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Tackling Subutex abuse in Singapore

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Subutex® (or buprenorphine hydrochloride) was approved by the Ministry of Health (MOH) in 2000 as substitution treatment for opiate-dependent drug abusers within a framework of medical, social and psychological treatments. It was subsequently introduced into the Singapore market in 2002. When used appropriately, Subutex has been shown in other countries to reduce craving for heroin and facilitate improvement in social functioning such as employment and personal relationships[1].

SUBUTEX ABUSE

Within four years of introduction, there were at least 3,800 known Subutex users in Singapore. Instead of taking the drug sublingually as indicated, some drug addicts were found to be abusing Subutex by mixing it with other drugs and injecting the cocktail into their body. A "needle injection culture", which is common among drug addicts in many other countries but never part of our drug addiction scene, had emerged in Singapore.

Complications of parenteral drug abuse were increasingly noted by clinicians. These complications included infections of varying severity and vascular complications: cellulitis, abscesses, gangrene, necrotising fasciitis, compartment syndrome, and distal limb ischaemia associated with multiple injection sites (including the femoral vein/artery and neck vein regions), limb amputations and infective endocarditis[2,3].

The Centre for Forensic Medicine reported 50 buprenorphine-associated deaths[4], with the incidence rate nearly doubling from 9 per 1,000 to 17 per 1,000 autopsies in two 12-month periods surveyed from September 2003 to August 2005, with postmortem blood samples positive for buprenorphine and other substances. 44 of the 50 cases (88%) showed concurrent presence of benzodiazepines like midazolam, diazepam and nitrazepam in blood samples. Media reports had also highlighted indiscriminate disposal of contaminated needles and utensils, sometimes blatantly, in public places. These reports coupled with the congregation of Subutex users in some "hotspots", including medical clinics, caused significant public concern.

CONTROL MEASURES

To tighten control on Subutex prescription, MOH introduced the Clinical Practice Guidelines (CPG) on "Treatment of Opiate Dependence" in November 2005. The CPG described good clinical practice, complementing administrative guidelines that were also issued to ensure appropriate prescription of Subutex. MOH also introduced the Central Addiction Registry for Drugs, Singapore (CARDS) – a web-based system which monitors the prescription of Subutex by doctors and enables them to identify patients who obtain additional supplies from different doctors. In addition, MOH required Subutex-prescribing doctors to attend a mandatory eight-hour training course on managing opiate dependents. Anecdotally, these measures were effective in significantly reducing the incidence of doctor hopping to obtain multiple prescriptions. Unfortunately, the Subutex abuse situation on the ground persisted.

The decision was thus made by MOH to tackle this problem fundamentally and nip it in the bud before it became unmanageable. The two main priorities were to prevent new addicts to this drug and help the current users wean off this drug. A three-pronged approach was adopted.

SUBUTEX MADE A CONTROLLED DRUG

Firstly, from August 14, 2006, buprenorphine was made a Class A Controlled Drug under the Misuse of Drugs Act. The importation, distribution, possession and consumption of buprenorphine will be an offence unless specifically exempted by the relevant authorities. First-time and second-time abusers will undergo compulsory treatment at the Drug Rehabilitation Centres. Recalcitrant abusers will face stiffer punishment under the Long Term Imprisonment (LTI) regime. Under the LTI regime, third-time or more abusers could face a maximum

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sentence of seven years imprisonment and six strokes of the cane if convicted. If they commit a subsequent offence of consumption after their conviction for a LTI regime, they could face a maximum sentence of 13 years imprisonment and 12 strokes of the cane.

Those arrested for trafficking or possession of buprenorphine will face even stiffer penalties. If convicted, traffickers will face a minimum sentence of five years imprisonment and five strokes of the cane, and a maximum sentence of 20 years imprisonment and 15 strokes of the cane. Those convicted for possession of buprenorphine will face up to ten years imprisonment, $20,000 fine, or both. To deter proliferation of a needle culture among drug abusers, those found in possession of syringes, stained or otherwise, will face up to three years imprisonment, $10,000 fine, or both.

SUBUTEX VOLUNTARY REHABILITATION PROGRAM (SVRP)

Secondly, MOH, with the assistance of an expert panel of psychiatrists, introduced the Subutex Voluntary Rehabilitation Program (SVRP), which consists of a medical and rehabilitation component. This programme was opened to all Subutex users including those who were not registered in CARDS. The medical component consists of a detoxification regime of sublingual buprenorphine (under daily supervised dosing) in gradual tapering dose reduction from the current dose, usually within five to seven days. In cases with prolonged withdrawal symptoms, the treatment duration would be extended accordingly. Most patients will undergo detoxification in a supervised outpatient setting.

However, some patients may require inpatient detoxification, such as those with high potential for complicated withdrawal (e.g. patients with concurrent poly-substance abuse or patients with history of complications during previous withdrawal experiences), presence of other comorbid medical conditions (e.g. uncontrolled diabetes, infections) and those with a history of depression and psychosis. The medical component is being carried out at the Institute of Mental Health (IMH). Symptomatic medications for withdrawal symptoms are also available and allowed for take home. All patients enlisted are offered basic psycho-education.

The rehabilitation component includes options for naltrexone, structured substance abuse counselling (non-residential), and half-way house (residential) placement. For continuity of care, patients can be referred for further addiction follow-up when indicated or to relevant specialist clinics for further management of comorbid mental or medical conditions detected. The importance of compliance with the prescribed programme was strongly emphasised as the patient must play his/her part if they wish to overcome their dependence. Patients who default their appointments, are non-compliant with the treatment regime and/or are found to be abusing opiates, benzodiazepines or any other controlled/illicit drugs will be disqualified from SVRP. Family and society support was also strongly encouraged.

TRANSITIONAL PROVISIONS

The third prong involved the transitional provisions. All general practitioners (GPs) were instructed that as of August 14, 2006, no new patients were to be started on Subutex. Take-home dosages for existing patients on Subutex must also be discontinued from the day of their next appointment. All patients who require Subutex will have to consume their medication sublingually under direct visual observation (i.e. daily observed therapy or DOT) by their doctor and/or his treatment team on a daily basis. The doctor and/or his treatment team will have to ensure that the sublingual dose is dissolved completely before allowing the patient to leave the clinic. If the clinic is closed during weekends or public holidays, the clinic is required to provide a private prescription slip for their patients to collect their daily dose of Subutex from IMH Pharmacy.

Subutex users were given a two-week period (August 14-27, 2006) to sign up for the SVRP. They can do so through existing doctors managing their opiate dependence. GPs were requested to encourage their patients to sign up for SVRP. As their patients were on DOT, there were ample opportunities for GPs to counsel their patients on their treatment options. Subutex users could also sign up through the MOH hotline. Some also chose to walk in directly to IMH to get their appointments. The latter two groups were mainly patients who were not registered in CARDS. Patients who consented for SVRP were contacted by MOH on their appointment details. GPs and emergency departments were also advised of the treatment options for patients with withdrawal symptoms. IMH also set up a Detoxification Clinical Advisory Service manned by addiction medicine specialists to assist doctors managing such patients.

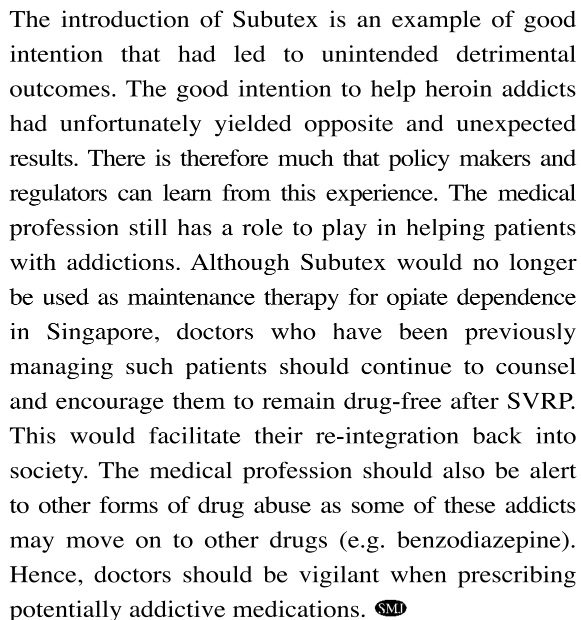
SVRP IMPLEMENTATION

More than 3,000 patients have signed up for SVRP. SVRP started on August 21, 2006 (one week earlier than the planned date) to cater to patients who were not being managed by GPs. These patients had been obtaining their Subutex illegally from

secondary markets (e.g. other Subutex users). As their supply of Subutex is now severely restricted, there is a risk that they may go into withdrawal if they are not treated early. Some of these patients also needed to be stabilised on oral dosing as they have been used only to intravenous dosing. The medical component of SVRP ended on September 30, 2006. Of those who signed up, 2,269 had started SVRP medical detoxification at IMH (i.e. 75% of the patients who signed up for SVRP). Of these, 1,544 patients had completed the medical detoxification phase (i.e. 68% of those who started on the detoxification programme).

SVRP has been a massive logistical exercise. The scale of the medical detoxification phase is unprecedented not only in Singapore but also in any other country. Additional medical and paramedical staff from IMH and restructured general hospitals as well as locums were mobilised by MOH and trained by IMH to assist with the patient load. Additional security personnel and support staff were also employed to enable the SVRP Clinics to run morning, afternoon, and evening clinics (including weekend morning and afternoon sessions). The smooth implementation of SVRP is testimony to the effectiveness of the multi-agency approach with IMH anchoring the treatment aspects and with the Central Narcotics Bureau and the Singapore Police Force providing invaluable assistance to ensure security and safety.

CONCLUSION



The introduction of Subutex is an example of good intention that had led to unintended detrimental outcomes. The good intention to help heroin addicts had unfortunately yielded opposite and unexpected results. There is therefore much that policy makers and regulators can learn from this experience. The medical profession still has a role to play in helping patients with addictions. Although Subutex would no longer be used as maintenance therapy for opiate dependence in Singapore, doctors who have been previously managing such patients should continue to counsel and encourage them to remain drug-free after SVRP. This would facilitate their re-integration back into society. The medical profession should also be alert to other forms of drug abuse as some of these addicts may move on to other drugs (e.g. benzodiazepine). Hence, doctors should be vigilant when prescribing potentially addictive medications. SMJ

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