

Dear Chairman,

I am Dr Mak Siu King, a specialist in urology. I have been working as a frontline doctor in the Department of Surgery of North District Hospital since my graduation from The University of Hong Kong.

Today, I would like to share with you some of our experience in managing substance abusers.

On the right hand side is the magnetic resonance imaging (MRI) of the urinary system or MRU of an early substance abuser while the one on the left hand side is that from a chronic abuser. What we see is the progressive blowing up of the kidneys; we call it hydronephrosis and the shrinkage of the urinary bladder, which we call a contracted bladder. The consequence of hydronephrosis is the loss of kidney function. This can end up with chronic pain, infection, renal impairment or even renal failure. You may have seen the abusers appearing on TV to carry urinary bags. This is because of their urinary tract obstruction that doctors have to put in catheters for draining out the obstructed urine from the kidneys.

I have seen teenagers admitted to Intensive Care Unit because of acute renal failure. This is not just a nightmare to the patient but also a stress to our multi-disciplinary medical team. The stormy recovery of these young patients does drain away tremendous resources.

I have also witnessed ex-abusers suffering from chronic renal failure. The cost of multiple operations and renal replacement therapy for these young adults is a heavy burden to our health care system both in the short term and in a long run.

Seeing and being in these situations, the health motto or basic clinical management principle alerts me and drives my service vision: Management of disease at an early stage is always more rewarding and cost effective than remediating it at a late stage.

As an urologist, I also have chance to screen diseases at an early stage and to save patients' lives. One example is the screening by prostate specific antigen (PSA) to lower prostate cancer mortality. Evidence demonstrates men could benefit from screening because they are at a higher risk of prostate cancer (race, family history, etc.). [American Urological Association New Clinical Guideline on Prostate Cancer]

I would like to use this example to illustrate the benefits of (drug) screening because young substance abusers are similarly at a very high risk of (substance use related) health problems that necessitate clinical interventions. As a frontline doctor, I welcome referral of these early

screened patients to our clinic for medical assessment, treatment and counselling. This arrangement can then help prevent the health complications from chronic substance abuse.

We know hepatitis can damage the liver, which, if not treated, can end in liver cirrhosis and liver failure. In this connection, I would like to show you another image taken of a substance abuser. On the right hand side is the MRI of the biliary tree (MRCP) of an early abuser while that on the left is from a chronic abuser. Again you can see the progressive “blowing up” phenomenon of the biliary tree due to chronic drug abuse. Blood test of these patients will show abnormalities in liver function. The clinical picture looks extremely similar to a patient suffering from acute infection of the biliary tract which requires endoscopic or surgical treatment, if the doctor is not aware of the hidden background of the patient as a substance abuser.

With my experience, I would like to reveal that substance abuse is a medical condition in addition to it being associated with social and other problems. We understand its potential destructions to body organs and functions if it is not under early medical and rehabilitative interventions. Furthermore, with it being socially infectious or potentially spread among the youth peer groups, I'll also coin this medical condition as a "Social cancer with infectious capability". The consequence of chronic substance abuse is like cancer destroying the bodies of our young adults progressively. Similar to the management of infectious disease, e.g. managing the endemic/epidemic respiratory diseases, my view, as a frontline doctor, is to manage it at an early rather than a late and wide-spread stage.

In medical field, there are numerous examples of early screening of a disease to result in changing the prognosis to a more positive one. Examples are blindness from glaucoma, limbs gangrene from diabetes mellitus and stroke from arteriosclerosis. Screening of ocular pressure, blood sugar level and cholesterol level are all simple and effective means to increase the awareness of patient. We save vision, save limbs and even lives by these simple screening tests. Is there anything wrong of asking our relatives, friends or neighbours to go screening for these conditions if we notice some circumferential evidence of them having these diseases? If we notice that our relatives are having blurring of vision, frequent urination and fat body, we will bring them to see doctors for screening test. This is in our goodwill to help people.

I have led many initiatives to screen substance abusers for identification of medical complications since 2009, including outreach service in community halls, night clinics and short detoxification programs in our hospital that serve the whole Hong Kong community.

From January 2011 to December 2012, 18 outreach clinics were run in the community centres in North District, Tai Po, Kwai Chung and Tsuen Wan. 230 teens attended the clinics for assessment. The mean duration of ketamine abuse was 55.8 months. Among them, 79.5% had abused ketamine for over 4 years, 60.1% abused ketamine for more than 5 times per week, 50% consumed alcohol while taking drug, and 68.3% reported use of multiple drugs. Only 37.4% of them admitted dependence on substance use.

The dosage of ketamine use also had negative effect on the body mass index (BMI). The risk of BMI below average was 2.5 times in abusers taking ketamine at a frequency over 2 times per week. Moreover, 29.5% of the abusers were underweight, with females at a higher likelihood.

47.8% of them suffered from overactive bladder symptoms. Taking drug one extra day per week would increase 50% of getting overactive bladder symptoms. The duration of ketamine abuse related inversely to urinary flow rate. The frequency of ketamine abuse also related inversely to the urinary voided volume.

Ultrasound scan showed 17.2% of hydronephrosis in one or both kidneys. Taking one extra year of ketamine would have 98% chance of having hydronephrosis. Increasing one extra gram of ketamine would increase 58% chance of getting hydronephrosis.

18% of cases were referred to urology clinic for further work up after this outreach assessment.

We have set up a Crisis Accommodation Centre in North District Hospital in 2012. This is the first platform in Hong Kong that provides hospital-based cross-specialities' treatment and rehabilitation services to accommodate the health crisis of substance abusers. It is a territory-wide open access referral centre, accepting direct referrals from NGO, Counselling Centre for Psychotropic Substance Abusers (CCPSA), Residential Drug Treatment and Rehabilitation Centres (DTRC) and Accident and Emergency Department of all districts of Hong Kong. It provides out-patient screening and follow-up together with a brief in-patient recovery program. The program includes urological and other medical assessments and interventions, psychological and functional assessments as well as coaching and lifestyle redesign to enhance the motivation and readiness of the abusers for engagement in rehabilitation with a view to enhance the outcomes.

In one year period, we accepted over 500 bookings from social workers. 360 medical consultations were given to the abusers accompanied by social workers. We recruit 84

abusers to go through this program in hospital. We engaged 145 parents, family members and social workers in the pre-discharge case conference.

On immediate completion of program 71.6% of abuser showed improvement in treatment motivation. 60.5% of abusers showed improvement in treatment motivation 2 weeks after discharge from hospital. And it rises to 71.4% improvement in treatment motivation with follow through effort from collaboration social workers.

28.6% participants abstain from drug use for at least 3 months after counselling. 85.7% of ketamine users show improvement in reduction of drug use.

This program showed the benefit from drug screening because they are at a higher risk of drug abuse related health complications. We have positively changed the abusers' lives and prevent deterioration of their body health.

Through the program and platform of the Crisis Accommodation Centre of North District Hospital, we demonstrated the evidence that the multidisciplinary team intervention can improve the readiness and engagement of abusers to treatment and rehabilitation program. We established a hospital-community system and a mode of practice effective for collaboration and interfacing with social workers in the community so to bridge the gap and build continuity between treatment and rehabilitation. We have witnessed participants in better health status upon discharge from this program. This piece of evidence proved early medial intervention can save life.

Dr Pierre Chan and I are nominated by HKPDA to share the frontline doctor opinion. We face life and death every day. We see people dying from chronic diseases. We will not comment on the human right issue of RESCUE drug testing scheme. Yet, as a doctor with a passion to help substance abusers, we advocate early identification of psychotropic substance abusers and with a follow through structured crisis recovery program.

Act fast, save life, we can make a difference.

Thank you for your kind attention.

Dr Mak Siu King  
HKPDA  
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