



Experience sharing on BDF projects

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Begin...

'Street ketamine'–associated bladder dysfunction: a report of ten cases



Peggy SK Chu 朱秀群
SC Kwok 郭善淳
KM Lam 林建文
TY Chu 朱天儒
Steve WH Chan 陳偉希
CW Man 文志衛
WK Ma 馬偉傑
KL Chui 崔家倫
MK Yiu 姚銘廣
YC Chan 陳耀祥
ML Tse 謝萬里
FL Lau 劉飛龍

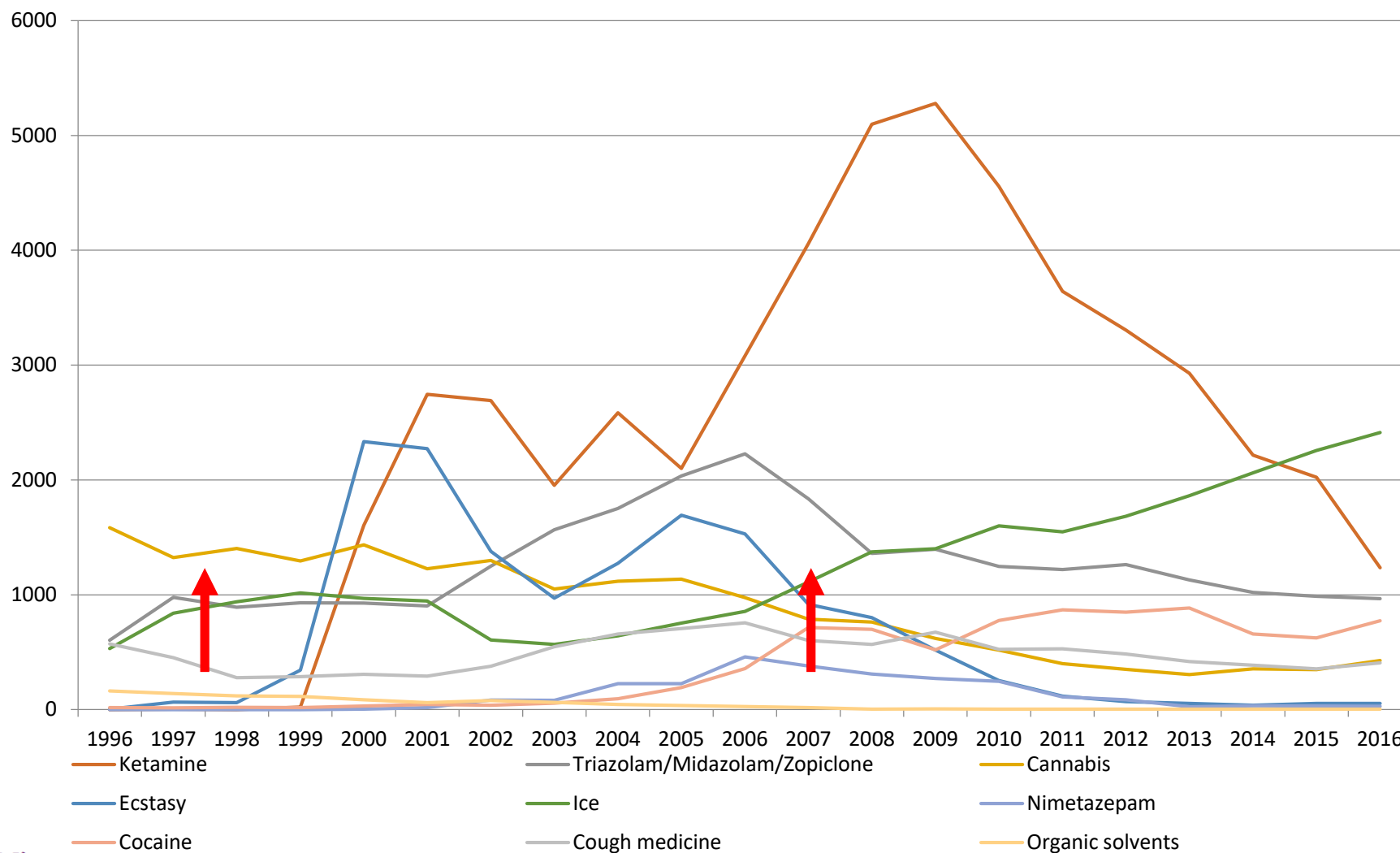
Ten young ketamine abusers presented with lower urinary tract symptoms to two regional hospitals in Hong Kong. Investigations demonstrated contracted bladders and other urinary tract abnormalities. These types of findings have never been reported before in ketamine abusers. The possible aetiology is also discussed.

Int
Keta
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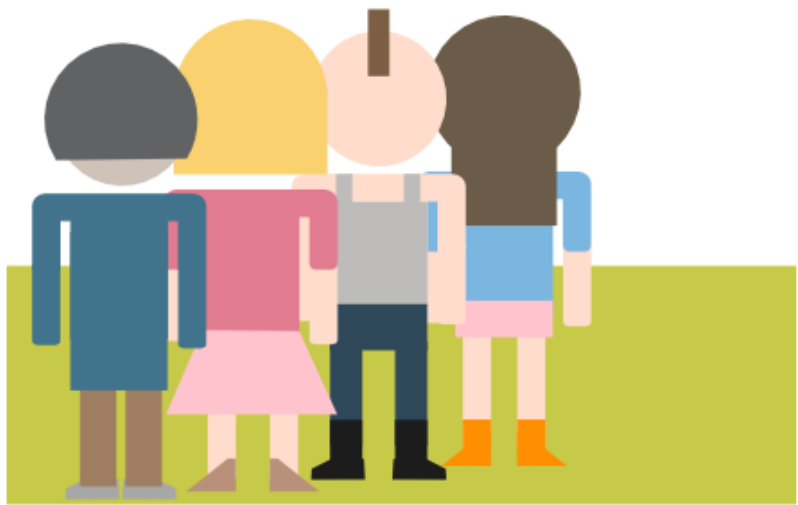
與「街頭」氯胺酮有關的膀胱功能失調： 十宗病例報告

十名氯胺酮濫用者因呈有下尿道徵狀分別被送往兩間香港地區醫院，經檢查後發現膀胱收縮及其他尿道異常。這是於氯胺酮濫用者身上發現這類結果的首批病例報告。本文亦討論導致以上情況的可能病原。

Number of reported drug abusers for 1996-2016 by Common type of Psychotropic substances



How Long Wait?



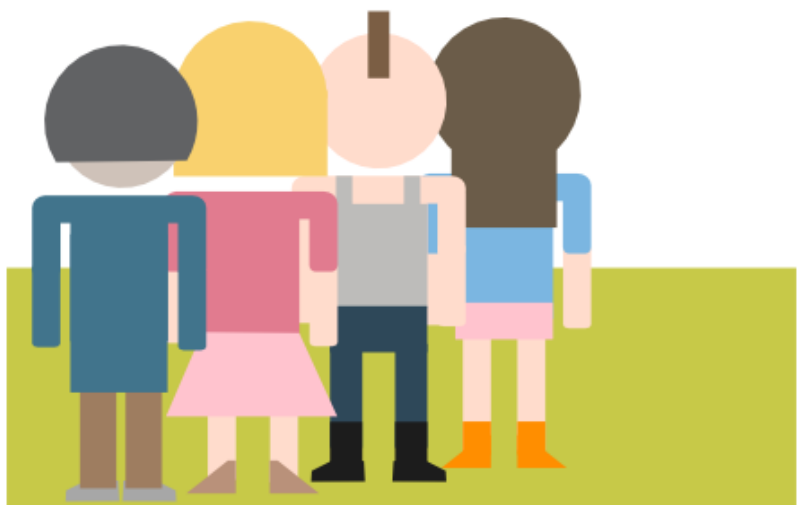


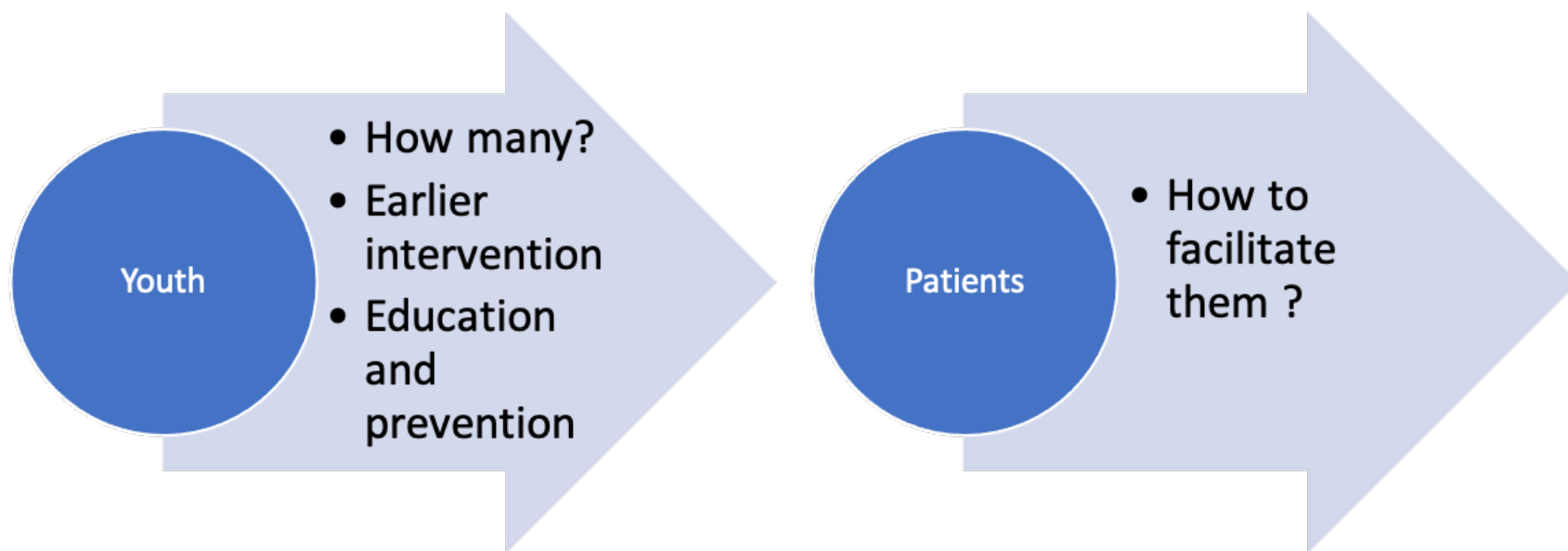
The Gaps

How Long Wait?

Patients

- How to facilitate them ?





- (A) Project reference no.: BDF101012
- (B) Project title: A targeted urological treatment program for secondary school students abusing psychotropic substance and a territory-wide school-based survey of bladder dysfunction symptoms associated with psychotropic substance abuse
針對中學生吸食危害精神科毒品的泌尿系統治療計劃及全港性有關吸食精神科毒品而導致膀胱功能失調的學校普查

YUTC opening ceremony Mar 19, 2012

青少年泌尿治療中心開幕式 - 2012年3月19日





青少年泌尿治療中心 / YUTC



- Supported by Beat Drug Fund
- Provide fast track territory wide clinical service
- 由禁毒基金支持
- 為所有需要的病人提供全港快速服務

青少年泌尿治療中心

吸毒尿頻遺害多
立即求醫勿再拖

尿頻
小便赤痛
滲尿

吸毒可破壞膀胱，永久失去正常排尿功能。若您懷疑自己因曾吸食毒品而導致任何小便不正常病徵，請立刻致電威爾斯親王醫院青少年泌尿治療中心求助熱線：**2632 3773**
我們歡迎青少年自行預約及求診。

  青少年泌尿治療中心
由禁毒基金資助成立





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*, Kristine Kit-Yi Pang*, Chi-Hang Yee*,
Winnie Chiu-Wing Chu†, Vivian Yee-Fong Leung†, Grace Lai-Hung Wong†,
Vincent Wai-Sun Wong†, Henry

• 58 •

中国药物依赖性杂志 (Chin J Drug Depend) 2016, 25(1): 58 - 67

[论 著]

氯胺酮相关尿路病变的新型治疗策略： 包含 540 个年轻患者的前瞻群组在基线的服务 提供模式、病人特征以及非侵入调查的首份报告*

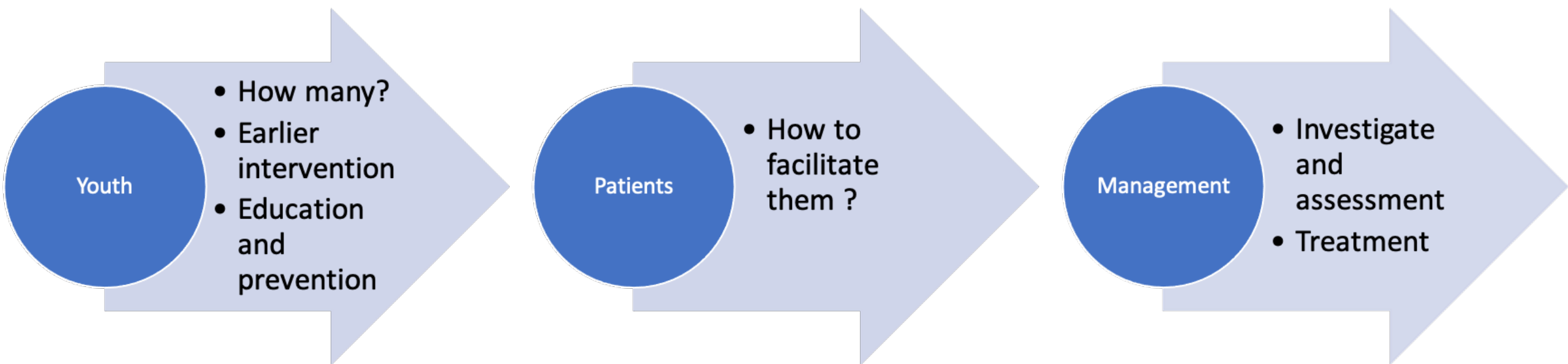
吴志辉^{1,3**} 余知行^{1,3} 黎珮德^{1,3} 陆 晔^{1,3} 李慧敏^{1,3} 谭煜谦^{2,3}

Population-based survey of the prevalence of lower urinary tract symptoms in adolescents with and without psychotropic substance abuse

YH Tam *, CF Ng, YS Wong, Kristine KY Pang, YL Hong, WM Lee, PT Lai



- 16,000 questionnaires sent out
- 12,350 (77.2%) returned
- Male, n=6166; Female, n=5928; male-to-female ratio 51:49
- 81% age 13-17
- 2.7% “ever use” psychotropic substance
 - 45.6% Ketamine user
- 發出了16,000份問卷
- 12,350 (77.2%) 返回
- 男, n = 6166; 女, n = 5928; 男女比例為51:49
- 81% 13-17歲
- 2.7% “使用過” 精神藥物
- 45.6% 氯胺酮用戶



(A) Project reference no.: BDF110010

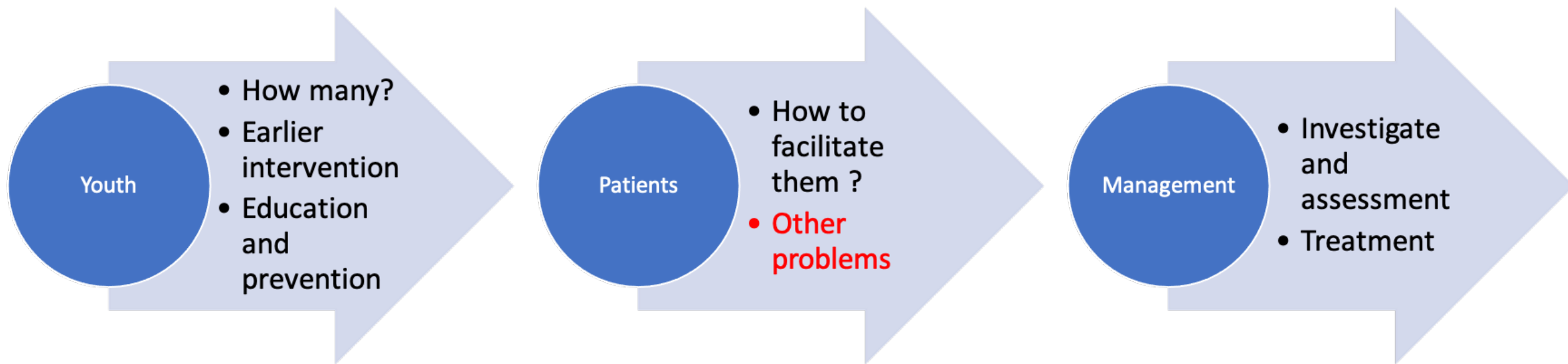
(B) Project title: **Prospective Longitudinal Study on the Treatment Outcomes of Various Treatment Modalities under a Standardized Treatment Protocol in Patients Suffered Ketamine-induced Voiding Dysfunction**
前瞻性縱向研究有關遭受氯胺酮引起排尿功能障礙的患者在一個標準化的治療方案中各種治療方法的效果

Clinical Outcome of a Prospective Case Series of Patients With Ketamine Cystitis Who Underwent Standardized Treatment Protocol

Chi-hang Yee, Pui-tak Lai, Wai-man Lee, Yuk-him Tam, and Chi-fai Ng



- 1st line treatment:
 - Oral non-steroidal anti-inflammatory drugs (or COX II inhibitor if not tolerated),
 - Anticholinergic agents +
 - Simple analgesics – pyridium / paracetamol
 - 2nd line treatment: for pain control – additional treatment, such as tramadol, pregabalin etc.
 - 3rd line treatment: A course of intravesical hyaluronate
 - 4th line treatment: Surgical procedures
- 一線治療：
 - 口服非甾體抗炎藥（或不耐受的COX II 抑制劑）
 - 抗膽鹼劑
 - 簡單的鎮痛藥 – 吡啶/撲熱息痛
 - 二線治療：用於疼痛控制 – 如曲馬多，普瑞巴林等。
 - 三線治療：膀胱透明質酸
 - 四線治療：外科手術



(A) Project reference no.: BDF130018

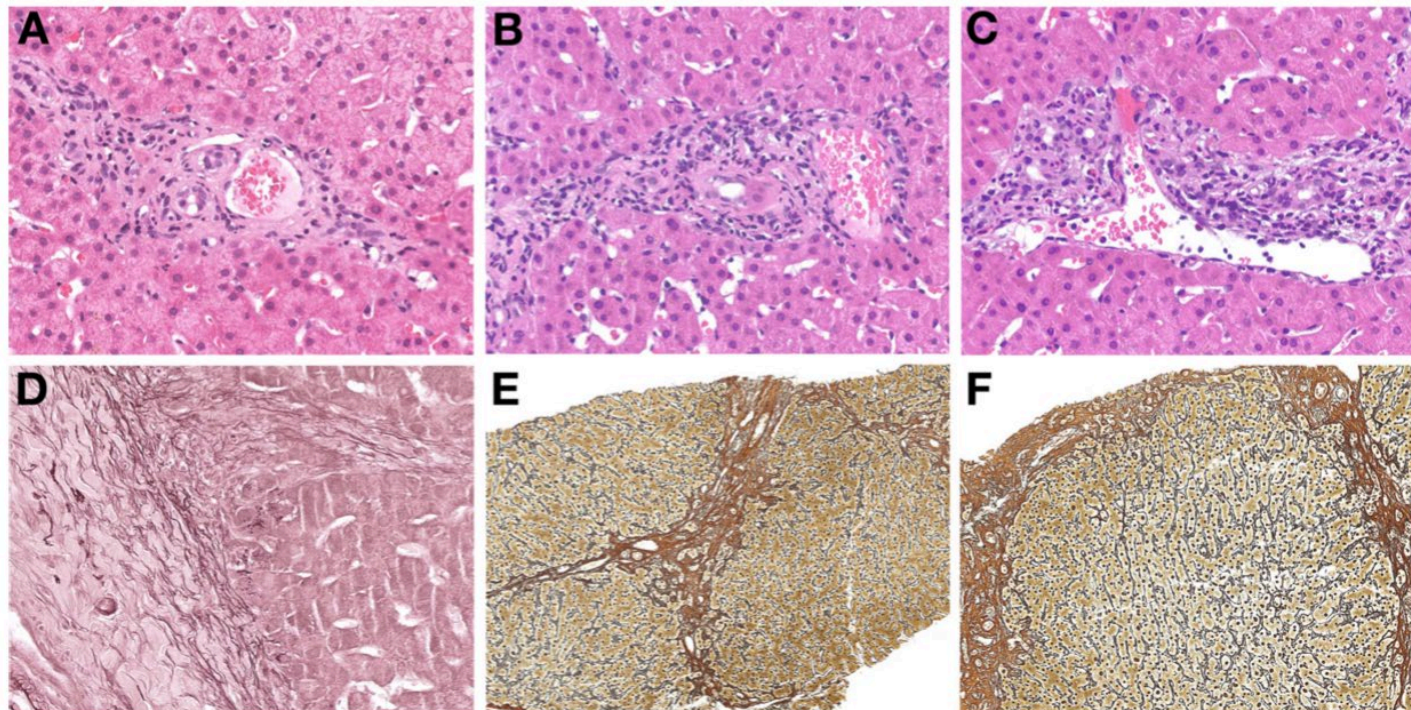
(B) Project title: An evidence-based two-tier urological treatment and liver-injury surveillance program to young ketamine abusers with urinary tract dysfunction
為患有與氯胺酮有關的排尿功能障礙的年輕病人提供以實證為基礎的雙線泌尿治療及肝臟損傷監測計劃

BRIEF COMMUNICATION

Liver Injury Is Common Among Chronic Abusers of Ketamine

Grace Lai-Hung Wong,^{*,‡} Yuk-Him Tam,^{§,||} Chi-Fai Ng,^{||,¶} Anthony Wing-Hung Chan,[#]
 Paul Cheung-Lung Choi,[#] Winnie Chiu-Wing Chu,^{**} Paul Bo-San Lai,^{||,‡‡}
 Henry Lik-Yuen Chan,^{*,‡} and Vincent Wai-Sun Wong^{*,‡}

liver injury found in 9.8% of subjects
 在9.8%的受試者中發現肝損傷



Multidisciplinary care 多學科 / 專業護理

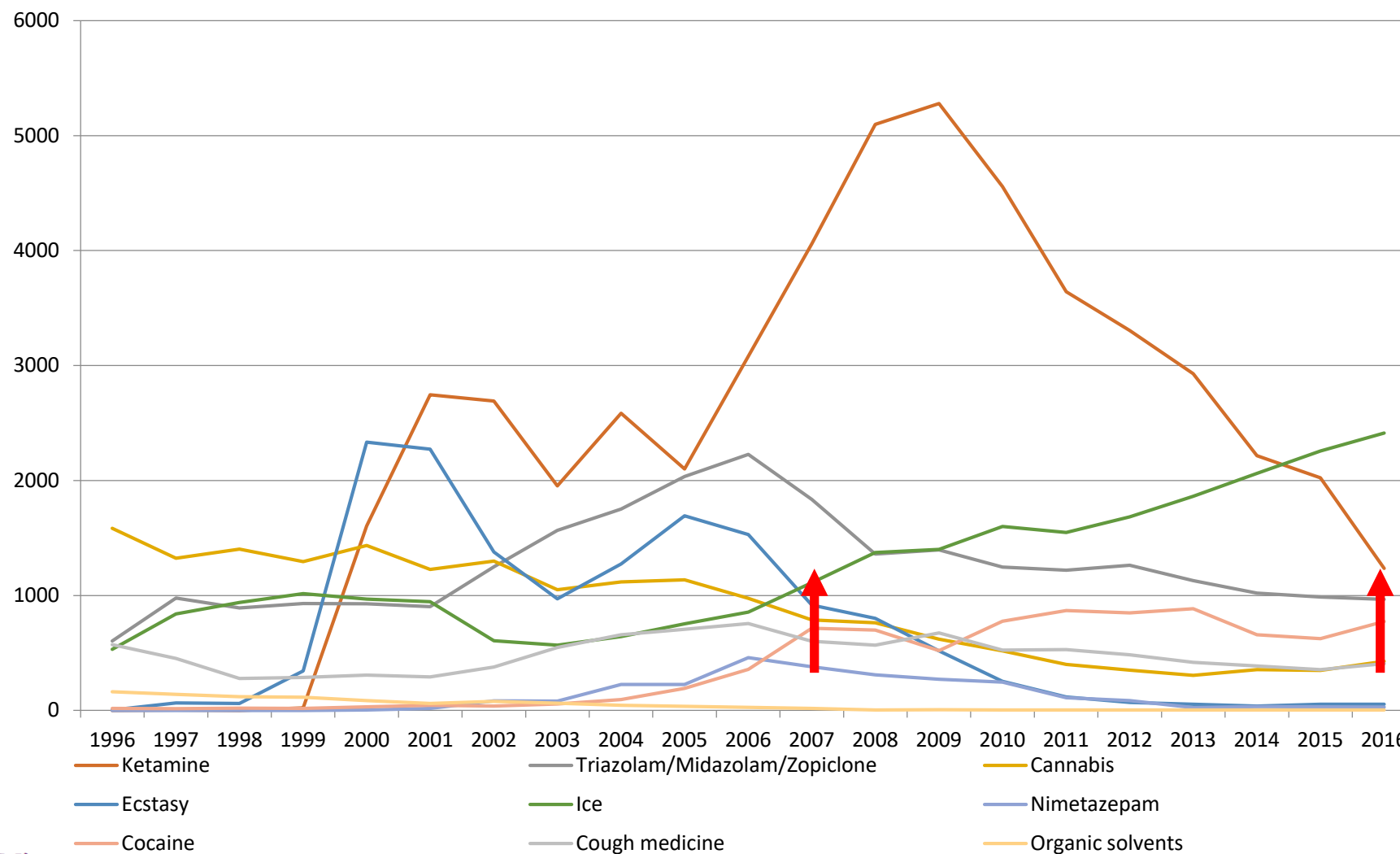


- Urologists
- Hepatologist
- Gynaecologist
- ENT surgeons
- Gastrointestinal doctor
- Psychiatry



- 泌尿科醫師
- 肝病醫師
- 婦科醫師
- 耳鼻喉醫師
- 胃腸道醫師
- 精神科醫師

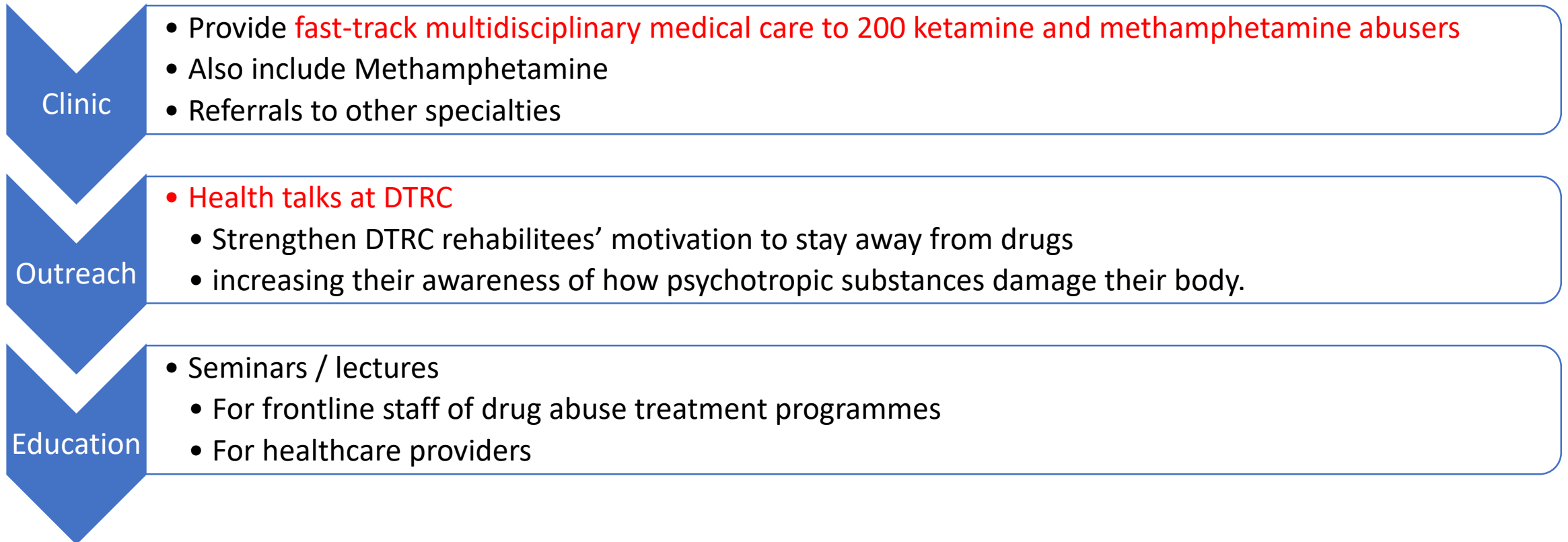
Number of reported drug abusers for 1996-2016 by Common type of Psychotropic substances



**Beat Drugs Fund (BDF) Regular Funding Scheme
(2016 Funding Exercise)**
**“Multi-disciplinary treatment programme for Methamphetamine and
Ketamine abusers with urinary tract symptoms”**



A 3-year project territory-wide project started at 1 April 2017 and ended on 30 March 2020





28 Apr 2017 Visit to DTRC - Dawn Island



25 May 2017 Seminars for frontline staff of drug abuse treatment programme



20 Jul 2017 Medical lectures to healthcare providers



2017 Medical lectures to healthcare providers



13 Sep 2017 Visit to DTRC – Operation Dawn Sister's Home

Project Content – Major activities

Output – Attendance - Treatment

	Expected Result	Achieved Result
Output Indicator 1	200 ketamine or methamphetamine abusers receive urological assessment and treatment at YUTC of Prince of Wales Hospital	217 ketamine or methamphetamine abusers receive urological assessment and treatment at YUTC of Prince of Wales Hospital (108.5%)
Output Indicator 2	200 ketamine or methamphetamine abusers receive screening for the need of multi-disciplinary care by other specialist services	217 ketamine or methamphetamine abusers receive screening for the need of multi-disciplinary care by other specialist services (108.5%)

Patient characteristics

217 patients included

Female 120/217 (55.3%), Mean age at attendance 28.3 (14-46)

K users 197/217 (79.3%), Meth users 45/217 (9.2%), K+Meth users (11.5%)

Referred by Social worker/ DTRC at baseline 161/217 (74.2%)

Patients having mild symptoms of other systems, especially impaired liver function 96/206 (46.6%), are under YUTC's observation and monitoring. They are screened at each YUTC consultation and readily referred to other specialty if indicated.

- With other medical speciality follow-up during project period 105/217 (48.4%)
 - Medical (Hepatology / renal / neurology etc)
 - ENT
 - O&G
 - O&T
 - Psychiatry
 - Surgery (Others)
- Referred to other speciality by YUTC 39/217 (18.0%)
 - Medical (Hepatology / renal / neurology / dermatology etc)
 - ENT
 - O&G
 - O&T
 - Psychiatry
 - Surgery (Others)

 - Social workers

Outcome – Treatment results

	Expected Result	Achieved Result
Outcome Indicator	50% of patients who clinically require anti-inflammatory therapy have free access to therapeutic agents not covered by the standard drug formulary of Hospital Authority	55 out of 73 patients (75%) who clinically require anti-inflammatory therapy have free access to therapeutic agents not covered by the standard drug formulary of Hospital Authority
Outcome Indicator	65% of patients show improvement in voiding function/symptoms or stabilization of upper urinary tract abnormality	141 out of 174 patients (81%) of patients show improvement in voiding function/symptoms or stabilization of upper urinary tract abnormality

Output – Attendance - Education

	Expected Result	Achieved Result
Output Indicator	200 DTRC residents receive reinforcement education through health talks delivered at DTRC	184 DTRC residents receive reinforcement education through health talks delivered at DTRC (92%)
Output Indicator	50 registered nurses and social workers from CCPSA attend the seminars with practical knowledge on urinary tract problems associated with psychotropic substance abuse	50 registered nurses and social workers from CCPSA attend the seminars with practical knowledge on urinary tract problems associated with psychotropic substance abuse (100%)
Output Indicator	200 healthcare providers attend medical lectures on the update of urinary tract pathology associated with psychotropic substance abuse and its treatment	307 healthcare providers attend medical lectures on the update of urinary tract pathology associated with psychotropic substance abuse and its treatment (153.5%)

Key Lesson learnt

- **Services:**

YUTC provides a priority medical care for various medical needs among the ketamine and methamphetamine abusers, and thus plays an essential role / easy access point to fill the current service gap in the treatment for psychotropic substance abusers complicated with urinary tract problem (and other medical problems)

- All stakeholders including the government, the social work services and the urological care providers should collaborate in providing a multidisciplinary and continuous care to better tackle the challenging issue of psychotropic substance-associated urinary tract dysfunction (and other medical problems)

Substance abuse effects on urinary tract: methamphetamine and ketamine



CH Yee *, CF Ng, YL Hong, PT Lai, YH Tam

ABSTRACT

Introduction: Ketamine is known to cause urinary tract dysfunction. Recently, methamphetamine (MA) abuse has become a growing problem in Asia. We investigated the symptomatology and voiding function in patients who abused MA and ketamine and compared their urinary tract toxicity profiles.

Methods: In the period of 23 months from 1 October 2016, all consecutive new cases of patients presenting with MA- or ketamine-related urological disorder were recruited into a prospective cohort. Polysubstance abuse patients were excluded. Data were analysed by comparison between patients with ketamine abuse and MA abuse. Basic demographic data and initial symptomatology were recorded, and questionnaires on urinary symptoms and the Montreal Cognitive Assessment (MoCA) were used as assessment tools.

Results: Thirty-eight patients were included for analysis. There was a statistically significant difference in mean age between patients with MA and ketamine abuse (27.2 ± 7.2 years and 31.6 ± 4.8 years, respectively, $P=0.011$). Urinary frequency was the most common urological symptom in our cohort of patients. There was a significant difference in the prevalence of dysuria (ketamine 43.5%, MA 6.7%,

$P=0.026$) and a significant trend in the difference in hesitancy (ketamine 4.3%, MA 26.7%, $P=0.069$). Overall, questionnaires assessing urinary storage symptoms and voiding symptoms did not find a statistically significant difference between the two groups. The MoCA revealed that both groups had cognitive impairment (ketamine 24.8 ± 2.5 , MA 23.6 ± 2.9 , $P=0.298$).

Conclusions: Abuse of MA caused urinary tract dysfunction, predominantly storage symptoms. Compared with ketamine abuse, MA abuse was not commonly associated with dysuria or pelvic pain.

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Conclusion

- See the need and gap
 - Medical need
 - Defect in medical care – funding support
 - Gap in knowledge in medical knowledge
- Collaboration with BDF to try to overcome the gaps
 - Improve patients' care – shorten waiting time, increase accessibility, ultimately decrease symptoms and complications
 - Improve patients understanding of the situation – decrease relapse
 - Improve education
 - To public / youth – decrease substance abuse
 - To social workers and other – early referral and recognition
 - To health care provider – improve patient care

Thank you