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Could the North American opioid crisis hit Switzerland?

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Introduction

For over 10 years now, North America has been experiencing a major crisis linked to opioid overconsumption[1] . Could Switzerland incur the same fate?[2] This question is often raised both in the media[3] and in scientific publications [4]. Is it a form of fear mongering? Are we at the mercy of the same trends, or do we benefit from protective factors unique to Switzerland or Europe?

Actually, asking the question this way can be misleading. What is really meant by "opioid crisis"? Are we referring to the flood of deaths from intoxication (so called "overdoses")? Or are we more generally referring to excessive (and medically unjustified) consumption?[5] Are we targeting the consumption of certain substances that are perceived as particularly dangerous, such as fentanyl?[6] Are we attacking the practices of certain doctors and their (in)famous US "pill mills"?[7] Are we criticizing the dubious commercial strategies[8] and misleading advertising [9] of a few pharmaceutical companies? Or the lack of access to appropriate care for people with opioid-related addiction disorders?[10]

Obviously, this issue has several facets. Our article aims to address some of them.

Significant differences between Switzerland and the United States

To simplify our analysis, we will start with the six "easiest" arguments; that is, areas where Switzerland does rather well.

1. Once Switzerland overcame its heroin crisis of the 1990s, the number of fatal intoxications stayed relatively low and stable,[11] at around 140 deaths per year.[12] Such deaths usually occur when several psychoactive substances are mixed (e.g., alcohol, benzodiazepines, opioids).[13] By themselves, opioids taken under medical supervision rarely lead to death; taken at the dose tolerated by the body, they do not present chronic toxicity,[14] unlike other psychoactive substances such as alcohol[15] Apart from dependence (physical and psychological), the lasting side-effects of opioids are mainly digestive disorders, in particular constipation.[16] In the United States of America (USA), on the other hand, deaths from "overdoses" have risen massively.[17] As a reminder, there were over 100,000 such deaths in 2022, mostly among men with low levels of education. The first so-called (temporal) "wave" of deaths was explained by the sudden change in access rules: patients who had become addicted suddenly found it difficult to obtain opioid medicines from their doctors once the government decided to introduce various bans (e.g., maximum daily doses).[18] With no other options, individuals turned to the black market.[19] Products they found on the street or on the internet are, by definition, unregulated; they are labelled neither for quality nor for dosage. Consumers incur significant risk when ingesting these substances. Moreover, in the past few years, the US illegal market expanded considerably; worse, there was a major surge of dangerous products containing fentanyl or xylazine,[20] without consumers being able to identify them as such.[21]

The combination of these two factors (a sudden change in regulatory approach and a black market inundated with dangerous products) is, at least for the time being, of no concern in Switzerland.[22] On the contrary, for over 20 years now, Switzerland has been implementing a balanced policy based on 4 complementary pillars (i.e., prevention, treatment, repression,[23] and harm reduction [24]).

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2. In Switzerland, treatment for opioid use disorders is both easily accessible and reimbursed.[25] According to estimates,[26] around 70-80% of eligible persons are undergoing treatment (opioid agonist treatment or "OAT").[27] People dependent on "illegal" opioids can obtain methadone, buprenorphine, or sustained-release morphine from their general practitioners, from a pharmacy, or from a specialized centre.[28] Waiting times are not too long (a few days or weeks at most). Treatment is covered by mandatory insurance.[29] Health professionals and government authorities try not to stigmatize these treatments and the people to whom they are offered. Physicians have been taught about OAT at university, and continuous training is easily available.[30] Moreover, specialized support networks are available to healthcare professionals having further concerns or questions.

Conversely, in the USA, long-term treatment with OATs, although based on the strongest scientific evidence, remains very difficult to access, with a coverage rate of between 10 and 20%.[31] Emphasis is still too often placed on withdrawal and abstinence programs, known to be not only largely ineffective, but also dangerous, given the risks of relapse and overdose.[32] Physicians wanting to prescribe OATs have to overcome various administrative hurdles;[33] patients on treatment often incur high direct and indirect costs.[34] People who use drugs are highly stigmatized, especially if they are poor and/or belong to certain minority groups.[35]

3. In Switzerland, public advertising of prescription drugs, including opioids, is prohibited.[36] Hence, people are unlikely to ask their doctors for a specific drug just because they may have seen an advertisement on TV or in a magazine.

In contrast, the USA is one of the few countries in the world to allow all pharmaceuticals, including opioids, to be widely advertised to the public.[37]

4. Physicians in Switzerland are banned from receiving remuneration from pharmaceutical companies or from other third parties, in exchange for prescribing medicines.[38] Nor may they receive gifts from the pharmaceutical industry.[39] These rules have been in place for two decades; they are subject to monitoring and sanctions.[40]

Admittedly, prescribing practices vary both between and within Swiss cantons, and some can be problematic. However, large-scale scandals remain very rare.[41] With the exception of "propharmacy" (i.e., the right that doctors in certain Swiss-German cantons have to sell the drugs they prescribe to their patients), doctors have no financial incentive to select specific drugs. As a result, the "pill mill" phenomenon seen in the USA is unlikely to take root in Switzerland.[42]

5. In Switzerland, the (relatively low) prices of drugs, including narcotics, are set by the State, and 60 tablets of oxycodone cost around 45 Swiss francs (public price[43]), compared to up to USD 200 in the USA (without including the possible discount negotiated directly by each insurance plan[44]). For pharmaceutical companies, the profit potential is therefore lower and more regulated in Switzerland. In any case, Switzerland is a tiny market compared to the 332 million inhabitants of the USA.

The difference is also notable in prices on the black market, where opioids are extremely profitable in the USA. An oxycodone tablet is charged between USD 5 (5 mg) and USD 40 (40 mg) per tablet.[45] By comparison, in Switzerland, oxycodone is largely absent from the black market, but sustained-release morphine usually is found at CHF 5 per 200 mg tablet.[46]

6. The opioid crisis in the USA has highlighted the link between the prescription of opioid drugs by hospital emergency departments and the ensuing risk of addiction among adolescents and young adults. In other words, if hospitalized young people receive opioids during their hospital stay, they are more likely to become dependent on the drug and/or develop substance use disorders.[47]

In Switzerland, this risk has been widely recognized. As a result, hospital doctors only parsimoniously prescribe opioid drugs to underage patients. They may even have acted too sparingly, leading to oligoanalgesia (inadequate pain management). The knowledge of the US opioid crisis has only reinforced Swiss pediatricians' caution.[48]

The delicate aspects

Let's now turn to three aspects that, we believe, are more complex and less supported by causality studies, leading us to only draw hypotheses.

The Swiss medico-social safety net

In Switzerland, health insurance is compulsory, and the federal government and cantons support low-income policyholders by contributing to their health insurance premiums. Thus, a person who is ill or has had an accident can access long-term medical care relatively easily and at a high, but still reasonable, cost (CHF 1,000 maximum per year; i.e. CHF 700 co-payment and CHF 300 deductible if the lowest option is chosen, plus the already-paid-for insurance premiums).[49] If the person is employed, she cannot be dismissed immediately on grounds of illness; her employer must continue to pay the salary for a minimum period of one month.[50] If the sick employee is protected by a collective agreement, or if loss-of-earnings insurance has been taken out, payment may be due for up to 2 years.[51]

Hence, the pressure to recover as quickly as possible to keep one's job does not hang over the person as it does in the USA. Of course, there are also groups in Switzerland for which such a threat exists (e.g., self-employed individuals, people without residence permits, or undeclared employees). However, the various social insurances and safety nets guarantee a minimum of financial security in the event of illness – much more so than in the USA. As a result, suppressing short-term pain with an opioid is less likely to be the only feasible solution to maintain one's subsistence or income.

Support for young people

In Switzerland, the age group most represented among those receiving OAT in 2022 was 50–54 year-olds. People under 29 account for 5.2% of people in OAT treatment,[52] and there are more people over 60 than under 30 receiving OAT.[53] Likewise, the group most affected by overdose deaths is those over 50.[54]

In the USA, the comparison cannot be based on people undergoing treatment, as they are too few in number and hence not representative of the general population. Instead, then, statistical data on lethal intoxication can be used. Recently,[55] the age groups with the highest number of such deaths were 25-34 (20,279) and 35-44 (21,100) year-olds, while the 45-54 (15,599) and 55+ (16,894) age groups are less affected; 6,531 people aged 0-24 died of intoxication.[56] Among adolescents and young adults, prescription and non-prescription opioid use is higher in the USA [57] than in Switzerland.[58]

Why do the age groups concerned differ between the two countries? Do young people in the USA and Switzerland have different attitudes toward risk?

American culture is known to value individual freedom, performance, competition,[59] and risk-taking, all of which can contribute to increase stress [60] as well as dangerous substance-related behaviour. In addition, young people in the USA frequently leave home at the age of 18,[61] often to find work or to live on college campuses hundreds or thousands of kilometers from their place of origin.[62] Parental or social control is then diminished,[63] and we know that parental control is associated with a reduced risk of, for example, alcohol consumption.[64] On the other hand, in Switzerland, young people remain much closer to their original social circles,[65] even when they come of age, not least because of the country's small size and linguistic diversity.[66]

In Switzerland, the pressure to perform at the highest level in sports or academics exists, but is less intense than in the USA.[67] University entrance selection is less competitive in Switzerland than in the USA.[68]

In addition, the Swiss context tolerates (although illegal), also in young people, the use of certain substances such as alcohol and cannabis. These psychoactive substances are less likely to cause lethal intoxication, although recent figures suggest an increase in the mixing of alcohol with calming drugs (anxiolytics).[69]

Specific harm reduction measures, such as Swiss drug testing services, also have a protective effect.[70] The same applies to safe drug consumption rooms, which are equipped to react quickly and effectively to intoxication occurring within their structures.

Social inequalities

We hypothesize that, compared to the USA, individuals in Switzerland are less likely to "self-medicate" their pain with opioids. Opioid drugs are first and foremost remedies for pain (analgesic effect), even though they also have a calming effect (sedative and anxiolytic) and a much-discussed euphoric effect. Schematically speaking, a person who wants to "party" won't turn to oxycontin, but rather to ecstasy and cocaine;[71] someone who wants to "have fun with friends" will try alcohol or cannabis; and one who wants to "study all night" will probably take stimulant substances such as methylphenidate (Ritalin®).[73] However, those who suffer psychologically and/or physically may be tempted to take opioids,[74] even though the latter offer only partial and temporary relief.[75]

There are many causes of physical and mental suffering, and inequalities (whether economic, educational, social, or sexual) are among them. Inequalities increase the risk of falling ill, for example, because of substandard housing, arduous working conditions, unhealthy diet, exposure to (legal) toxic substances (chemicals, tobacco, alcohol), or lack of knowledge of preventative measures.[76] These inequalities also limit access to healthcare and may even lead to poorer quality of care. This in turn increases morbidity and mortality and reduces healthy life expectancy.[77] Disadvantaged people are therefore more likely to suffer from pain[78] and their perceptions of pain are often more acute.[79]

In the USA, inequalities are greater than in Switzerland,[80] and they affect a number of life experiences.[81] It's a vicious circle, made all the more unfortunate by the fact that faith in the famous "American dream" has been lost.[82] It is therefore not surprising that the American opioid crisis has been described as an "epidemic of despair".[83] This brings to light the unending debate about the social determinants of physical and mental health.[84]

Risk factors in Switzerland

Despite all the aforementioned, the situation in Switzerland is not perfect. Recent studies have shown an increase in overall opioid consumption.[85] Ruchat et al. wrote that "Switzerland is the world's 7th largest per capita consumer of opioids. Between 1985 and 2015, Swiss consumption of strong opioids rose from 18 to 421 mg/inhabitant/year".[86] It is therefore important not to ignore possible challenges and problems. We analyse three potential risks below.

High level of suffering among young people

The statistics on youth mental health in Switzerland are worrying. According to a 2022 report, "hospitalizations for mental and behavioural disorders increased by 26% [between 2020 and 2021] among girls and young women aged 10 to 24, and by 6% among men of the same age. For the first time, mental disorders are the leading cause of hospitalization among 10- to 24-year-olds (19,532 cases), ahead of injuries (19,243 cases). Hospitalizations for suicide attempts rose by 26% for the same age group. Outpatient psychiatric services provided in hospitals rose by 19% among young people",[87] and nearly 24% of young women say they are depressed.[88]

These numbers are dramatically high, and reactions so far have not been adequate. We need to do more to prevent this high level of psychological pain. Otherwise, young people could turn, even more so, to the use of psychotropic drugs.

The tendency to turn to medicines for "answers"

To a certain extent, one can get used to pain or learn to manage it.[89] However, this is a process that is very much up to the individual; it takes time and it requires resources (internal and/or external).[90] More and more, people are looking for "quick fixes", in the hope of being fully "up and running" again.

In this respect, the Swiss Federal Office of Statistics provides interesting numbers about how the Swiss population increasingly consults healthcare professionals: in 2002, 26.2% of the population aged 25-34 had not consulted a doctor at all (20.6% aged 55–64), whereas in 2017, the figure had fallen to 13.9% for 25-34 year-olds (8.9% for people aged between 55 and 64). The percentage of the popu-

lation who consulted their doctor between 5 and 9 times in a year stood at 10.5% among young people (14.7% among 55–64 year-olds) in 2002, rising to 18% (and 25.3% respectively) in 2017.[91]

Painkillers often work, at least at the beginning. However, they can also foster the view that pain is unacceptable [92] and that medication is all that's needed to get rid of it.[93] This could explain why[94] pharmaceutical consumption is on the rise in Switzerland.[95]

Pharmacological dependence is often the consequence of medium- to long-term opioid use. The public is not necessarily sufficiently aware of, nor sufficiently warned about, this reality. It's probably not enough for the doctor to say "be careful; use for no more than two weeks" (e.g., tramadol). Rather, healthcare professionals should explain what will happen if one exceeds this limit. People in care are often not informed about the concepts of physical (pharmacological) dependence, psychological dependence, and addictive disorders; they know little of their causes and interactions.[96] Imparting such information takes significant time and is hard to achieve given the very busy schedules of physicians.[97]

Pressure on healthcare costs

Not least because of the phenomenon described above, healthcare costs are rising.[98] Logically, this implies higher premiums for Swiss compulsory health insurance, since premiums are the main source of financing of our health care system.[99] Authorities are forced to react to this increase as it has become a major political issue for politicians and, of course, for the general population.[100]

However, the measures implemented by public authorities [101] have not always been tailored to the needs of the public. Moreover, their consequences are rarely assessed, whether *a priori* or *a posteriori*. Pressure on drug prices, for example, is contributing to growing shortages, including of medicines used for OAT.[102] Another example is the limitation on basic medical consultations to 20 minutes.[103] If the doctor only has a window of 20 minutes available, he or she will be far more likely to prescribe a drug. Trying to convince a patient to do without a drug or trying to encourage the person to adopt a healthier lifestyle (more physical activity, better sleep, etc.), all take time.[104] Similarly, health insurance companies that limit their coverage of rehabilitation care and "integrative" approaches may steer patients towards pharmacological solutions just because the latter are less costly in the short term.

Our provisional conclusions

At present, Switzerland is not facing the same difficulties as the USA. We're not experiencing a rise in lethal intoxications, a black market of fentanyl, or chaotic opioid prescriptions. But "resting on our laurels" would be unwise. Risk factors are present. What's more, things can evolve rapidly, as shown by the sudden upsurge in crack cocaine use in cities such as Geneva and Lausanne. So, how should we react?

As with almost all problems, we need to be clear about what we want, which also means knowing what we are prepared to sacrifice (the famous "opportunity costs"), in order to anticipate future challenges.

The road will be long and full of pitfalls. Compromises will be inevitable. If we focus on fighting/countering the risk of abuse (black markets, dependence, "overdoses"), we inevitably run the risk of restricting access for people who suffer and do need these painkillers.[105] Conversely, if we facilitate access to these substances, we run the risk of some people developing physical dependence, or even addictive disorders. Furthermore, the shortages increasingly affecting the pharmaceutical industry also demonstrate that, even in Switzerland, the supply of opioids is not always guaranteed, and that public authorities and the industry must work together to ensure access.[106]

To find the most optimal balance, reliable data to monitor developments are needed. How many people receive opioid prescriptions? What other treatments or therapies have been tried beforehand and for which medical conditions? How quickly were people able to access treatment? At what dosages were opioids prescribed? For how long? For what beneficial effects? How many people became physically dependent on the substance? How many suffer from dependence? What other adverse effects occurred? What is the number and profile of overdose victims? Unfortunately, we don't really know the answers to these questions.

Solid data[107] to guide our healthcare system in prescribing opioids, particularly for analgesia, are scarce.[108] Public authorities rely too much on health insurance companies to provide them with data, but their figures are not designed to answer the aforementioned questions. Ideally, we should set up cohort studies,[109] or at least facilitate the regular collection of data from primary care physicians. Unfortunately, Swiss expertise in this area remains limited. However, the rapid development of IT tools (including AI) suggests that there is a considerable potential to be explored.[110]

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Potential competing interests
All authors have completed and submitted the International Committee of Medical Journal Editors form for disclosure of potential conflicts of interest. No potential conflict of interest related to the content of this manuscript was disclosed.

Endnotes

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