 deliveries to 6 case/1,000 deliveries.

Table 1 and 2 reveal the characteristics of the illicit-drug-use parturients. The patients were 23.30 ± 6.04 years old with gravidity 2.42 ± 1.33 , parity 1.11 ± 1.12 , and number of previous abortions 0.36 ± 0.72 . The incidence of illicit-drug-use patients with antenatal care (ANC) (21.21%) was significantly lower than that of other parturients (94.35%) with RR = 0.23 (95% CI = 0.14-0.26). Rapid test for HIV was obtained in 60 patients who delivered in the hospital. The result was positive in 9.09 per cent of

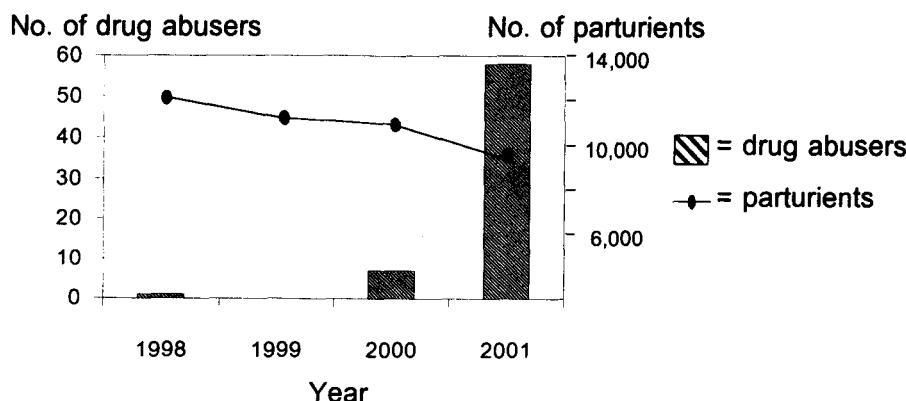


Fig. 1. The number of identifiable cases of illicit-drug-use parturients (striped box) and total number of parturients (line) in Siriraj Hospital from January 1998 to December 2001.

Table 1. Characteristics of illicit-drug-use parturients in Siriraj Hospital from January 1998 to December 2001.

Parameter	Abuser		
	N	%	X ± SD
Age (years)	66		23.30 ± 6.04
Gravidity			2.42 ± 1.33
Parity			1.11 ± 1.12
Abortion			0.36 ± 0.72
Number of cases with positive urine amphetamine ^(a)	65 in 66	100	
Number of cases with positive urine opioid	1 in 41	2.5	

(a) Urine amphetamine was not performed in 1 case who gave a history of only opioid abuse

Table 2. Characteristics of parturients in Siriraj Hospital from January 1998 to December 2001.

Parameter	Abuser		Non-abuser		RR (95% CI)
	N (66)	%	N (44,574)	%	
Number of cases with ANC	14 in 66	21.21	42,179	94.35	0.23 (0.14-0.26)
Number of cases with positive HIV test	6 in 60	9.09	663	1.48	6.09 (2.83-13.12)

Table 3. Route of delivery.

Route of delivery	Abusers		Non-abusers		RR (95% CI)
	N	%	N	%	
Total number of births	66	100	44,574	100	
Birth before arrival (BBA)	6	9.09	472	1.06	8.59 (3.98-18.51)
Cesarean section	7	10.60	11,748	26.36	0.40 (0.20-0.81)

cases compared to 1.48 per cent of other parturients (RR = 6.09, 95% CI = 2.83-13.12). Urine toxicology test was performed according to the patients' history. Urine amphetamine was positive in all 65 cases who gave a history of amphetamine abuse. Likewise, 1 case with a history of opioid abuse had a positive urine opioid test. Since July 2001, both the urine amphetamine and urine opioid test have been performed in all cases with a history of any illicit drug use. None had 2 positive tests.

Table 3 reveals the route of delivery. Most of the patients were admitted to the labor room during the intrapartum period. Six cases (9.09%) gave birth before arrival (BBA). Compared to the incidence in other parturients (1.06%), BBA in the drug abusers was significantly higher (RR = 8.59, 95% CI = 3.98-18.51). There was no other intrapartum or immediate postpartum complications in the present case series.

Cesarean section rate was 10.06 per cent in the patients; the rate of which was significantly lower than in other parturients (26.36%) with RR = 0.40 (95% CI = 0.20-0.81). Although fetal distress was an indication for cesarean section in approximately half of the cases, none of the babies had severe birth asphyxia.

Fetal outcomes are shown in Table 4. The gestational age at delivery was not shown since the majority of the patients never had prenatal care, therefore, reliable gestational age could not be determined. Moreover, the Ballard's score assessment for gestational age of the new born was performed only in problematic cases, i.e. low birth weight infant, thus, the incidence of preterm could not be determined. Immediate neonatal outcomes including 1-minute APGAR score (8.92 ± 0.53), 5-minute APGAR score (9.97 ± 0.26) were within normal limits. Head circumference (31.85 ± 1.47 cm) was lower than the average

Table 4. Fetal outcome of maternal drug abuse.

Fetal outcome	Abuser			Non-abuser			RR (95% CI)
	N	%	X ± SD	N	%	X ± SD	
Total number of infants	66	100		44,574	100		
Number of male infants	33	50		23,034	51.53		0.97 (0.76-1.23)
Number of low birth weight infants (<2,500 g)	15	22.73		4,551	10.23		2.22 (1.42-3.46)
Head circumference	66		31.85 ± 1.47				NA NA
1-minute APGAR score(a)	60		8.92 ± 0.53				NA NA
5-minute APGAR score(a)	60		9.97 ± 0.26				NA NA

Note NA = data not available

(a) APGAR score of 6 BBA cases were not applicable

of term babies (35 cm). The incidence of low birth weight infants was higher than other parturients (RR = 2.22, 95% CI = 1.42-3.46).

DISCUSSION

Pregnancy in a drug abuser is high-risk(4,5). Poor pregnancy outcome results from multiple factors including (1) the direct adverse effects of the drug, (2) concomitant substance abuse, (3) socioeconomic-associated factors, and (4) obstetric complications. It is difficult to determine the direct influence of adverse effects on pregnancy outcome since they are always confounded by other factors coexisting in this high-risk population(2,10,11). These cofounders include low socioeconomic status, poor nutritional status, lack of prenatal care opportunity, concomitant substance abuse, and adverse environment.

However, there is evidence that maternal drug abuse itself is related to a higher incidence of obstetric and fetal complications compared to a similar high-risk population(4). Common complications include pregnancy induce a hypertension (PIH), abruptio placenta, severe infections, premature rupture of membranes (PROM), premature delivery, intrauterine growth restriction (IUGR), breech presentation, fetal demise, and abortion(2,3). In present series, the authors did not find any significant intrapartum or early neonatal complications. It should be emphasized that the present patients were identified from only suspicious parturients during the intrapartum period. The incidence in the present study is certainly far less realistic because the incidence in non-skeptical cases was not known. Moreover, the incidence during the prenatal period was not known. Those who had early obstetric complications such as miscarriage or illegal abortion would not have access to

the formal health care system, thus, this information could not be obtained. In fact, intrapartum detection is too late to provide the maximal benefit for pregnancy outcome. There should be a strategy to screen cases in the early prenatal period.

Prenatal screening for early detection of maternal drug abuse would be most beneficial for the prevention of long-term sequelae to both the patient and her off spring. There is evidence that prenatal exposure to drug can permanently damage fetal neurons(5). Therefore, case identification and intervention during the prenatal period would attenuate long-term psychoneurological deficit in offsprings. However, random screening is unethical regarding the patient's rights(12). A study that performed universal intrapartum screening using the urine toxicology test demonstrated that approximately 40 per cent of test positive cases denied substance abuse at any time(10). The authors could not obtain such an incidence in the present series since universal screening was not performed.

Prenatal universal screening is not available in the current obstetric setting and its feasibility is remote from reality. Currently a high index of suspicion during clinical data gathering seems to be the best measure for case identification. ACOG in 1994 issued a practical guideline for substance abuse and presented a list of signs and symptoms suggestive of a high-risk for chemical abuse(12). In the present case series, the characteristics of parturients who were at high risk of illicit drug abuse lacked of prenatal care, coming to the hospital late after the onset of labor, or giving birth before arrival at the hospital (BBA). A study from the USA using a structured interview for screening of maternal drug abuse found that either a past or present history of drinking alcohol

or cigarette smoking were significant predictors of drug abuse. Additional significant predictors for current maternal drug abuse included those who had moderate or severe depression, who lived alone or with small children, who lived in an urban area, and who lived with someone using drugs or alcohol(13).

Therefore, all gravida should be asked about the above information in the context of the health evaluation. If this part of the history is positive, they should be referred for appropriate counseling and further evaluation. Although maternal interview has the lowest sensitivity in detecting illicit drug exposure(14), it may be the most cost-effective way for the screening(13). Interviewing regarding this issue is an art. Straightforward intrusive questions are prohibited because it can induce defensive reaction from the patients, consequently the truth could not be revealed.

Owing to the fact that the present patients rarely attended prenatal care, the prenatal screening program may not have an impact. More general modality may be more suitable. The information about the adverse effects of substance abuse should be incorporated into a regular prenatal educational program. A confidential and friendly channel should be available for these patients. Every gravida should be informed and encouraged to use such a channel.

If cases are identified during the prenatal period, the patients should be counseled regarding the risk of specific drugs. They should be informed about common pregnancy complications related to drug abuse such as preterm birth, growth restriction, fetal death and long-term neurobehavioral effects. A program of drug detoxification should be selectively offered at an appropriate time. An early ultrasound examination is recommended in order to confirm gestational age and to establish an accurate baseline for following fetal growth. Fetal surveillance should be started as soon as there is a sign of pregnancy complication. This comprehensive prenatal care can attenuate some of the maternal and neonatal complications of maternal substance abuse(15). Unfortunately, the presented identifiable cases rarely attended prenatal care, so they failed to obtain the opportunity to prevent such complications. Ironically, none of the patients in the present series presented with prenatal complications.

All the cases in the present study were identified during the intrapartum period. The manage-

ment in this period was to prevent intrapartum complications but not long-term adverse effects. Obstetric complications vary on types of drug and their side effects (i.e. toxic or withdrawal effects). Amphetamine and its derivatives were the most common illicit drugs used by the presented patients. They acted as an sympathomimetic agent. Their toxic effects during intrapartum include hypertension, tachycardia, proteinuria, preterm labor and placental abruption(5). Therefore, both the gravida and her fetus should be closely monitored. Normal delivery should be attempted and cesarean section is performed only with obstetric indications. In the present series, the authors did not find any cases with severe maternal toxic effects. Neither was birth asphyxia found in the infant. The patients had a lower cesarean section rate than the average rate in Siriraj Hospital. The presented patients may not have been cases of profound drug abuse. However, long-term neurological effect of the offsprings could not be excluded since the infants had smaller than average head circumference.

Postpartum care includes prevention, early detection and treatment of immediate complications such as postpartum hemorrhage and puerperal infection. Breast-feeding is discouraged since even a minimal amount of drug in milk can have a toxic effect on the baby. The newborn have to be closely monitored by a neonatologist. Long-term follow-up with psychosocial support is indispensable for both mother and child.

In conclusion, the use of illicit drugs during pregnancy is certainly an important issue for mothers, their babies, and the health care system(2). Obstetricians and primary physicians should be familiar with all aspects of drug abuse during pregnancy. Early detection of the cases and appropriate intervention, such as referral to maternal drug rehabilitation and social support programs, would be appropriate management. A multidisciplinary team consisting of an obstetrician, neonatologist, toxicologist, psychiatrist, and social worker should be developed. A team member should approach the patient without prejudice but with good understanding of psychosocial deficit underlying this problem in a supportive manner(16). More studies regarding the epidemiologic data of maternal drug abuse, the behavior and attitude of the patients, appropriate screening methods, and the psychosocial approach for Thai women have yet to be determined.

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REFERENCES

1. Kaltenbach K, Berghella V, Finnegan L. Opioid dependence during pregnancy. Effects and management. *Obstet Gynecol Clin North Am* 1998; 25: 139-51.
2. Sauter D, Habal R. Drug therapy and substance abuse. In: Marx JA, editor. *Rosen's Emergency Medicine : Concepts and clinical practice*. 5 ed. St Louise: Mosby, 2002: 2453-7.
3. Wolman I, Niv D, Yovel I, Pausner D, Geller E, David MP. Opioid-addicted parturient, labor, and outcome: A reappraisal. *Obstet Gynecol Surv* 1989; 44: 592-7.
4. Oro AS, Dixon SD. Perinatal cocaine and methamphetamine exposure: Maternal and neonatal correlates. *J Pediatr* 1987; 111: 571-8.
5. Plessinger MA. Prenatal exposure to amphetamines. Risks and adverse outcomes in pregnancy. *Obstet Gynecol Clin North Am* 1998; 25: 119-38.
6. Eriksson M, Jonsson B, Zetterstrom R. Children of mothers abusing amphetamine: Head circumference during infancy and psychosocial development until 14 years of age. *Acta Paediatr* 2000; 89: 1474-8.
7. Eriksson M, Jonsson B, Steneroth G, Zetterstrom R. Amphetamine abuse during pregnancy: Environmental factors and outcome after 14-15 years. *Scand J Public Health* 2000; 28: 154-7.
8. Substance abuse and mental health services administration office of applied studies. National household survey on drug abuse: Population estimates 1999. Rockville (MD): US Department of Health and Human Services, Public Health Service; 2001.
9. Amphetamine crisis. In: Department of Medical Services, Ministry of Public Health; 2002.
10. Gillogley KM, Evans AT, Hansen RL, Samuels SJ, Batra KK. The perinatal impact of cocaine, amphetamine, and opiate use detected by universal intrapartum screening. *Am J Obstet Gynecol* 1990; 163: 1535-42.
11. Bauer CR, Shankaran S, Bada HS, et al. The maternal lifestyle study: Drug exposure during pregnancy and short-term maternal outcomes. *Am J Obstet Gynecol* 2002; 186: 487-95.
12. ACOG. Substance abuse. In: ACOG technical bulletin. Washington DC: American College of Obstetricians and Gynecologists, 1994.
13. Chasnoff IJ, Neuman K, Thornton C, Callaghan MA. Screening for substance use in pregnancy: A practical approach for the primary care physician. *Am J Obstet Gynecol* 2001; 184: 752-8.
14. Ostrea EM, Jr, Knapp DK, Tannenbaum L, et al. Estimates of illicit drug use during pregnancy by maternal interview, hair analysis, and meconium analysis. *J Pediatr* 2001; 138: 344-8.
15. ACOG. Substance abuse in pregnancy. In: ACOG technical bulletin. Washington DC: American College of Obstetricians and Gynecologists, 1994.
16. Finnegan LP, Wapner RJ. Narcotic addiction in pregnancy. In: Neibyl JR, editor. *Drug use in pregnancy*. Philadelphia: Lea and Febiger, 1987: 452-80.

การเพิ่มขึ้นในอุบัติการณ์ของการใช้สารเสพติดผิดกฎหมายในสตรีไทยที่คลอดในโรงพยาบาลศิริราช

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พิชัย ลีรัชศรี, พ.บ.*; ดาวราภา นาโนนช, พ.บ.*; วิทยา ภิรุพันธ์, พ.บ.*

วัตถุประสงค์ : เพื่อรายงานขนาดของปัญหาเกี่ยวกับการใช้สิ่งเสพติดผิดกฎหมายในสตรีไทยและศึกษาผลกระทบในทางสุติดิคสตรีเมื่อผู้ป่วยมาคลอดที่โรงพยาบาลศิริราช

รูปแบบการวิจัย : การศึกษาข้อมูลแบบมีกลุ่มเปรียบเทียบ

สถานที่ทำการวิจัย : ภาควิชาสูติดิคสตรี-นรีเวชวิทยา คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล

กลุ่มตัวอย่าง : สตรีที่มาคลอดบุตร ณ โรงพยาบาลศิริราช ในระหว่างเดือนมกราคม 2541 ถึง ธันวาคม 2544 จำนวน 44,640 ราย โดยแบ่งเป็น 2 กลุ่ม กลุ่มศึกษาเป็นสตรีที่ได้รับการวินิจฉัยว่ามีการใช้สิ่งเสพติดในระหว่างการตั้งครรภ์จำนวน 66 ราย กลุ่มควบคุมเป็นสตรีที่คลอดบุตรปกติ และไม่มีประวัติการใช้สิ่งเสพติด จำนวน 44,574 ราย

การกระท่า : ทำการทบทวนรายงานผู้ป่วยคลอดที่ได้รับการวินิจฉัยว่ามีการใช้สิ่งเสพติดในระหว่างการตั้งครรภ์เปรียบเทียบกับข้อมูลสถิติทางสูติกรรมในระยะเวลาเดียวกันที่ได้จากฐานข้อมูลของสาขาวิชาเวชสถิติ ภาควิชาสูติดิคสตรี-นรีเวชวิทยา

ตัวแปรที่สำคัญ : ลักษณะของมารดา และทางภูมิหลังคลอด, ผลของการคลอดที่มีต่อมารดา และทารก, ชนิดและอุบัติการณ์ของการใช้สิ่งเสพติด

ผลการวิจัย : จากการศึกษาพบผู้ป่วยทั้งสิ้น 66 ราย โดยที่ 65 รายใช้สารเสพติดในกลุ่มแอมเฟตามีน อีก 1 รายใช้สารอนุพันธ์ของเฝี่น จำนวนผู้ป่วยเพิ่มขึ้นจาก 1 ราย ในปี 2541 เป็น 58 รายในปี 2544 ผู้ป่วยมีอายุเฉลี่ย 23.30 ± 6.04 ปี เมื่อเปรียบเทียบกับสตรีที่มาคลอดรายอื่น ๆ พบร่วมสตรีที่ใช้สารเสพติดมีอัตราการฝ่าครรภ์ต่ำกว่า อัตราการติดเชื้อเออดล์สูงกว่า อัตราการคลอดบุตรก่อนมาถึงโรงพยาบาลสูงกว่า และอัตราการผ่าตัดคลอดต่ำกว่า ไม่พบภาวะแทรกซ้อนที่รุนแรงในระหว่างคลอดและหลังคลอด ไม่พบภาวะแทรกซ้อนในการแกรคลอด

สรุป : จากการศึกษาพบอุบัติการณ์การใช้สิ่งเสพติดผิดกฎหมายเพิ่มขึ้นอย่างรวดเร็วในสตรีที่มาคลอดในโรงพยาบาลศิริราชในระยะ 4 ปีที่ผ่านมา แม้ว่าในขณะนี้ยังไม่พบภาวะแทรกซ้อนที่รุนแรงในระยะคลอดแต่เนื่องจากแนวโน้มที่จะพบผู้ป่วยในกลุ่มนี้เพิ่มขึ้นเรื่อย ๆ บุคคลากรทางการแพทย์ควรจะให้ความรู้ในทุกด้านที่เกี่ยวข้องกับการใช้สารเสพติดในสตรีมีครรภ์เพื่อสามารถป้องกันภาวะแทรกซ้อนและอันตรายที่อาจเกิดขึ้นได้

คำสำคัญ : สิ่งเสพติด, แอมเฟตามีน, สารอนุพันธ์ของเฝี่น, ผลของการคลอดที่มีต่อมารดาและทารก

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