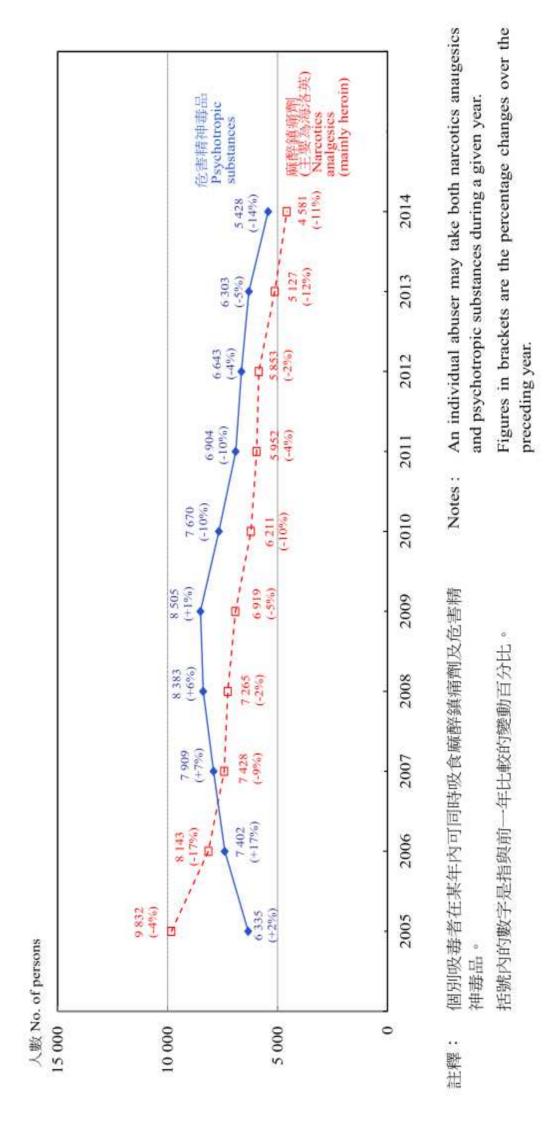
## Ketamine Abuse in Hong Kong Experience and challenges

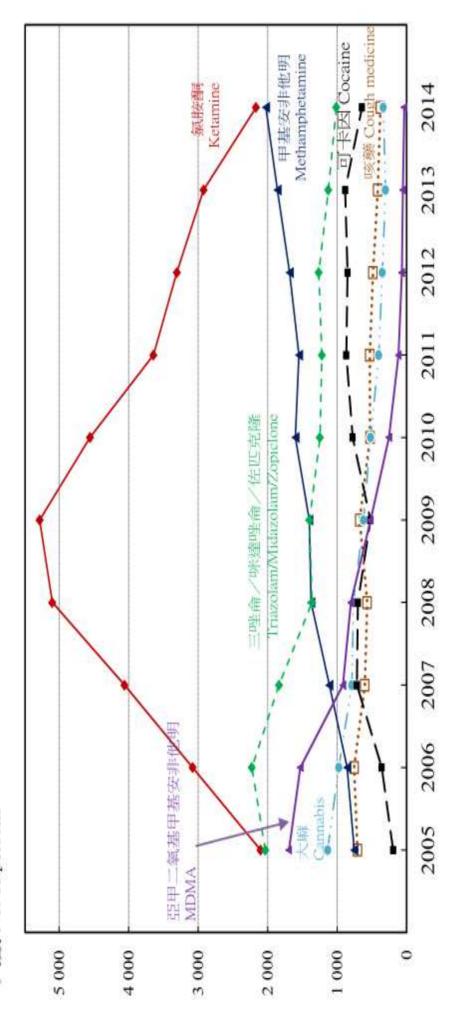
Dr. Ben Cheung, Chairman Action Committee Against Narcotics (ACAN) Hong Kong Hon. Consultant Psychiatrist Hong Kong & Sanatorium Hospital Adjunct Assistant Professor, Dept of Psychiatry, Chinese University of Hong Kong

# Reported abusers of psychotropic substances and narcotics analgesics 被呈報吸食危害精神毒品及麻醉鎮痛劑者



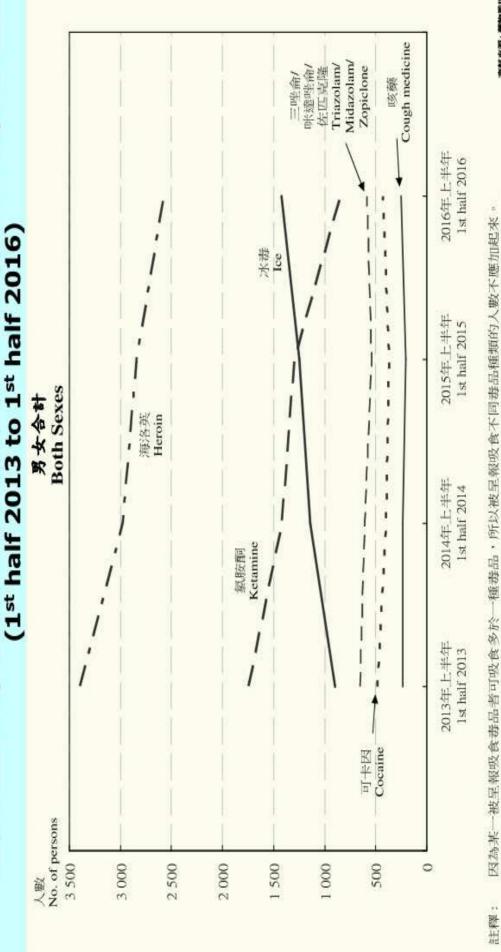
# 被呈報吸食各種主要危害精神毒品者

Reported drug abusers of major types of psychotropic substances 人數 No. of persons



More than one type of drugs may be reported for an individual drug abuser in a given year. Note: 個別吸毒者在某年內可被呈報多於一種毒品。 计 掛祖

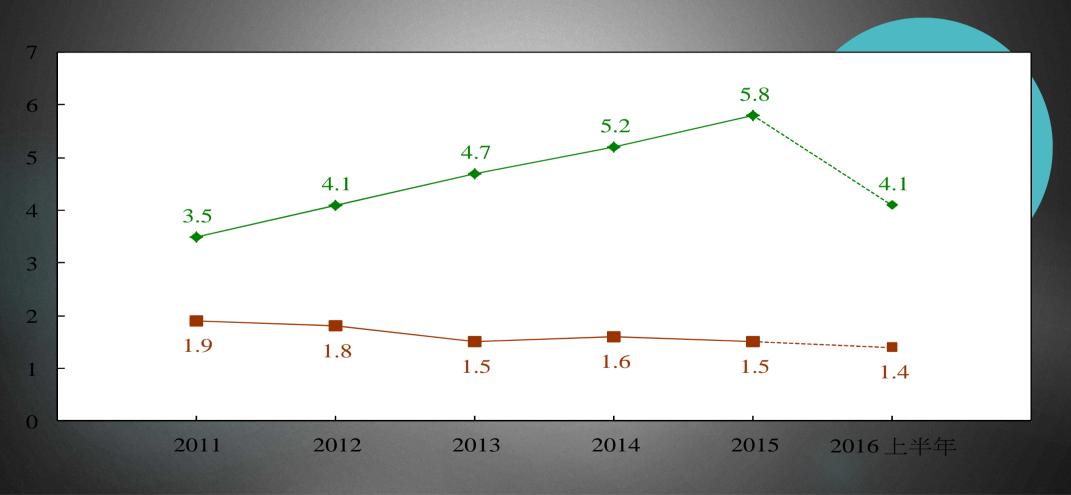
# Reported drug abusers by sex by common type of drugs abused 按性别及常被吸食毒品種類劃分的被呈報吸食毒品人士 (2013年上半年至2016年上半年)



Since a reported drug abuser may abuse one or more types of drugs, the numbers reported for abusing different drugs should not be added together. Note:

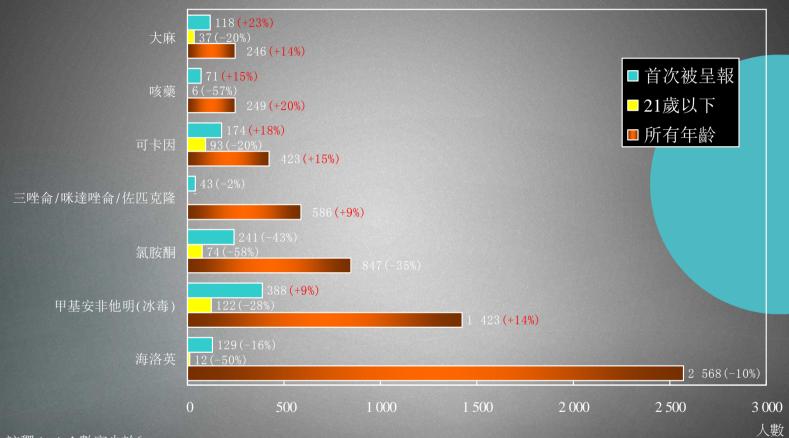
資料水源:賽物應用資料中央鐵水光 Source: Central Registry of Drug Abase 資料更新於了19-2016 Updated on 7:19-2016

#### 首次被呈報吸毒人士的毒龄中位數 Median drug history of <u>newly reported</u> abusers



#### 被呈報吸毒人士吸食毒品的種類 (2016年上半年)

Reported drug abusers by major types of substances (2016 6m)



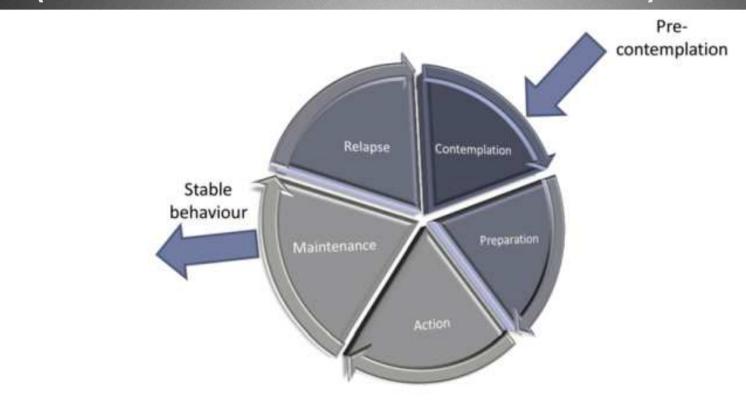
註釋:: ^數字少於6。

括號內的數字是指與上年同期比較的變動百分比。

個別吸毒者可被呈報吸食多於一種毒品。

資料來源:藥物濫用資料中央檔案室

#### Stages of Change (Prochaska & DiClemente)



#### Check up Study

(Benefield, Miller, Tonigan 93)

- Advertisement to drinkers about body check up
- Subjects: randomly assigned to receive 2 diff. styles of feedback
  - Conventional style: directive, denial was confronted using assessment results
  - Motivational interview: client-centred, eliciting and reflecting the person's own reactions to assessment results
- Community application of MI intervention

# HKMA CIVIE BULLETUR January 2008

## motivational feedback as an early intervention Use of a body check-up and personalized for young substance users in Hong Kong

Complete this course and earn 1 CME POINT

Dr. CHEUNG Kin Leung, Ben, Specialist in Psychiatry (Chief Investigator)

Dr. CHENG Wai Fun, Anna, Specialist in Paediatrics

Dr. LEE Lai Ping, Specialist in Paediatrics

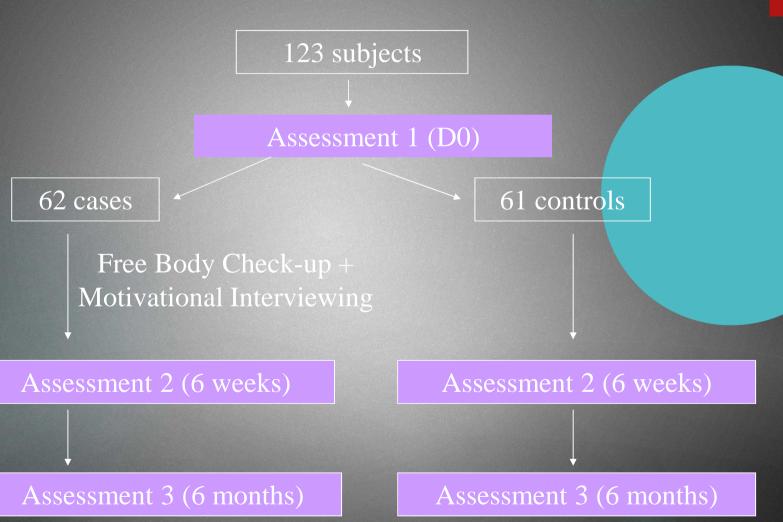
Dr. TANG Jinling, Associate Professor in Epidemiology & Community Medicine,

Dept. of Community and Family Medicine, CUHK

#### Hypothesis

- "Free Body check-up" programme would be an attractive service for young drug users
- Brief motivational interviewing will enhance their readiness to change
- ▶ The effect will be significant and lasting

#### Methodology



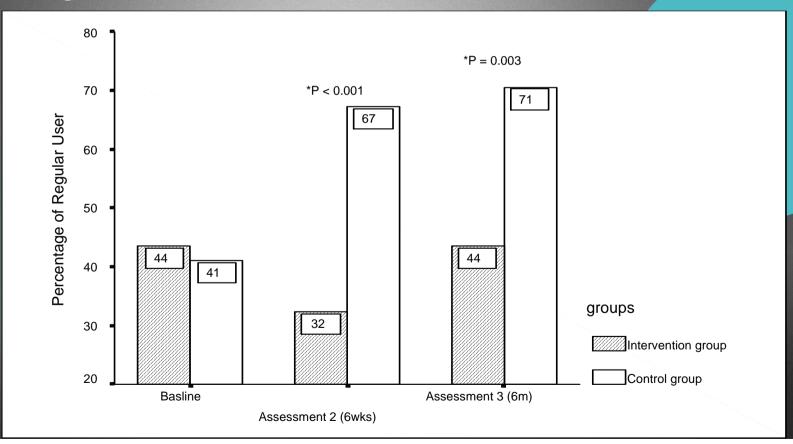
#### Demographic characteristics

	Intervention gp $(N = 62)$	Control gp (N = 61)	p- value	Total (N = 123)
Males (%)	55	59	0.568	56.9
Age (mean ± SD)	$17.4 \pm 2.2$	$17.3 \pm 1.9$	0.942	$17.4 \pm 2$
Years of education (mean $\pm$ SD)	$8.9 \pm 1.4$	8.9 ± 1.2	0.992	$8.9 \pm 1.3$
Single status (%)		93	0.194	95.1
No. of household (mean $\pm$ SD)		3 ±1	0.617	3 ±1
Single parent (%)		26	0.134	20.3
Living in public housing(%)	67.7	78.7	0.079	73.2
Living area (mean ± SD)	$483 \pm 338$	$433 \pm 197$	0.173	$458 \pm 279$
Unemployed (%)	47	38	0.252	42.3
Family total income $\leq 10001-20000  (\%)$	54.8	68.9	0.058	61.8

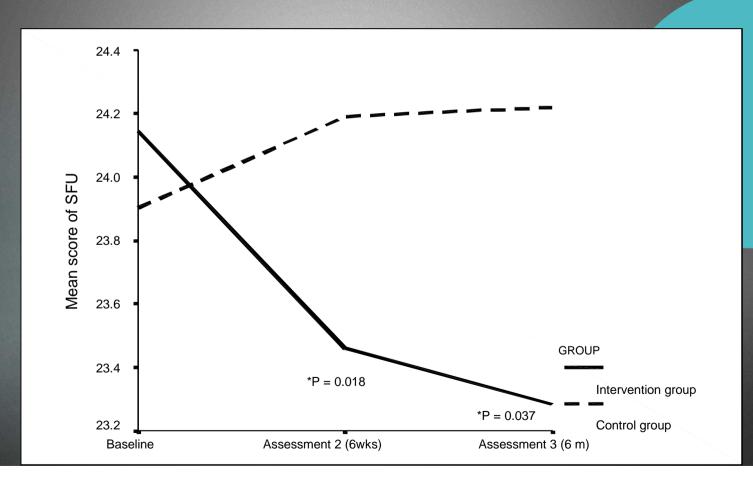
#### % of Regular Users in both groups

Occasional user: < once per month

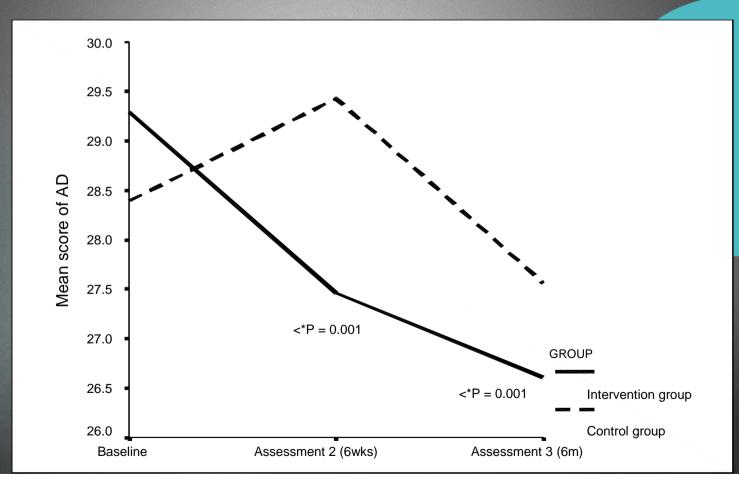
**Regular user:** once a month or more (Pentz MA. 1999)



## \*Scores for Smoking Frequency and Usage (SFU)



## \*Scores for Attitude of Drug Usage (AD)



Psychiatric services for the new era of psychoactive substances

Conventional services



Broad-base Interventions

#### Conventional Services

#### Advantages

Intensive, multi-sessions
Conducted by trained
professionals

More thoroughly researched Suitable for those with severe addition and complications

#### **Disadvantages**

#### Stigmatizing

Not suitable for the less severe Involve acceptance of a label (addict)

More passive and "high threshold" approach Wait for clients to present for service, after passed through various gatekeepers

Less involved in enhance the help-seeking process or to bring service to those in need Costly

**Disruptive** to clients, rendering them unable to fulfill family and social responsibilities

#### Broad-base Interventions

#### Advantages

Low-threshold intervention Time-limited, less intensive, problemspecific Can attract more substance abusers into helping environments More accessible, reduce stigma and less barriers to help-seeking Suitable for the underserved majority with mild to moderate problems May serve as gateway to other modality of treatment **Cost-effective** 

#### Disadvantages

May not be intensive enough to bring about behavioural change for more severe clients

Relatively fewer literature on outcome and effectiveness

Do not intend to change the clients' social environment

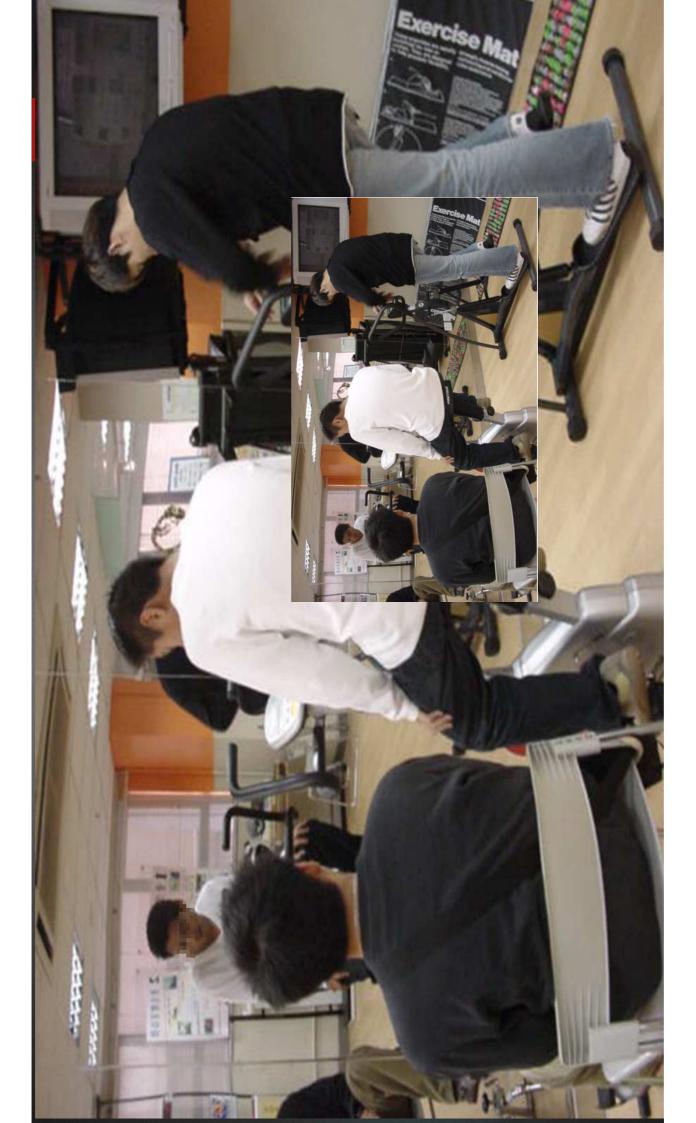
#### Broad-base interventions

- broadening the base of treatment can attract more substance-abusing individuals into helping environment
- ► Treatments are less intense, employing timelimited, problem-specific, low stigma
- The aim is not to replace traditional services but to complement them
- May serve as precursor to conventional treatment
- Benefits of this lower threshold approach include early case finding, early treatment and wider application to non-opiate drugs

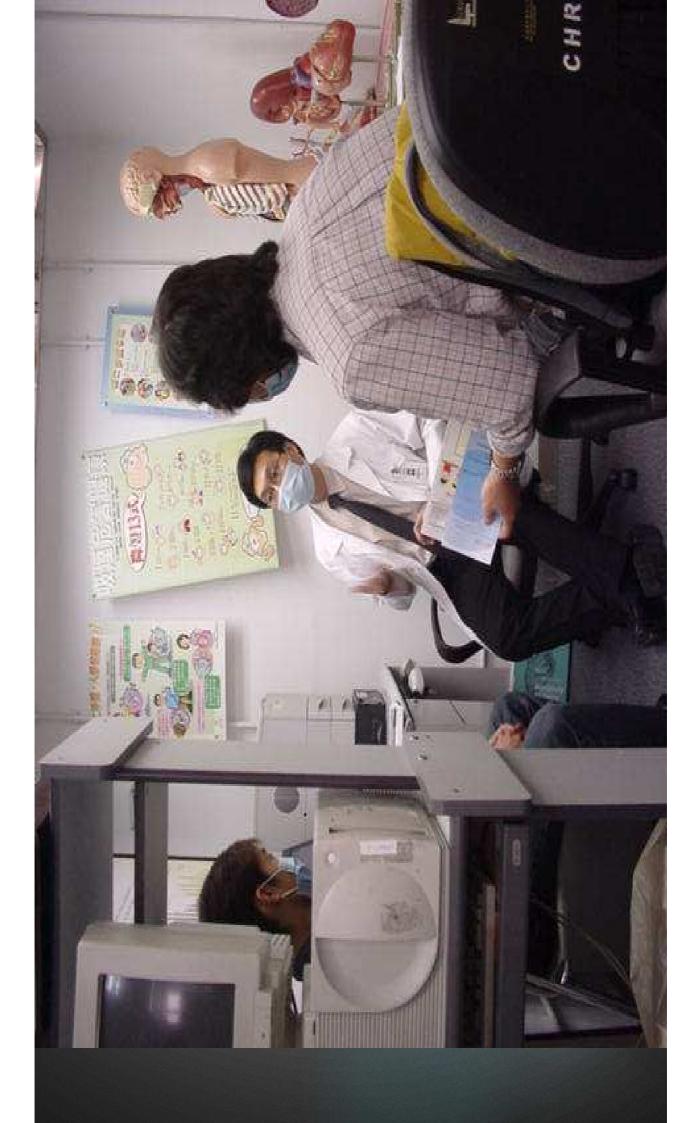
#### Broad-base interventions

- Several mainstreams hold promise to provide for the underserved mild to moderately substance users, and to help unmotivated or poorly engaged clients with heavy addict and complications:
  - Motivational interviewing
  - Relapse prevention
  - Guided self-change
  - Case management
- Innovative applications:
  - Outreaching services: home detoxification, treatment my bus, delivery of vouchers
  - Drinkers Check up programme (Miller 94)

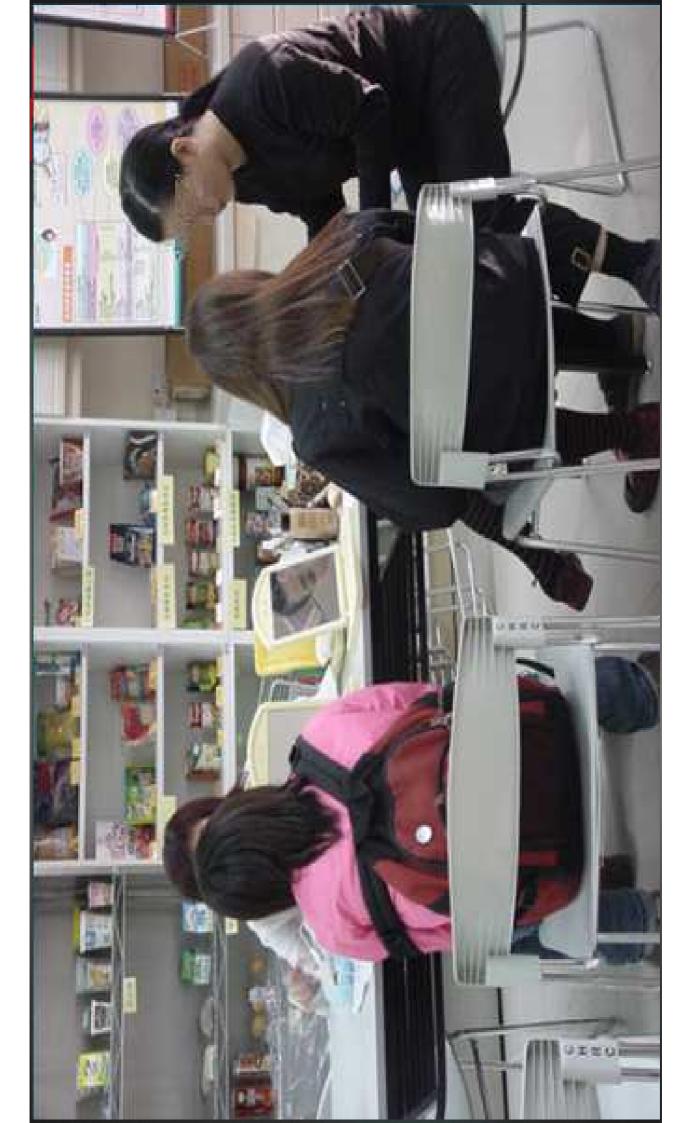












Moving from Non-specific M.I.

Model to Specific



## Newer Service Model for Ketamine Users with Urologist and Pediatric Surgeon's Involvement

- One-stop clinic for ketamine-associated uropathy: report on service delivery model, patients' characteristics and non-invasive investigations at baseline by a cross-sectional study in a prospective cohort of 318 teenagers and young adults
- ▶ Yuk-Him Tam, Chi-Fai Ng et al
  - ▶ BJU Int. 2014 Nov;114(5):754-60. doi: 10.1111/bju.12675.

#### **Motivational Elements**

- The service delivery model of the YUTC removes the potential barrier due to mandatory assessment by GPs before urological referrals.
  - Existing literature has reported the use of cystoscopy with biopsy and urodynamic studies in investigating these patients (1,2,3,4,5)
- ▶ Encouraging social workers to make appointments for their clients further facilitates identifying the patients and provision of the necessary urological care for them.
- Use of non-invasive investigation at the initial assessment when chronic ketamine abusers present with typical LUTS.
  - Many patients declined invasive procedures and young ketamine abusers are not reliable attenders at medical appointments (6,7)
- The one-stop clinic using a non-invasive approach provides the hidden abusers with an easy access service, a comfortable and efficient evaluation at the initial assessment.
- Protective role of cessation of ketamine use is objectively measured and feedback provided to clients so as to enhance motivation

#### Useful Parameters

- Baseline
  - renal function test (creatinine level)
  - ▶ ?liver function (50% impaired in those with LUTS
- Measuring the voided volumes when the patient experiences a strong desire to void and estimating the residual urine volume in each visit appears to be more practical to evaluate the progress of this unique group of patients and their response to treatment (Ineffective bladder emptying not reported before)
- Mean peak flow rate
- ▶ Urine culture (5% of positive secondary infection)
- ► U/S:
  - ▶ thickened bladder wall,
  - hydronephrosis (due to retroperitoneal fibrosis),
  - ► Bladder-wall calcification (not reported before)
- ▶ Bladder biopsy: microscopic calcification

### Protective Factors for Ketamine Abuse

Table 3. Risk and protective factors in multivariate analysis

	OR (95% CI); P				
	PUF score ≥28 (75th percentile)	Voided volume ≤35 mL (25th percentile)	Bladder capacity ≤ 60 mL (25th percentile)		
Female gender	2.39 (1.35-4.23); 0.003	1.90 (1.10-3.31); 0.02			
Ketamine use, g/week	1.03 (1.01–1.05); 0.002				
Status of ex-abusers at baseline	0.28 (0.13-0.57); 0.001	0.14 (0.06-0.33; < 0.001	0.33 (0.17-0.64); 0.001		

One-stop clinic for ketamine-associated uropathy, BJU Int. 2014 Nov;114(5):754-60. doi: 10.1111/bju.12675.

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