

## **iGEM 2019 Concordia**

Doctor, general practitioner

Interviewed by Giuliana Giacomini. Transcribes script from phone

*Giuliana*

*In your experience what is the root cause of addiction in individuals?*

Doctor

Many patients that come into my clinic are young addicts but majority of them suffer from chronic pain and are of old age to middle age, they have a bad quality of life and are desperate for anything. Knowing the addictive affects that opioids have; we prescribe the patients with a medication that aren't narcotics, but these meds are not affective long term and the patient always come back. Therefore, we prescribe them with a diluted dose of narcotic and they always come back once again with the same degree of pain and asks us to increase the dose. It is difficult as a doctor in my practice to determine the correct treatment of pain and not to let it overlap with addiction.

Young addicts have a different background story, they usually experience trauma and have acute pain, they are given narcotics at emergency clinics and there is never a follow up. These young adults are given 10-15 pills of narcotics and the system lacks to follow up on their treatments and these patients go to other resources such as the streets or black market to get these pills.

*In your opinion what lacks in the medical system?*

The Doctors are aware of the dangers of opioids and the crisis it is causing but we are lacking the resources and in Montreal we are lacking pain programs and well-trained personnel staff that can monitor treatments in order to minimize addiction or overdosing.

There is no set structure that the government orders doctors on how to handle opioid addiction cases. There isn't a system that tracks patients and which clinics they have had opioids prescribed at. A patient can go to Doctor A and get prescribed to pain medications but never have a follow up, so they go to Doctor B and ask for a higher dose and Doctor B has no history of their past medications and the pattern continues.

Patients in traumas are not aware of the dangers that these medications have, they were never told the seriousness of the drug by doctors and I personally think that doctors lack to inform the patients is due to the pressure and the frustrated patients. Many patients don't have family doctors and will go to any Doctor who's available at a clinic but for the next time that same doctor won't be available which causes that vicious cycle of unmonitored medications.

The government needs to establish more pain programs and install a better consultation treatment for traumas or chronic pain in order to have a better control the patients' medical activity.

*Are there any regular use detection methods that you used on a patient?*

In my clinic, when a patient is prescribed a narcotic we make them sign a contract, this contract indicates that they are aware of the medication and the concentration that is being prescribed to them and under these medications they must see only one doctor and go to one pharmacy, where we keep in contact with the pharmacist and get updates if the patient is early at his or hers renewal or if they were asking more than the required amount. However, this solution is not always implied and patients don't often follow it, it becomes telephone with the pharmacist and it becomes time consuming on each of our end. The patient must also know the dangers their medication has when in use of them and understand this opioid crisis. In the medical field there is no exact way to measure or determine a patients every step or a system to advice the doctors that their patient is in danger. We lack pain management programs and clinics which can help us stabilize the Diagnostic.

*From your experience, would the use of a patch that prevents the consumption of fentanyl help combat the opioid crisis? Are there any changes would you advise us to take on the design or approach or our project?*

I personally think, this patch goes beyond the party-goers and rave scene that you are targeting and can be put into my general practise. I view the patch/tattoo as an alarm system, and we are the house. A fire alarm detects if the house is in danger and if there is too much fire, the patch essentially does the same thing. If the patient is aware of the potency of the drug, then they will voluntarily put the patch on. However, if targeting addictive patients, it will be more difficult and take more convincing. Personally, I think it is a very good tool and aid for doctors as the detection and diagnostic is already difficult.

*Do you think that our project will work better for victims of involuntary doping or people that have been addicted for many years?*

The clientele of patients who are suffering and will do anything to stop the suffering is the niche I would target towards as they want to get better without being addicted or overdosing. They must understand the danger of opioids. As a doctor, I would prescribe the medication however they must wear the patch in order to track the level of toxicity in their system, not one without the other. By giving them this patch, doctors will be able to track their patient at all times and this will also put into perspective for the patients the importance of this crisis and educate them.