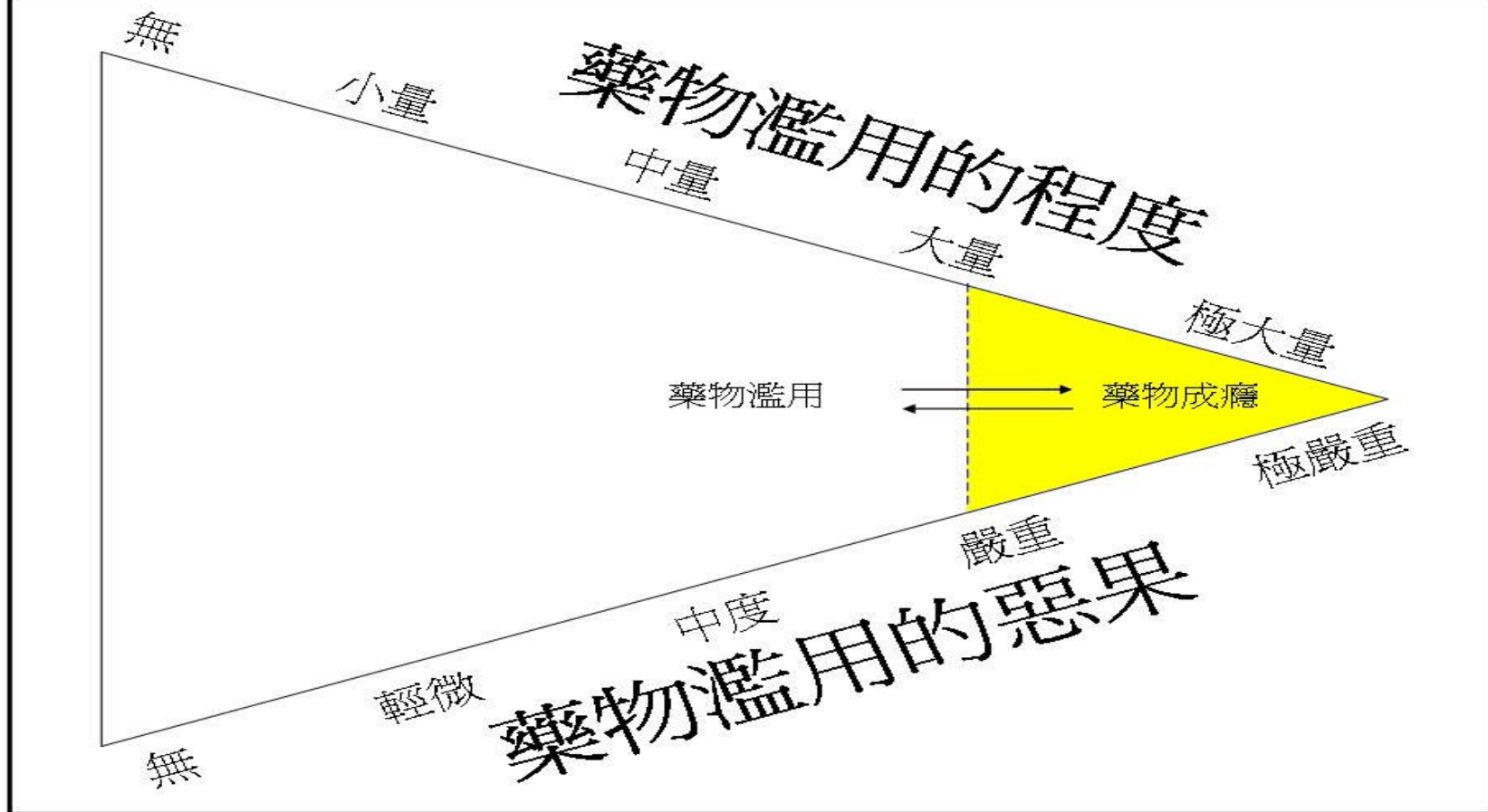


Addiction as an infection

Dr Ben Cheung



- 接受傳統治療服務的藥物濫用者是社會裏所有物濫藥人士事的一部分而已
- 由於他們的毒癮比較深，也發生了嚴重的後遺症，需要接受較深入、漫長的治療。因此，只是一小撮人的治療，已佔用了大部分的治療資源。

Addiction as an infection

- SARS!!!

What we've learnt from SARS

- Disease surveillance 疾病監測
- Regional and international collaboration 地區及國際間的合作
- Epidemic management 流行病的處理
- Border health measures 邊境衛生措施
- Engaging the community 社區參與
- Research and training 研究及培訓

Regional and International Collaboration

- Surveillance and outbreak reporting mechanism in place

Disease Surveillance

- Internet disease reporting
在互聯網上呈報疾病
- Expanded sentinel surveillance
擴大定點監測範圍
- Communicable Disease Information System
傳染病資訊系統

為有顯著流行病學關連的肺炎病人推行電腦聯線通報系統



Border Health Measures

- Health declaration and temperature screening
健康申報及體溫檢查
- Liaison with PRC's General Administration of Quality of Quality
與中華人民共和國國家質量監督檢驗檢疫局及深圳出入境檢驗檢疫局保持聯絡

社區參與

Engaging the Community

- General public
一般市民
- Community groups with special needs
有特別需要的社區團體

研究及培訓

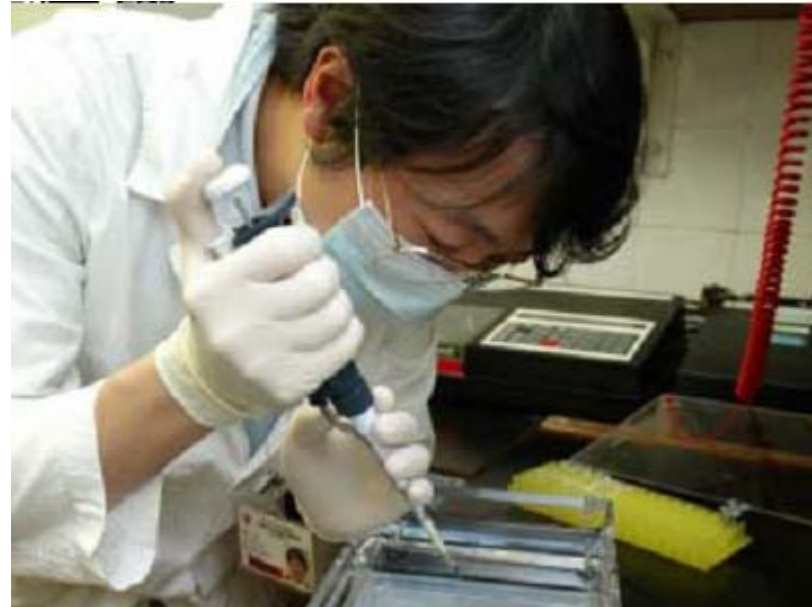
Research and Training

- Collaborative research with academic sector
與學術機構合作進行研究
- Staff Infection control training and guidelines for healthcare
為醫護人員提供感染控制培訓及指引

診斷及治理

Diagnosis & Management

- HA microbiology laboratories were networked with DH and universities to enhance accurate & rapid testing



Early Detection

- Body Check up Programme
- Early Detection Programme
 - School
 - Parents
- Random checks at school
- Health Programmes

Waves of Addiction

- Heroin
- Psychotropic drugs
- Behavioural Addictions
 - Internet
 - Sex
 - Gambling
 - Shopping
 - Video games
- Alcohol and smoking

Brain Storming

- School surveillance program
- School health program
- Social cost research
- Treatment benefit research
- Drug Court
- Education of judge

Study				Data				Type of Outcome/Benefit		
First Author (Year)	Type of Study	Cost Primary Focus	Study Design/Comparison Population	# of Providers	# of Clients	Year(s) of Data	Source of Cost Data	Success/Improvement	Quality/Disability Adjusted Life Yrs.	Economic Value
French (2001)	L,CE,CB	x								
Holder (1987) ¹	L,CB	x								
Holder (1991) ²	L,CB	x								
Holder (1992) ²	L,CB	x								
Holder (1992) ³	L,CB	x								
Holder (1998)	L,CB	x								
Howard (1990)	L,CE									
Lennox (1992)	L,CE	x								
Leukefeld (1998)	L,CE	x								
Merrill (1999)	L,CE,CB	x								
Miller (1998)	L,CE									
Peele (1990)	L,CE	x								
Rutgers Univ (1993)	L,CB,CE	x								
Saxe (1983)	L,CB,C	x								
USDHHS (2000)	L,CE,CB									
Wexler (1996)*	L,M	x								
Wing (1991)	L,CB,CE	x								
Cartwright (1993)	C	x			165000	1987	1			
Cisler (1998)	C	x		3	430	NS	2			
Dayhoff (1994)	C	x		6489		1989	3			
French (1994)	C	x	2	4	352	1991	2			
French (2000) ¹	C	x								
Friedman (1993)	C	x		1	54	88-91	2,4			
Goodman (1991)	C	x	1	NS	NS	80-87	1			
Goodman (1992)	C	x	1		873	80-87	1			
Goodman (1996)	C	x	1		879	80-87	1			
Goodman (1997)	C	x	1		25495	89-91	1			
Goodman (1998)	C	x	1		9878	89-91	1			
Harwood (2001a) ¹	C	x		37		1997	2			
Harwood (2001b) ²	C	x		60		1997	2			
Holder (1991) ¹	C	x	1		3888	74-87	1			H
Rosenbach (1994)	C	x			4214	89-90	1,3			
Schoenbaum (1998)	C	x	3	93	32647	1995	1			
Siegel (1984)	C	x		2		75-76	1			

Study				Data				Outcome/Benefit		
First Author (Year)	Type of Study	Cost Primary Focus	Study Design/Comparison Population	# of Providers	# of Clients	Year(s) of Data	Source of Cost Data	Success/Improvement	Quality/Disability Adjusted Life Yrs.	Economic Value
Walsh (1991)	C		5		227	82-87	1,2	x		
Westermeyer (1998)	C	x		2	642	1996	2,3			
Alfano (1987)	CB	x	1	1	150	NS	1,3			P
Anglin (1989)	CB	x	4	4	584	80-81	3			W,C
Berkowitz (1996)	CB		1	7	1593	91-93	2			W,C
Blose (1991)	CB	x	1		2259	74-87	1			H
Booth (1997)	CB	x	3	172	85000	1987	1			H
Daley (2000)	CB	x	1	62	439	92-97	2			C
DeHart (1993)*	CB	x						x		H
Flynn (1999)	CB	x	1	19	502	1992	2,3			C
French (1991)	CB	x	2	41	2420	79-81	3			P
French (1992)*	CB	x	2							P
French (2000) ²	CB	x	3		263	97-99	1,4			H,P,O
Gerson (2001)	CB	x	4		3168	93-94	1			H
Gerstein (1994)	CB	x	1	97	2000	91-92	2			H,C,P,W
Goodman (2000)	CB	x	1		4856	80-87	1			H
Hartz (1999)	CB	x	5	2	102		2			H
Harwood (1988)	CB	x	3	41	2420	79-81	2,3			C
Harwood (1998)*	CB	x	1		1825	1992	2			H,C,P,W
Harwood (2000)	CB	x	1	71	4411	90-91	3			H,C,P,W
Holder (1981)*	CB	x	1				1			H
Holder (1986) ¹	CB	x	1		1697	80-83	1			H
Holder (1986) ²	CB	x	1		245	74-79	1			H
Holder (1987) ²	CB	x	1		1645	80-83	1			H
Holder (1992) ¹	CB	x	1		3729	80-87	1			H
Holder (2000)	CB	x	5	3	279	93-95	2			H
Hughey (1996)	CB		4	1	260	91-93	2			C
Humphreys (1996)	CB	x	3		201	84-89	3	x		H
Humphreys (2001)	CB	x	2	10	1774	96-98	1	x		H
Jernell (1996)	CB	x	5		132	90-91	1,2,4			H,C,W
Kashner (1992)	CB	x	5		137	87-89	1	x		H
Koenig (1999)	CB	x	1	72	5264	93-95	2,3			H,C,P,W
Koenig (2000a) ¹	CB	x	1	72	4411	93-95	2,3			H,C,P,W
Koenig (2000b) ²	CB	x	1	72	3065	93-95	2,3			H,C,P,W
Lee (1998)*	CB	x	2		102					H
Lennox (1993)	CB	x	1		690	80-87	1			H

Study				Data				Type of Outcome/Benefit		
First Author (Year)	Type of Study	Cost Primary Focus	Study Design/Comparison Population	# of Providers	# of Clients	Year(s) of Data	Source of Cost Data	Success/Improvement	Quality/Disability Adjusted Life Yrs.	Economic Value
Lo (1993)	CB	x	3	111	2928	82-85	1			H
Maddox (1996)*	CB		1	20				x		C
Mauser (1994)	CB	x	1	1	259	90-91	2,3			H
McGlothlin (1981)	CB	x	1	2	187	71-76	3			H,C,P,W
Mecca (1997)	CB	x	1		1990	1992	3			H,C,P,W
O'Farrell (1996) ¹	CB,CE	x	5	1	59	1992	2	x		H
O'Farrell (1996) ^{2*}	CB,CE	x	5		36	1992	2	x		H
Rajkumar (1997)*	CB	x	1		2420					C,O
Reutzel (1987)	CB	x	1		46	1983	1			H
Schoenwald (1996)	CB	x	5		118	93-95	2			H,C
Svikis (1997)	CB	x	4	2	146	91-92	2	x		H
Womer (1993)	CB	x	2		123	90-92	1			H
Yu (1991)	CB	x	2		327	85-89	1			H
Zywiak (1999)	CB	x	1		5434	NS	3	x		H
Alterman (1994)	CE	x	5	1	111	88-89	1	x		
Avants (1999)	CE	x	5	1	291	1995	2	x		
Bachman (1992)	CE		5	1	55	86-87	2,3	x		
Barker (1999)	CE		4	1	138	1995	1	x		
Barnett (1997)	CE	x	2	98	38863	89-90	2	x		
Bickman (1996)*	CE	x						x		x
Brent (1998)*	CE, CB	x			1689	77-81	4			P
Bury-Maynard (1999)*	CE	x							x	
Daley (2001)	CE	x	3	8	445	92-97	1	x		
Deschenes (1991)	CE	x	1		279	78-79	3			C
Fals-Stewart (1997)	CE, CB	x	5		80	91-93	2,3,4	x		H,C,W
Fink (1985)	CE		5	1	115	79-81	2,3	x		
Freeborn (1991)	CE	x			469	86-87	1	x		
French (1999)	CE	x	2		342	1994	2,3	x		
Griffith (2000)*	CE	x	4					x		
Hayashida (1989)	CE		5		164	85-87	1	x		
Kraft (1997)	CE	x	5	1	100	1991	2	x		
Longabaugh (1983)	CE	x	5		174	79-80	1,2,3	x		
Lu (1998)*	CE	x								
Machado (2001)	CE	x		38		91-94	2	x		
McCrary (1986)	CE		5		174	<83	2	x		

Study				Data				Type of Outcome/Benefit		
First Author (Year)	Type of Study	Cost Primary Focus	Study Design/Comparison Population	# of Providers	# of Clients	Year(s) of Data	Source of Cost Data	Success/Improvement	Quality/Disability Adjusted Life Yrs.	Economic Value
Pettinati (1999)	CE	x	3	1	173	88-92	2	x		
Reiff (1981)	CE	x	1		137	75-76	1			H
Schinka (1998)	CE	x	5	1	98	1996	2	x		
Schneider (1996)	CE		5	2	74	90-93	2	x		
Shepard (1997)*	CE	x	1	1	2941	93-95	3	x		
Vaughn (1998)*	CE	x	5					x		
Weisner (2000)	CE	x	5	1	688	93-97	2	x		
Barnett (1999)	S,CE	x							x	H
Barnett (2001)	S,CE	x	2						x	
Rosenheck (2001)	S,CE	x	2					x		
Zaric (2000)	S,CE	x					2,3,4		x	

* = Could not locate publication. Coding based on electronic abstract.

1,2,3 = For studies published by the same first author in the same year, the superscript number

Cost benefit studies

- 成本與效益分析研究一致地發現效益(健康, 罪行, 和社會功能的改善) 大於濫用毒品治療的費用。

每花在戒毒治療上的一美元

- 回報甚高 , 全面抵銷資本
 - French et al. (2000)
 - \$10 and \$23, in two Washington State clinics.
 - Gerstein, Harwood, and Suter (1994)
 - \$7 in the California public system
 - Finigan (1995)
 - \$7 in the Oregon public system
 - Koenig, Harwood, Sullivan, and Sen (2000)
 - \$4 in federally-funded programs

醫療費用

- 治療費用和醫療使用率在治療後顯著下跌
(reduced health care utilization and costs)
 - 治療晚期的後遺效應→昂貴許多
 - Holder and Blose (1992)
 - 醫療保健費用下降23%-55%
 - Holder & Schachtman (1987):
 - 治療的費用在2年之內補償了

治療物質濫用婦女大有好處

- 成效回報大約是治療費四倍
- 懷孕的婦女：
 - NICU:分娩嬰兒平均花費\$900 (未經治療者為\$12,200)
 - 院舍門診聯合的治療最有效(>準的門診治療、美沙酮診所和解毒治療)
- 對懷孕者和幼兒父母的強制治療
 - Options for Recovery (OFR) treatment program 不去監獄的另類強制治療
 - 比志願服務用使用者成效更大
 - 比監獄便宜
 - 改善至少持續六個月

青少年需要深化強化的服務

- 多系統療法 (Multisystemic Therapy) :
 - 濫用毒品、精神治療和社工服務的全面服務
 - 比“通常服務”效果較好、成本減少了50%
 - 拘捕率減少了26 %
 - 監禁時間減少了46 %
 - 額外的成本從回報抵銷了

雙重診斷者

- 雙重診斷 (Dual Diagnosis): 既濫藥又有精神病的問題
- 精神病的治療加上濫藥治療→
 - 治療後受助者的醫療資源使用節省40%

無家濫藥者

- 治療無家濫藥者具成本與效益
- 患精神病、無家可歸的人治療成本較高
- 但治療後,效益將補償治療費用,並且有餘