## America's Insatiable Demand for Drugs: Examining Alternative Approaches

## 15 June 2016

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At Providence Crosstown Clinic 140 people are receiving daily treatment with injectable opioids, an intensified form of medication assisted treatment. I want to thank the Government of British Columbia for supporting our clinic and making the delivery of this treatment possible in Vancouver. About half are receiving treatment with hydromorphone a widely available licensed pain medication, the remainder receive diacetylmorphine.

Our patients can come up to three times a day for treatment, half come twice per day and the other half come three times a day. About a third take a small dose of methadone with their last session at night. All these patients have a chronic disease, a medical condition for life that can be successfully managed. Treatment prevents withdrawal and stabilizes their lives. Here they have an opportunity to deal with underlying psychological and mental health issues. In time some will step down to less intensive treatments or gradually wean themselves off.

These patients were all participants in SALOME, the study to asses longer term opioid medication effectiveness. SALOME was a follow-up study to NAOMI, The North American Opioid Medication Initiative, which showed diacetylmorphine or prescription heroin is superior to methadone in that group of patients who continue to use illicit heroin despite attempts at the standard treatments. A small group of NAOMI participants received hydromorphone and in a surprise experienced drug users could not distinguish which treatment they received and the beneficial treatment effect was preserved in the hydromorphone arm.

Some people suffering from severe opioid use disorder need an intensified treatment like this. While methadone and buprenorphine are effective treatments for many people and should remain first line responses, no single treatment is effective for all individuals. Every person left untreated is at high risk for serious illness and premature death.

Despite positive results for diacetylmorphine published in the New England Journal of Medicine only Denmark acted on these results and incorporated prescription heroin into their health system.

But, it did lead to our follow-up study, and testing of Hydromorphone or Dilaudid as a potential treatment. Hydromorphone has the advantage over diacetylmorphine of already being a licensed pharmaceutical.

The SALOME group underwent stringent testing and controls to show need for treatment. For them the standard treatments, suboxone and methadone had not worked and most had multiple prior attempts at treatment. They had used injectable opioids for at least 5 years and on average 15 years. They had medical and psychological health problems. They had nearly universal involvement in the criminal justice system. In short we were able to recruit those patients appropriate for an intensified treatment like this.

At the start of the study they were using illicit opioids every day and by six months their use was down 3 to 5 days per month. Nearly 80 percent were retained in care and that high rate continues through today. At outset they were engaged in illegal activities on average 14 days per month and with treatment that reduced to less than 4 days per month. This study was published this past April in the Journal of the American Medical Association Psychiatry. I would like to acknowledge Health Canada for allowing us to investigate this important scientific question and for allowing a number of our patients to continue on Diacetylmorphine, those who need it on a compassionate basis.

Supervised injectable hydromorphone is indicated for the treatment of severe opioid use disorder. We are using injectable hydromorphone as a medication assisted treatment, an intensified medical intervention and part of the treatment continuum. Severe opioid use disorder is a chronic disease that needs to be managed long-term like type 2 diabetes or hypertension. Without our treatment this group's only option would be illicit opioids through the Narco capitalist networks.

We still have people who use drugs on the street in Vancouver, but we do have another option in addition to needle exchanges. Supervised consumption rooms are legally protected places where drug users consume pre-obtained illicit drugs in a safe, non-judgmental environment. Vancouver has two such sites. The sites provide an important entry point for people into medical care and substance use treatment. They also provide value over needle exchanges alone as all needles and equipment are contained onsite and needles will not end up in playgrounds or schoolyards where they could cause injury.

To contrast with these harm reduction interventions, at our clinic we are providing a medical treatment. Providing injectable medication in a specialized opioid clinic, under supervision of medical professionals not only ensuring safety of the patients and the community but allowing for the provision of comprehensive care.

We are able to use hydromorphone 'off-label' in Canada for treatment of substance use disorder but some jurisdictions restrict its use to pain. I have seen some remarkable transformations in our patients. Some of our patients have already returned to work or to school.

Supervised injectable hydromorphone is safe, effective, and cost effective. A useful tool when the standard treatments are not effective. Treatments are dispensed within our opioid treatment clinic and prescribed on a 'dispensing basis' on site. In this setting Hydromorphone is not susceptible to diversion and an exemption for its use could be considered in jurisdictions where its use to treat substance use disorder is prohibited by law.

In British Columbia we need every tool in the toolbox to rise to the challenge the opioid epidemic presents. Injectable opioid assisted treatment in supervised clinics is one effective approach. Supervised consumption rooms, like Insite, are valuable for public health. Of course we would like to see an end to people dependent on heroin but for those already suffering it is essential to provide care, and care based on evidence.