



# 物質成癮

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# 「你少用我折扣」 泰國助民戒癮

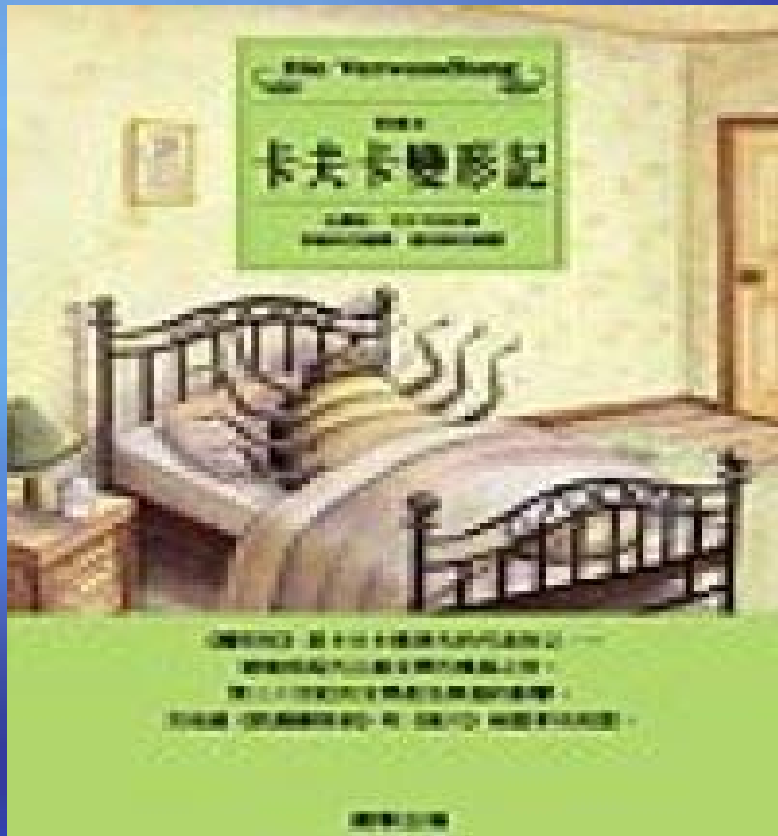
- 今年首都曼谷展開第二波「你少用我折扣」的活動，準備讓泰國民眾戒掉塑膠袋的癮頭。



- POTS WORLD：破世界 週四, 2010-07-01 20:02



*In this famous photograph taken from the Rathaus tower (town hall tower), August Schmitz's sculpture "Goodness" surveys Dresden after a firestorm started by Allied bombers in 1945.*



morally and,uh,possibly even...

在道德上,甚至可能在...

tu.6.cn



# 壹、定義

所謂「物質」是指一種藥物，此藥物的化學性質會改變生物體的功能或結構。而精神作用物質則是指不當使用時，會使個體的情緒、知覺或意識產生改變，可能造成個人或社會功能明顯損失。

- 1.中樞刺激物質
- 2.中樞抑制物質



# 物質濫用

- 同一年期間內出現下列行為表現之一項（或一項以上）。
  - （一）反覆使用物質，以致無法實踐工作、學業或家庭的主要角色。
  - （二）對身體有害的狀況下仍繼續使用物質。
  - （三）屢次捲入與物質使用有關的法律糾紛中。
  - （四）即使使用藥物已產生個人、社會或人際問題，仍持續物質的使用。

DSM-IV TR.

# 物質依賴

同一年期間內出現下列行為表現之 三項（或三項以上）。

- （一）耐受性。
- （二）戒斷症狀。
- （三）物質的攝取比個人意願為更大量或更長期。
- （四）對戒除物質有多次不成功的努力。
- （五）花費許多時間在尋找或取得藥物。
- （六）因為對物質的渴望而放棄或減少重要的社會、職業或娛樂活動。
- （七）因為物質使用，雖持續或重複發生身體或心理問題，但仍繼續使用物質。

DSM-IV

# 毒品危害防制條例

- 本條例所稱毒品，指具有成癮性、濫用性及對社會危害性之麻醉藥品與其製品及影響精神物質與其製品。
- 毒品依其成癮性、濫用性及對社會危害性分爲四級，其品項如下：
  - 第一級 海洛因、嗎啡、鴉片、古柯鹼及其相類製品。
  - 第二級 罌粟、古柯、大麻、安非他命、MDMA、安非他命(Amphetamine)、配西汀(Demerol)、潘他挫新(Pentazocine)及其相類製品。
  - 第三級 西可巴比妥(Secobarbital)、異戊巴比妥(Amobarbital)、Ketamine、GHB、酣樂欣(Triazolam)、FM2(flunitrazepam)、可待因(Codeine)及其相類製品。
  - 第四級 Allobarbitol、Alprazolam。



# Addictive Potential

■ Drug_	M.	M. Phy. harm_	M. Dep.	M. Social harm
Heroin	3.00	2.78	3.00	2.54
Cocaine	2.39	2.33	2.39	2.17
Tobacco	2.21	1.24	2.21	1.42
Barbiturates	2.01	2.23	2.31	2.00
Ketamine	1.95	2.00	1.54	1.69
Alcohol	1.93	1.40	1.93	2.21
Benzodiazepines	1.83	1.63	1.83	1.65
Amphetamine	1.67	1.81	1.67	1.50
Cannabis	1.51	0.99	1.51	1.50
LSD	1.23	1.31	1.23	1.32
Ecstasy	1.13	1.05	1.13	1.09

Development of a rational scale to assess the harm of drugs of potential misuse. *Lancet*, 2007, 369, 1047-1053.

# 毒品危害防制條例之修正重點

98年5月22日生效

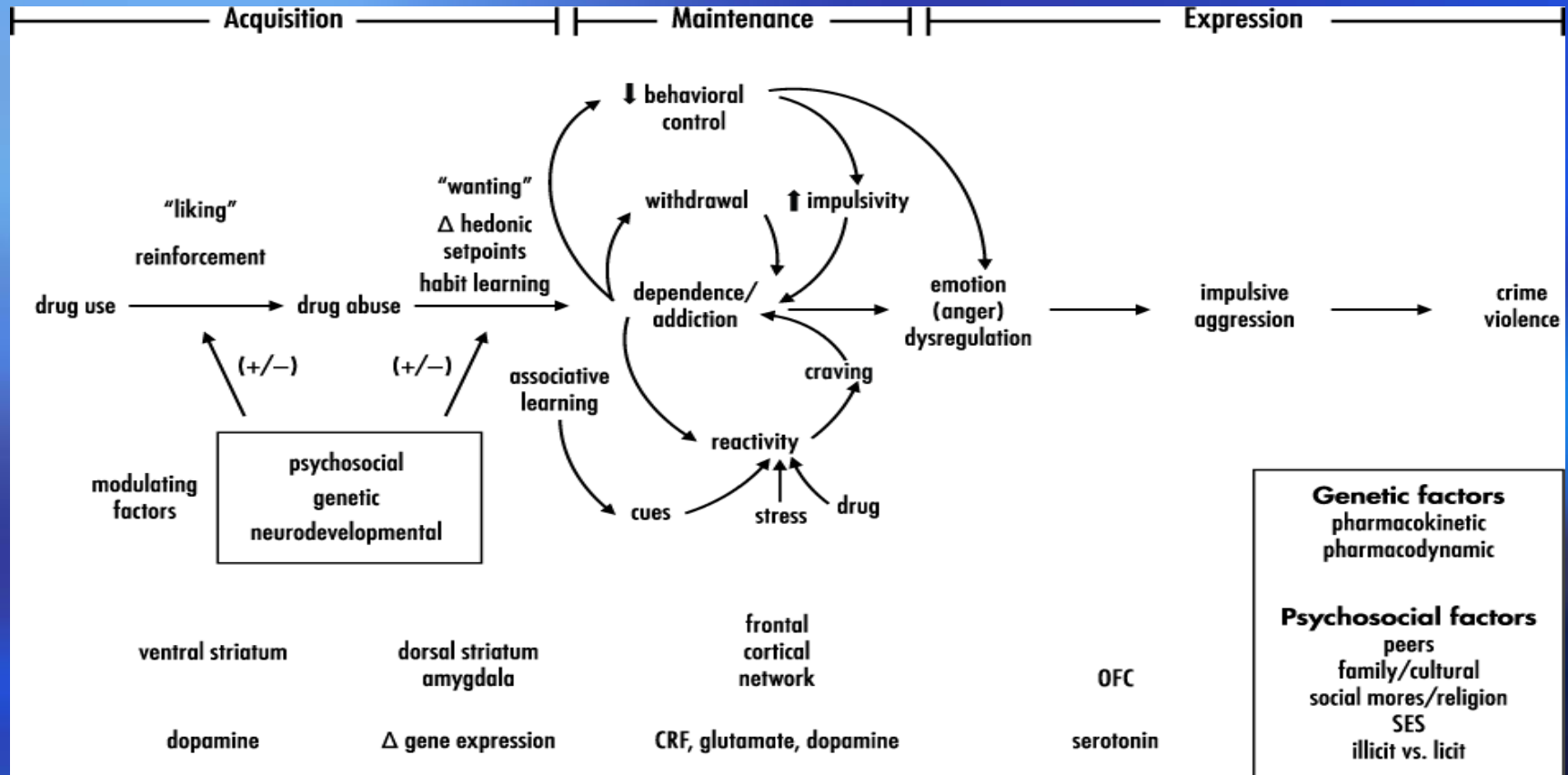
## ■ 第11條

持有第三級毒品淨重二十公克以上者，處三年以下有期徒刑，得併科新臺幣三十萬元以下罰金。

持有第四級毒品淨重二十公克以上者，處一年以下有期徒刑，得併科新臺幣十萬元以下罰金。

## ■ 第11條之1

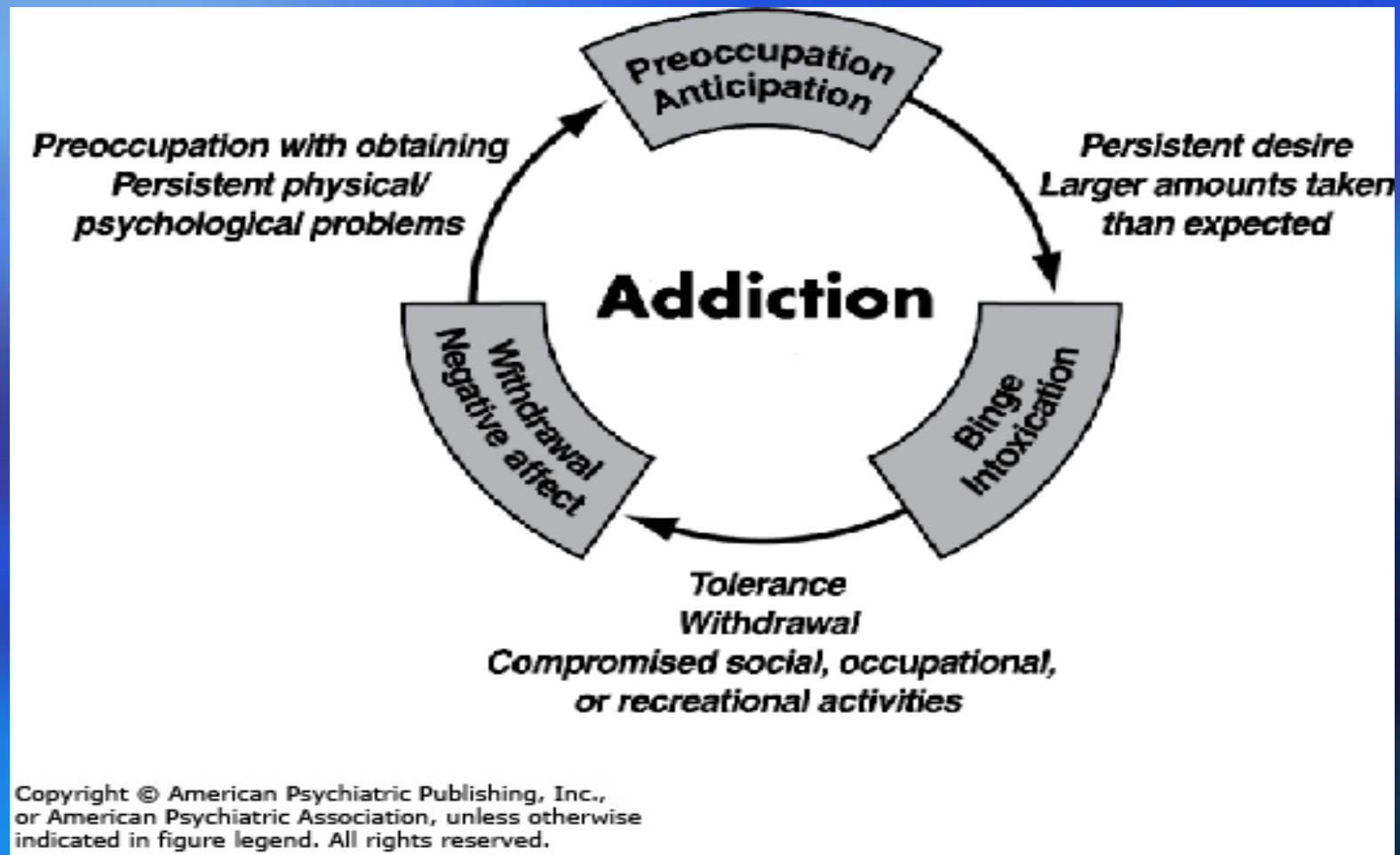
第三級、第四級毒品及製造或施用毒品之器具，無正當理由，不得擅自持有。違者處新臺幣一萬元以上五萬元以下罰鍰，並應限期令其接受四小時以上八小時以下之毒品危害講習。



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A three-stage model is proposed that entails the addiction process from initial drug use, the transition to chronic drug abuse and addiction, the chronically relapsing nature of addiction, and the social and personal costs of stage addiction. The roles of learning, memory, reward sensitivity, and emotion regulation are highlighted. Factors that positively and negatively modulate the addiction acquisition stage are shown. Psychosocial factors include the influence of peers, family, cultural variables, social and religious beliefs, socioeconomic status, drug attitudes, and the illicit versus licit nature of the drug of abuse. Genetic factors include allelic and haplotypic variation for genes regulating cognitive functions, drug pharmacokinetics and pharmacodynamics, and personality traits. Neurodevelopmental factors include risks posed by the adolescent period and by childhood maltreatment. Brain anatomical and neurotransmitter substrates are proposed for the different stages of the addiction process. CRF = corticotropin-releasing factor; OFC = orbitofrontal cortex; SES = socioeconomic status

Diagram describing the addiction cycle—preoccupation/anticipation, binge/intoxication, and withdrawal/negative affect—from a psychiatric perspective with the different criteria for substance dependence.



# Etiology

- Drug availability.
- Social acceptability.
- Peer pressures.
- Personality.
- Individual biology.
- Particular drug effects.
- Rewarding or aversive consequences

Initial experimentation



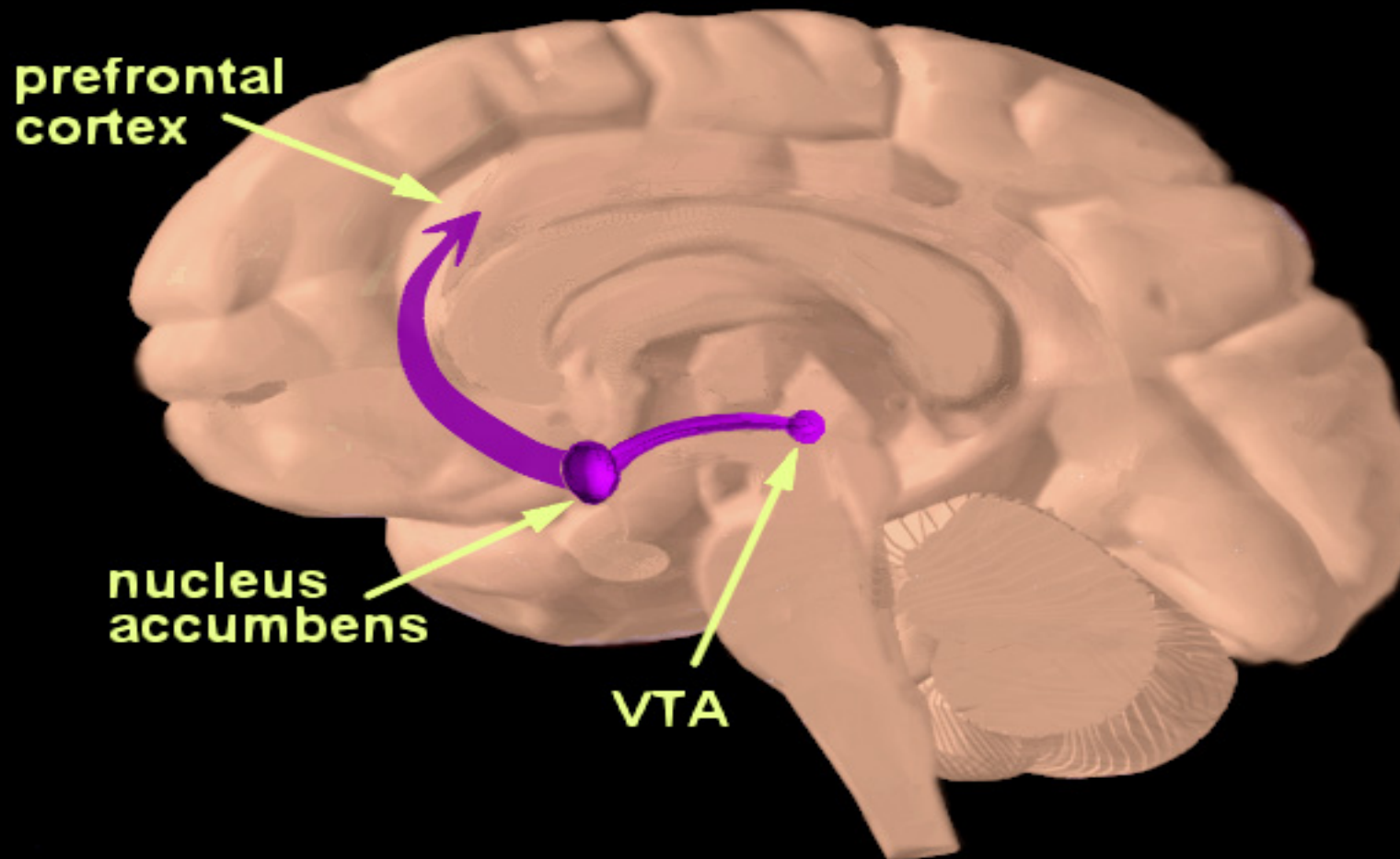
# Etiology

- Psychological : self-medication.
- Psychodynamic :
- Behavioral :
- Sociocultural :
- Childhood History :
- Genetic :

# Psychodynamic Factors

- Masturbation.
  - Defense against anxiousness.
  - Oral regression.
  - Disturbed ego function.
  - Alexithymia.
- 
- Learning and conditioning.

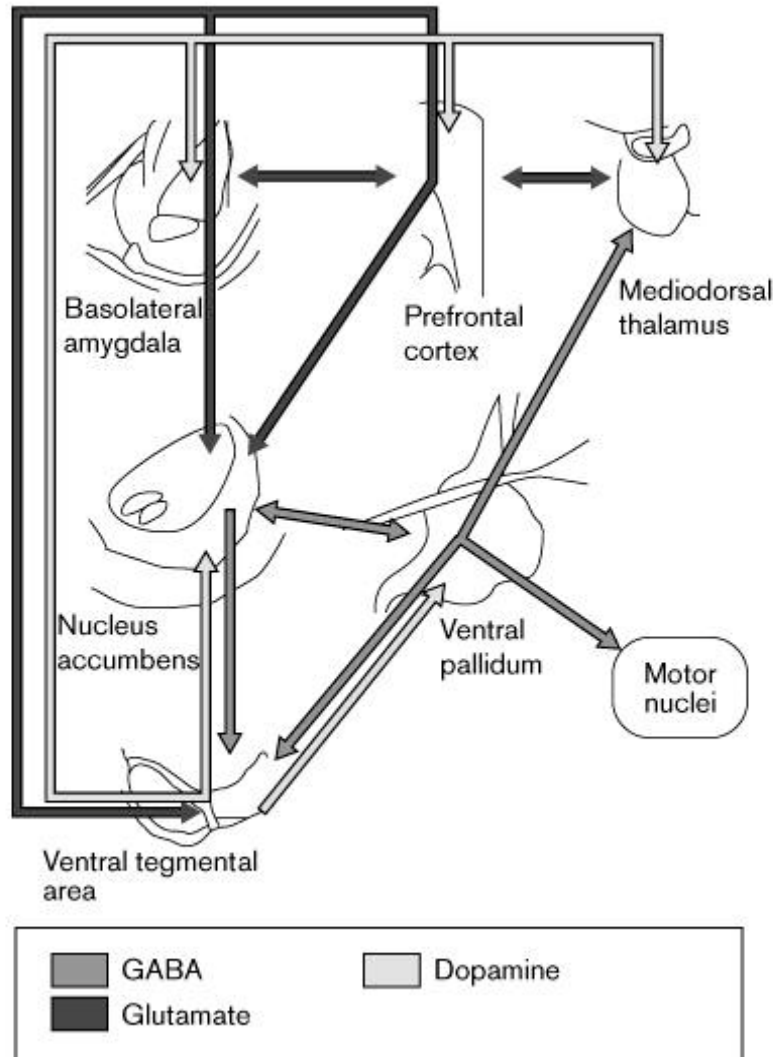
# Reward system



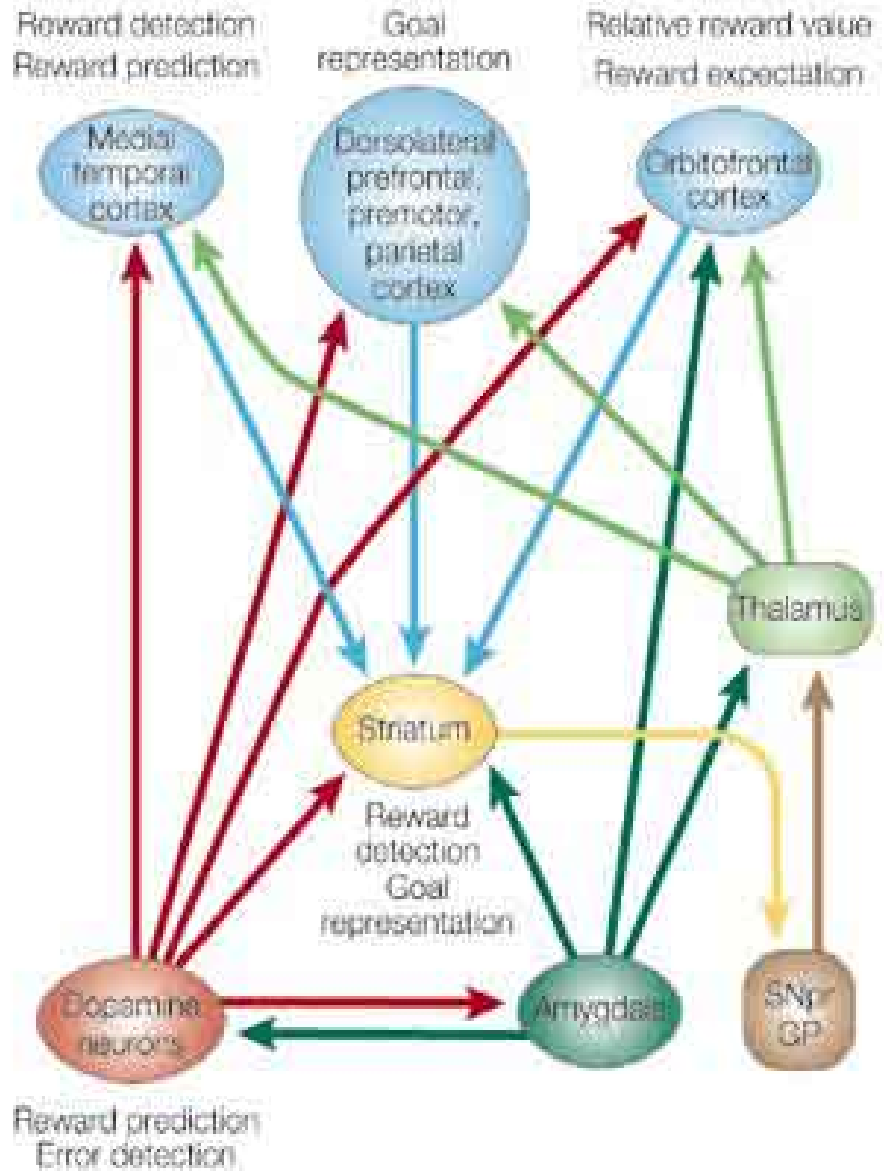
# Neurochemical and Neurotransmitters factors

- Receptors: tolerance mechanism  
2nd-messengers, gene regulation.
- Opioid,
- Catecholamine (dopamine),
- GABA systems,
- Endocannabinoids,
- Serotonin systems .

### The motive circuit



Current Opinion in Neurobiolo





# 台灣地區精神醫療院所通報藥物濫用個案統計表

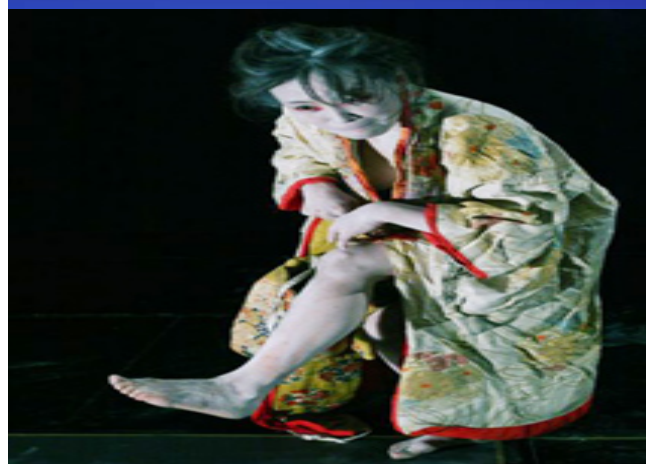
## (2000-2006.11)

年度	通報個案數 (件)	海洛因	(甲基)安非他命總陽性 數	MDMA	大麻	Benzo- diazepines類 藥物	愷他命
2000	2,871	1513	1452	9	23	317	0
2001	3,545	2265	1490	164	145	346	0
2002	7,654	6233	2152	251	62	386	18
2003	8,283	7353	1551	152	47	441	42
2004	12,232	11479	2663	103	43	431	49
2005	12,258	11466	4021	135	39	546	105
2006*	10,902	10207	3201	69	23	783	87

資料來源：衛生署管制藥品管理局  
\*：2006年1至11月之統計



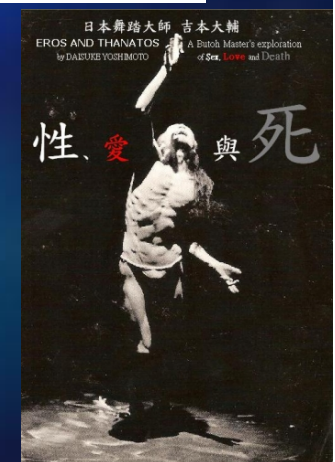
蘇珊克蘭著述的《日本暗黑舞蹈》是英語世界第一本日本舞蹈研究專書，收錄日本及台灣藝評所寫的舞蹈評論及訪談稿。



「黃蝶南天舞蹈團」演出的《瞬間之王》是一個在平常一動也不動，卻在某個時刻爆發出驚人能量的王者。



舞者們被繩子逆吊，從高樓頂端下降到地面，是「山海塾」著名的舞蹈作品。



# 物質成癮的四個階段:

- 第一階段:初嚐.衝突  
常用藥物:酒、菸、大麻、強力膠一類。
- 第二階段:感受X感的盪漾  
常用藥物:加上大麻和安非他命、安眠藥之類。
- 第三階段:迷上X感  
常用藥物:加上古柯鹼、迷幻藥、鴉片。
- 第四階段:服用藥物才感覺正常  
常用藥物:加上海洛英。

# 藥癮者表現的行爲

- 成爲生活中一個重心 (preoccupation)
- 強迫性的使用 (compulsive use)
- 失去對藥物使用的控制 (loss of control)
- 復發 (relapse)
- 認知上的改變, 否認 (denial)
- 併發的問題 (complication, consequence)

# 情感性疾患

- 重鬱病
- 低落性情感疾患
- 雙極性疾患（躁狂發作、混合發作、輕躁狂發作）



# 焦慮性疾患

- 強迫性疾患
- 創傷後壓力疾患
- 急性壓力疾患
- 廣泛性焦慮疾患
  - (1)容易疲累。
  - (2)難保持專心或心中一片。空白。
  - (3)不能靜止或感覺浮躁或不耐煩
  - (4)易怒。
  - (5)肌肉緊張。
  - (6)睡眠障礙(難入睡或難保持睡眠，或睡不安寧而對睡眠不滿意)。

# 反社會型人格異常

- 良心發展不足
- 不負責任和衝動的行爲
- 感動和利用他人的能力
- 對權威的排斥
- 無法維持良好關係

# 藥物濫用現況之特徵

 新興毒品之產生

 不純毒品之吸食

 多重毒品之混合使用

 吸食方式之多元化

 合法藥品之濫用





# Drug Abuse Trends In Taiwan—Brief History

行政院衛生署管制藥品管理局簡俊生

Opiates

Barbiturates

Pentazocine

Amphetamines

MDMA

Methaqualone

Barbiturates

Benzodiazepines

Marijuana

Pentazocine

Methaqualone

Opiates

GHB

Opiates

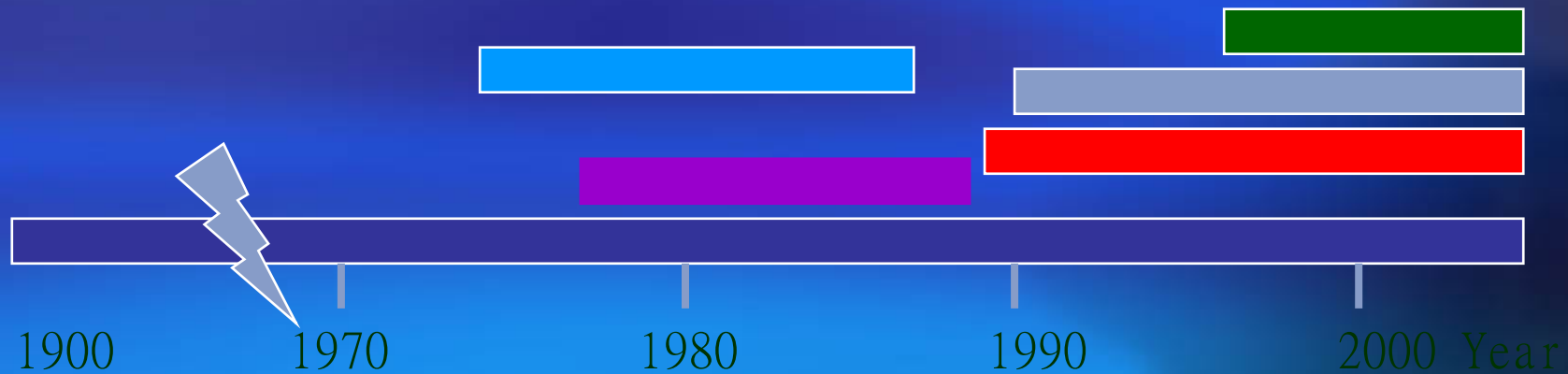
Opiates

Ketamine

Amphetamines

Benzodiazepines

Opiates





# Ketamine

- U. S. Controlled Substance Act: Schedule III
- United Kingdom: Class C drug
- Canada: Schedule I narcotic
- Hong Kong: Schedule 1



# 物質濫用防制策略

## 物質濫用之社會觀點

- 一、是一種罪行(Sin)  
治亂世用重典,刑期無刑
- 二、是一種疾病(Disease)  
醫療關懷的慈悲心
- 三、是一種適應不良的行為  
(Maladaptive Behavior)  
矯正社會與社會矯正的宏觀



有心 一定成功

只要主動求治，警察不會抓，檢察官不會辦

# 戒毒成功專線0800-770-885

(請請你 · 幫幫我)

<http://refrain.moj.gov.tw>  法務部



十四歲那一年 第一次接觸毒品  
就開始走上吸毒 戒毒 再吸毒 再戒毒的不歸路  
那天我的女兒來看我  
看著她的背影 我突然想好好照顧她  
因為毒品 我少了好多陪伴她成長的時光  
我要給她一個正常的生活 再怎樣難 我都要戒毒  
上天給了我機會 同樣也會給你  
吸毒沒藉口 戒毒真幸福



不打烊  
免費

## 戒毒成功專線

# 0800-770-885

98年3月1日起正式啓用 (請請你 · 幫幫我)



法務部 <http://refrain.moj.gov.tw>

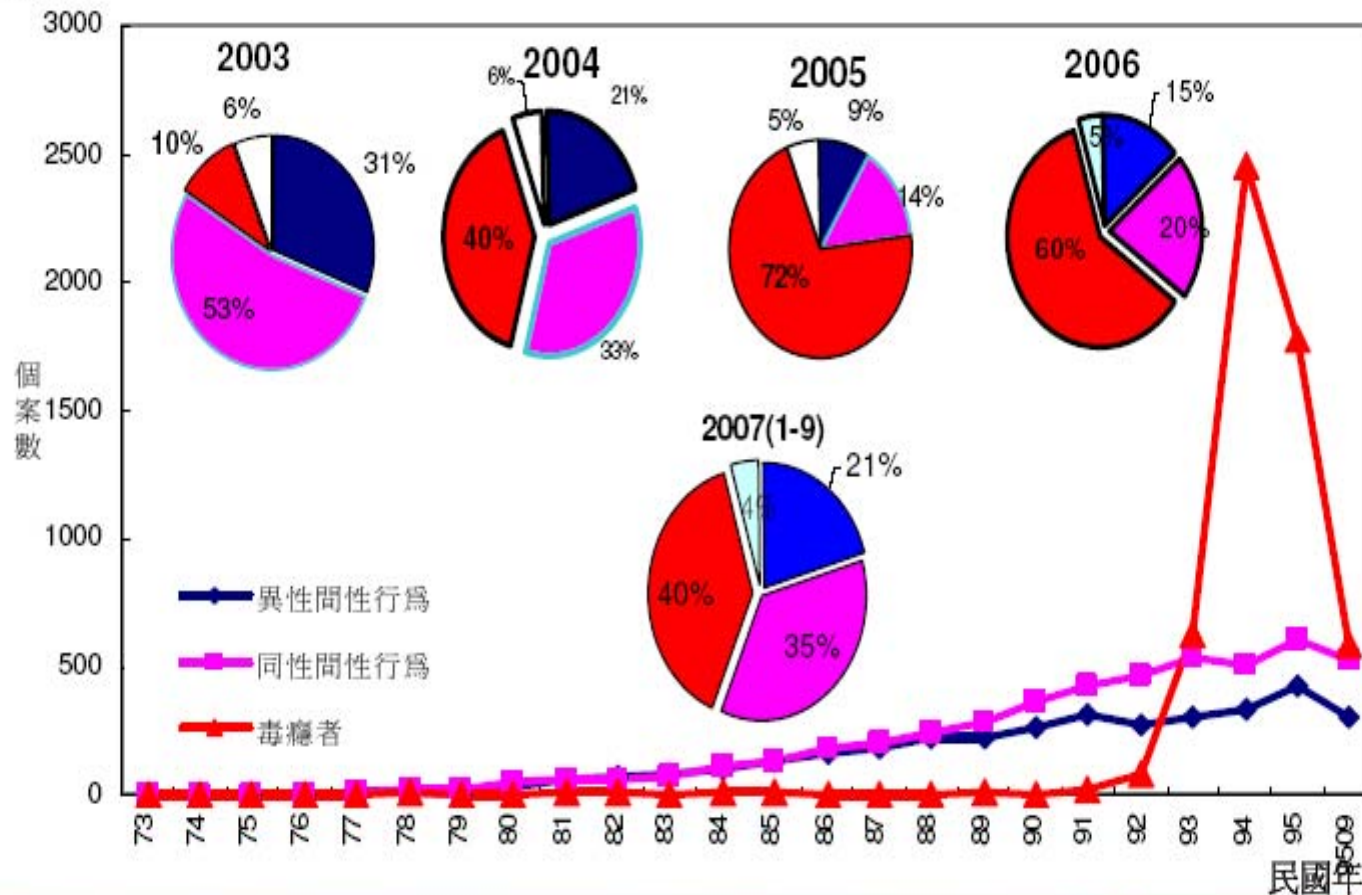
# 毒品病患愛滋減害試辦計畫



衛生署疾病管制局

## 台灣歷年HIV感染者數依危險因素統計

個案數



# 美沙冬－鴉片成癮的有效療法

- 降低或抑制違法吸食海洛因
- 降低犯罪活動
- 穩定患者的生活
- 減少攝取有害藥物
- 讓海洛因成癮者獲得有意義的人生
- 減少高風險的針具使用情形，如共用針具



# AIDS prevention Center- Methadone treatment room



Methadone

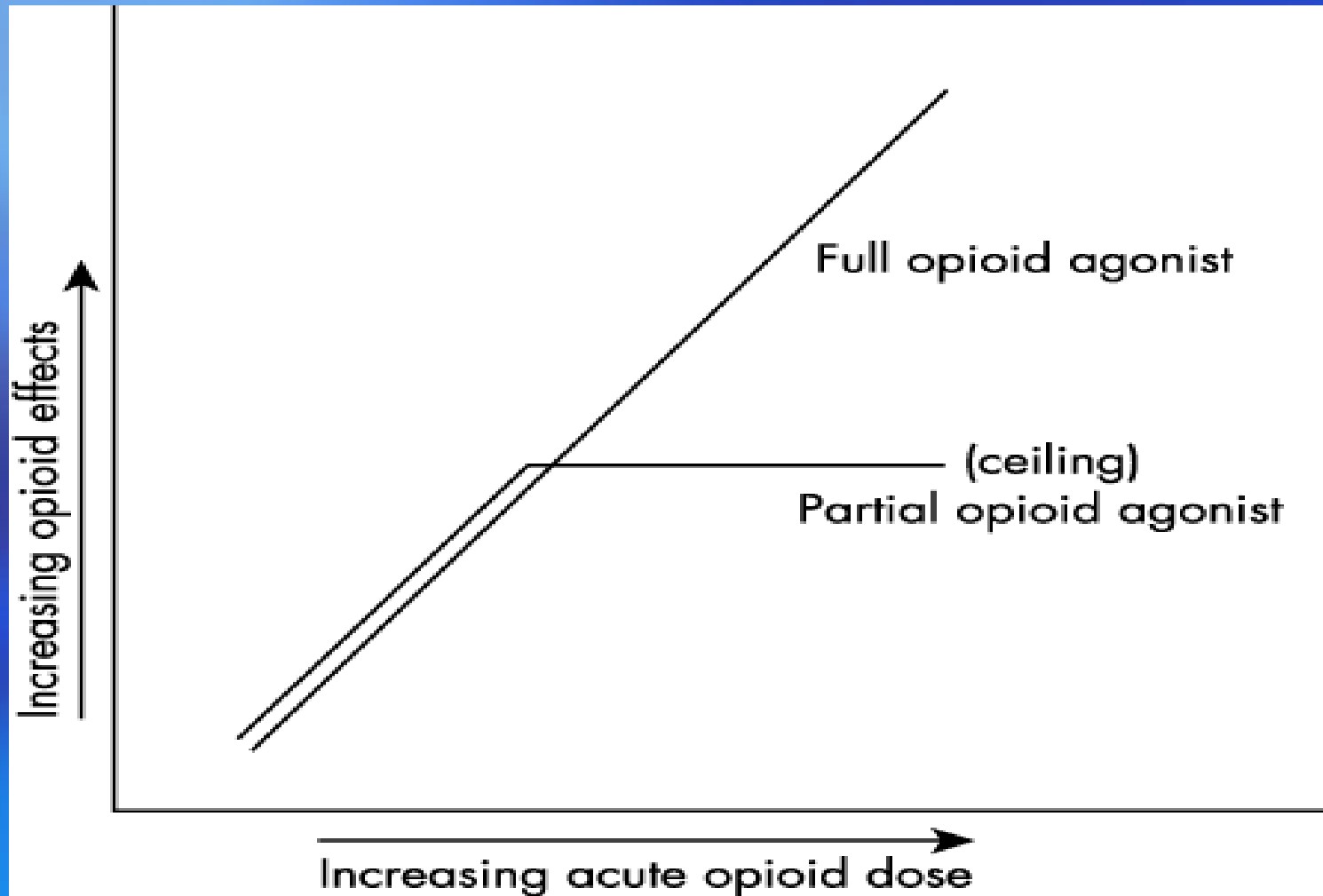
# 美沙冬/丁基原啡因的誕生

- 美沙冬:1930+
- 丁基原啡因:1980+
- 美沙冬:構造上與嗎啡、海洛因完全無關  
全促動劑 (agonist)
- 丁基原啡因: 半合成 (opiate), 部分促動劑  
(partial agonist)
- 強效止痛藥 至今仍是便宜有效的慢性疼痛  
止痛劑



## Hypothetical dose response curve for a partial and full opioid agonist

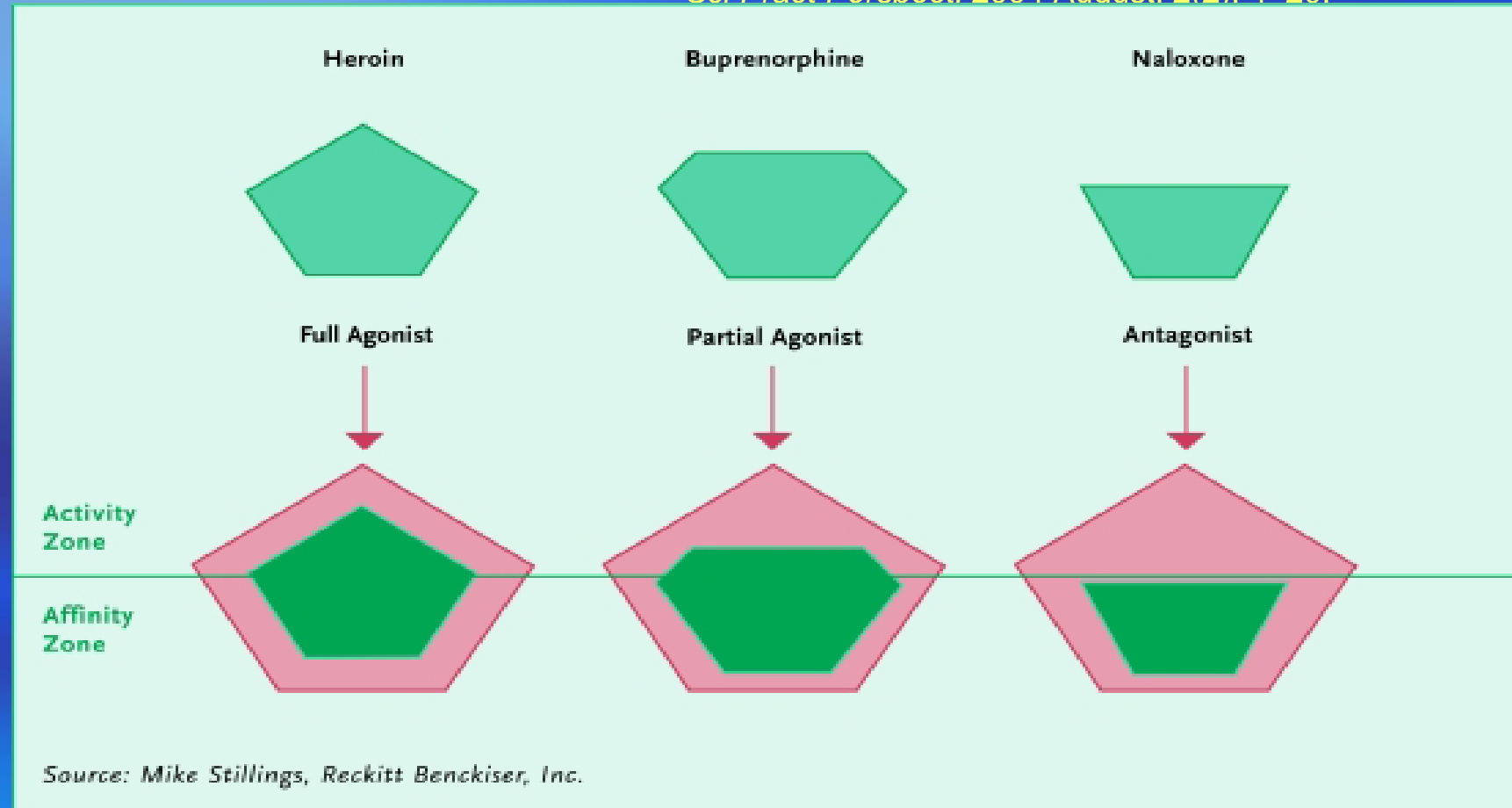
The American Psychiatric Publishing Textbook of Substance Abuse Treatment, 4th Edition



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# Heroin, Buprenorphine, and Naloxone Effects at the $\mu$ -Opioid Receptor

*Sci Pract Perspect. 2004 August; 2(2): 4-20.*



pain relief, feelings of well-being, respiratory depression

# 改變成癮行為的五個時期

## 動機促進式晤談法



# 醫院提供戒癮疾患那些醫療服務？

- (1) 衛生教育諮詢服務。(衛教室)
- (2) 門診治療。(包括初診、複診及藥癮戒治特別門診)
- (3) 急診治療。(包含急診留置觀察)
- (4) 全日住院治療。

## 醫院提供戒癮疾患

## 心理社會治療

- (1) 認知行為治療。
- (2) 人際互動治療。
- (3) 團體與家族治療。
- (4) 自助式團體。
- (5) 宗教靈性治療。



# Diagnoses Associated with Class of Substances

- Dependence
- Abuse
- Intoxication
- Withdrawal
- Intoxication Delirium
- Withdrawal Delirium
- Dementia
- Amnestic Disorders
- Psychotic Disorders
- Mood Disorders
- Anxiety Disorders
- Sexual Dysfunctions
- Sleep Disorders



# A drink of alcohol

- For most adults, moderate alcohol use--no more than two drinks a day for men and one for women and older people--is relatively harmless.
- A "drink" means 1.5 ounces of spirits, 5 ounces of wine, or 12 ounces of beer, all contain 0.5 ounces of alcohol. 12g ethanol, 150 pound person: 15-20mg/dl, metabolized in one hour.

2010 APA on-line service

# Pharmacology of Ethanol

- Most foods tend to retard absorption
- 90-98% is metabolized by the liver via oxidation at a relatively slow rate following zero-order kinetics  
(independent of time and concentration)
- • Average rate of metabolism:  
About 20 mg/dl/hr or  
Roughly 1 oz of hard liquor/1.5 hrs

# Delirium Tremens

## Delirium

- impaired attention/concentration
- disorientation
- waxing/waning level of consciousness
- hallucinations — visual > tactile > auditory
- delusions

## Tremens

- tremor

# Delirium Tremens

- Onset 48 - 96 hours after cessation
- Usually following prolonged, heavy drinking
- Clouding of consciousness
- Delirium

# THE HERITAGE OF THE 19TH CENTURY — A CONCEPT OF ADDICTION, TEMPERANCE AND DEGENERATION

- An uncontrollable, overwhelming and irresistible desire to consume alcohol was described by Benjamin Rush in 1784.
- **Delirium tremens** ( literally, "shaking delirium" or "trembling madness" in Latin) is an acute episode of delirium that is usually caused by withdrawal from alcohol, first described in 1813 by both Pearson and Sutton.
- **Alcohol craving and withdrawal symptoms were integral parts of the concept of addiction and of the destructive effects of alcohol consumption promoted by the temperance movement in the 19th century.**

Karl Mann et. al. ONE HUNDRED YEARS OF ALCOHOLISM: THE TWENTIETH CENTURY  
*Alcohol and Alcoholism* Vol. 35, No. 1, 2000

# Clinical Features

- Autonomic hyperactivity:

tremors, sweating, nausea, vomiting and hypertension, tachycardia, tachypnea.

(life-threatening delirium, accompanied by an autonomic storm.)

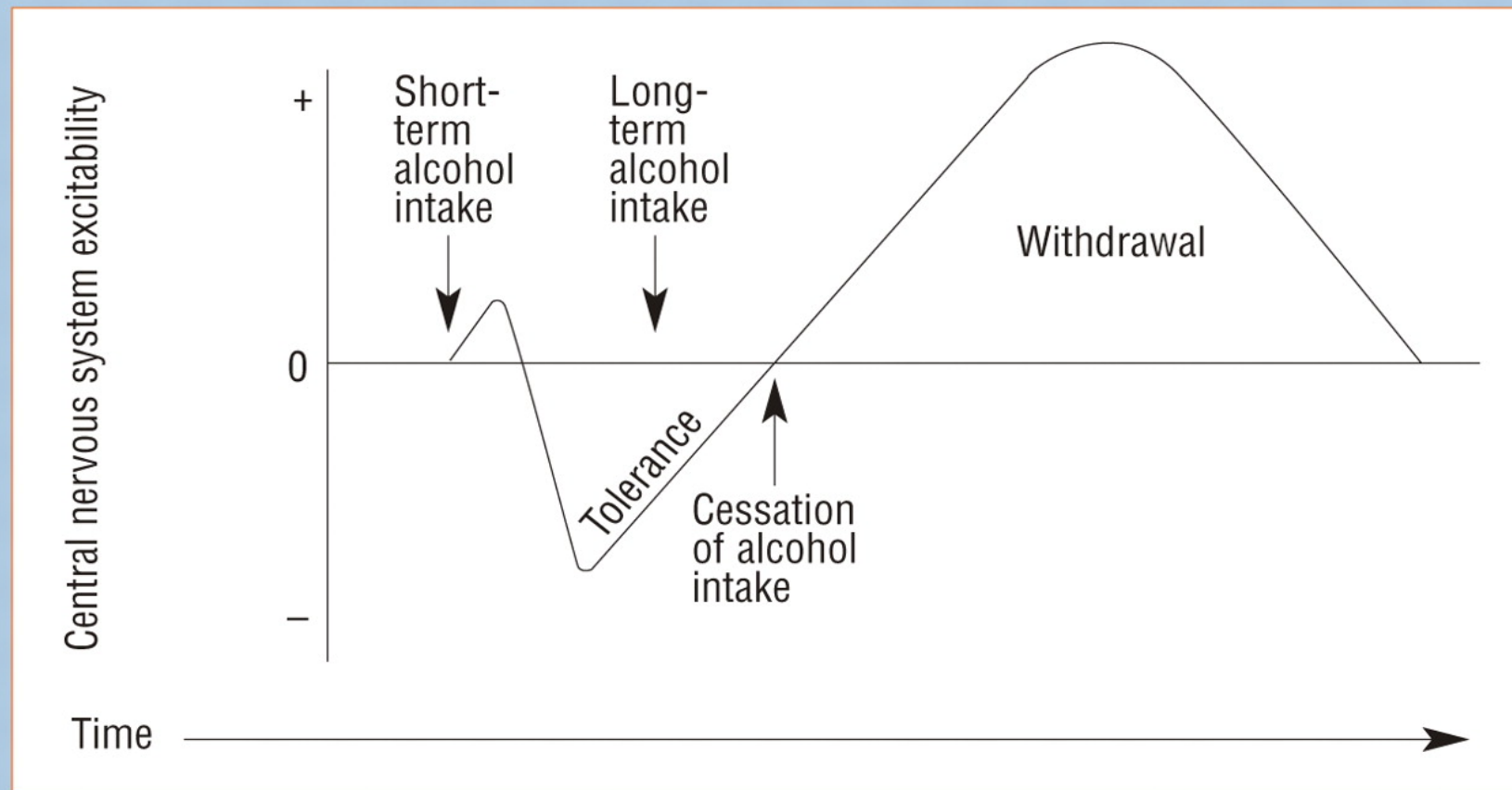
- Neuropsychiatric alterations:

agitation, anxiety, clouding of sensorium, and disturbances in auditory, visual or tactile senses, hallucinations, disorientation, and impaired attention.

- McKinley MG. Alcohol withdrawal syndrome overlooked and mismanaged? *Crit Care Nurse*. 2005 Jun;25(3)



# Figure 1 Schematic representation of the effects of alcohol exposure and withdrawal.



Adapted from Finn and Crabbe.<sup>3</sup>

## Treatment guideline of Alcohol Withdrawal Delirium

- **Lorazepam:** Oral Ativan ( 2-6mg ) every 60 minutes till calm-down.
- Neuropam 2-4mg IM every 30 minutes, until calm-down,
- Severe agitation :Haloperidol, 2.5 to 5 mg intramuscularly every 30 to 60 minutes as needed .(**Only to be used as adjunctive therapy with enough sedative hypnotic agents.**) Or, oral Haloperidol 2 to 5 mg every 4 hours as needed(for agitation not controlled by sedative-hypnotic agents alone.)
- IV thiamine 100 mg: Wernicke's encephalopathy symptoms appearance. **Prevention is mostly important with enough BZD initially.**

Reference: Management of alcohol withdrawal delirium An evidence-based guidelines. Arch Intern Med 2004,164 971206

# Benzodiazepines “Fixed” Regimens

- Traditional approach
- Administer BZD around the clock
- Additional doses prn
- Taper by 25% per day when stable

# Benzodiazepines

## “Symptom-Triggered” Therapy

- Administer BZD only when symptoms present (all prn)
- Less medication and shorter duration
- Staff-intensive, frequent CIWA assessments

*Saitz et al. JAMA 1994; 272: 519-523*

## Clinical Institute Withdrawal Assessment for Alcohol Scale (CIWA- Ar)有10個items如下：

- 盜汗(Sweating)
- 顫抖 (Tremor)
- 視覺干擾 (Visual disturbance)
- 觸覺干擾 (Tactile disturbance)
- 以上各項0-7分
- 焦慮 (Anxiety)
- 幻聽 (AH)
- 躁動 (Agitation)
- 頭痛 (headache)
- 噁心 (Nausea)
- 定向感 (Orientation)
- 以上各項0-4分

# Management of Patients With AWS

## Supportive Care

- Reducing environmental stimuli and providing uninterrupted periods of rest can help minimize the severity of signs and symptoms.

### Nursing interventions

- Maintain patient's safety
- Provide quiet environment
- Have patient avoid television and other activities that may contribute to hallucinations
- Initiate interventions to prevent falls

- McKinley MG. Alcohol withdrawal syndrome overlooked and mismanaged? *Crit Care Nurse*. 2005 Jun;25(3)



# Alcohol-related disorder

- Wernicke-Korsakoff syndrome: thiamine:100mg/Bid-Tid for 2 weeks. 3-12 months.  
Recent memory defect, anterograde amnesia.
- Treatment: Intervention:  
Confrontation.  
Detoxification:  
Rehabilitation: 1. continue high levels of motivation.  
2. help to readjust to a life free of alcohol.  
3. Relapse prevention. :  
(1).identify high risk situations.  
(2).help to develop coping modes for craving.  
Counseling: 1. here and now. 2. life, free of alcohol.

# Prognostic factors of Alcohol-related disorders

- 1. The absence of preexisting antisocial personality disorder or a diagnosis of other substance abuse or dependence.
- 2. Evidence of general life stability with a job, continuing close family contacts, and the absence of severe legal problems.
- 3. If the patient stays for the full course of the initial rehabilitation (perhaps 2 to 4 weeks)

Symnopsys of psychiary APA 10th edition.

# 戒菸

- **Nicorette** 口嚼錠成分：*中文品名*：尼古清口嚼錠2公絲
- 適應症：戒菸輔助劑。
- 用法用量：以2mg，每天8~12粒為宜。應至少使用三個月以上
  - (1) 立刻使用，不可等煙癮上了才使用。
  - (2) 嚼後含著。將本品緩慢咀嚼至軟化且口腔有刺感或辛辣感後，放在兩頰或舌下。
  - (3) 變換接觸面。一段時間後（無刺激感），可再次咀嚼至有刺感或辛辣感出現。
  - (4) 重複2~3步驟約三十分鐘或咀嚼後無刺感或辛辣感，換另一粒。

# 戒菸貼片

- smokfree nicotine, 中文名:淨菸經皮戒菸貼片10號
- 用法用量: 一天貼一片，每日應換貼不同的位置。最好在腰部以上，頸部以下毛髮較稀少之處，通常貼於上臂或肩膀。
- 菸癮大者 ( $>20$ 支/day) 15號每日一片持續6週  
→ 10號每日一片持續2週。
- 中度菸癮 ( $<20$ 支/day) 15號每日一片持續2週  
→ 10號每日一片持續4週 → 5號每日一片持續2週。
- 每日吸菸少於10支者不建議使用。

# 高雄市凱旋醫院戒菸班

- 藉著認知行爲團體的互動，改變吸菸的態度和行爲，進而達到戒菸或減少吸菸量，期使吸菸者能享有健康的身體，讓所關心與疼愛的身邊人免於二手菸的傷害。