Dear Editor,

In this letter, we would like to point out a threatening public health problem and its connection with socio-political processes to the professional public.

According to the United Nations Office on Drugs and Crime (UNODC), opium cultivation in Afghanistan decreased by 95% in 2023 compared to the previous year after the country’s de facto authorities imposed a ban on the production, trade, and usage of all drugs on April 3, 2022, including synthetic and semi-synthetic (1). Figure 1 shows the trend of poppy area and opium production annually from 1985 to 2023 (1). According to UNODC data, the area under poppy cultivation plummeted from 233,000 hectares in 2022 to a mere 10,800 hectares in 2023 (1). Notably, the majority of land once dedicated to poppy cultivation is now being utilized for less profitable crops like wheat (1). Most of the remaining poppy fields are located in the province of Kandahar (1). The initial impact of this ban suggests that it could potentially be regarded as one of the most successful anti-drug efforts in modern history.

In his book published by Harvard University Press, Pierre-Arnaud Chouv explained in detail the genesis of the growth of opium production in areas under the rule of the anti-Soviet Mujahideen...
parties (2). Under the slogan of helping freedom fighters, the intelligence services of the US and Pakistan were, if not directly, then indirectly involved in the growth of opium production (2).

Claims dating back to the turn of the century that the Taliban were linked to the opium trade proved to be false (3). Since their initial rise to power, the Taliban have maintained a staunchly anti-drug stance (3). The United Nations Office on Drugs and Crime (UNODC) stands out as one of the few international bodies to collaborate with the de facto authorities in Afghanistan, sharing a mutual commitment to combatting drug trafficking. Around the mid-2000s, the leader of the Taliban, Mullah Omar, issued a fatwa that poppy cultivation and opium production were against Islamic tradition and, therefore, prohibited in Afghanistan. Local authorities enforced this fatwa, often with brutal efficiency (3). Punishments for violators included imprisonment for up to two years, public floggings, or humiliation in public. Only the northern provinces that were not under the control of the authorities from Kabul during that time increased opium production (3). Merely two months after the fatwa was issued, the UNODC suddenly and without prior notice suspended all activities in Afghanistan, leaving the Taliban regime without any support despite previous cooperation (3). Despite a significant 99% drop in Afghanistan’s exports, followed by a 65% drop in world production of opium and heroin in 2001, this measure was neither economically nor politically sustainable (4). Shortly after, the invasion by the United States and its allies exacerbated the country's plight, leading to further destruction and a resurgence in opium production. When Western-backed factions assumed power, billions of dollars were invested in reshaping Afghanistan's governance and agriculture. However, these efforts fell short of expectations, as the profitability of growing poppy outweighed that of other crops (5, 6).

As the production of opium grew, so did the manufacturing of other illicit drugs. Thus, in the second half of the second decade of the 20th century, Afghanistan became the fastest-growing producer of methamphetamine (7). In Afghanistan and its neighboring nations, law enforcement agencies seized nearly 30 tons of methamphetamine in 2021 alone, a stark contrast to the mere three tons seized just four years prior (8). In Afghanistan itself, an increase from 100 kilograms in 2019 to 2,700 kilograms in 2021 was recorded (8). The mass cultivation of Ephedra, from which ephedrine is directly obtained, has brought down the cost of living to a tenth of that of Southeast Asian producers, making Afghan methamphetamine more competitive with Myanmar’s (7).
Opium production represented a crucial economic sector in Afghanistan, contributing to 9-14% of the country's GDP, given its predominantly agrarian economy (1). The decline in production has already yielded adverse economic ramifications at both macro and micro levels (1). There was a drop in Afghanistan's GDP by a fifth in 2022 compared to the year before (9). On a micro level, the reduction in income will economically jeopardize the 15% of the Afghan population involved in illegal trade, putting them in a difficult economic situation (1). The most vulnerable are the poorest communities in Afghanistan, Pakistan, and the surrounding countries through which opium was exported and in which the entire opium ecosystem was built.

The de facto Taliban authorities in Afghanistan are left to their own devices in this endeavor because they are left without official financial aid from other states, banks, or development agencies, with frozen funds from their central bank in the United States, receiving only limited humanitarian aid through the United Nations (9). Concerns about an impending humanitarian crisis have been voiced. Despite these challenges, even American political analysts had to admit that the new regime coped surprisingly well with economic problems (9).

The possible consequences will depend on the Taliban authorities’ persistence in this ban. The Taliban must take care not only of the implementation of the decision but also of the stability of their government. Economic problems may contribute to strengthening opposition local leaders, remnants of the Northern Alliance, or the Islamic Republic (5). Suppose the Taliban regime maintains its power and continues implementing the ban, the first effects on the international market can be expected during 2024, once most of the stocks from previous seasons are depleted (10). The drop in the purity of heroin would be the first indication of the effectiveness of the ban (3). For comparison, after the first ban in Estonia, the purity of heroin decreased from 58% in 2000 to only 7% in 2002 (11). Only after the decline in the quality of heroin, one could expect a rise in the price of heroin and other drugs, as well as the spread of harmful alternatives such as fentanyl and other synthetic and semi-synthetic products (1). An escalation in injection frequency could emerge as one of the consequences (3). A greater need for treatment among individuals struggling with substance abuse can also be expected (10). Opium users within Afghanistan, estimated to comprise one-tenth of the population, are projected to be the first affected by these changes. Subsequently, the repercussions will extend to neighboring countries like Pakistan and Iran,
followed by former Soviet Union nations, and eventually, Europe. Heroin is the most commonly used opioid in Europe and the drug associated with the highest health burden (10).

It is difficult to predict whether there will be a decline in drug use, even if prohibitions last for years (9). Furthermore, opium production may increase in other countries, such as Myanmar, India, Iran, Central Asian countries, or even further, Mexico and Colombia. If the economic situation in Afghanistan does not improve, a new mass wave of migration of the predominantly rural, young, male population to Europe can be expected (10).

Of these potential consequences, the fentanyl threat is particularly perilous. Synthetic opioids (primarily fentanyl) accounted for over 70,000 deaths in the US in 2021, continuing an upward trend from previous years (12). This rise is especially pronounced among men (12). Fentanyl became widespread in Europe, first in the Baltic states, especially in Estonia, which for almost a decade had the highest drug-related mortality in Europe (11). In Estonia, the popularity of fentanyl surged in 2003, swiftly replacing heroin in the opioid market within a year (11). There is a hypothesis that the increase in the use of fentanyl was caused by the first Taliban ban in 2000 (11).

Paradoxically but justifiably, warnings from European Union agencies underscore that the high availability of heroin serves as a deterrent against the proliferation of more hazardous synthetic drugs (13).

Fentanyl functions as an agonist of opioid receptors and is between 50 and 100 times more potent than morphine, in contrast to heroin, which is only 2-5 times more potent than morphine (14). It is used in general and local anesthesia and serves as an effective medicine for chronic, severe pain (15). Being lipophilic, it easily crosses the blood-brain barrier. Fentanyl has a shorter duration of action (half to a third of the action time of heroin), thus requiring more frequent administration, which is associated with HIV and viral hepatitis spreading among users who share injection equipment (11). Fentanyl carries a high risk of fatal overdose in a very short period, a few minutes after injection, much faster than is the case with heroin. The uneven purity of the illegally prepared formulations is an additional risk for death. Fentanyl is 100 times cheaper than heroin when corrected for potency (14). It is added to heroin and sold as heroin and at the price of heroin. That's why it has the name “artificial heroin” (15). It does not require outdoor cultivation but only an improvised laboratory (14). Smuggling is easier because of the possibility of transportation in small quantities and the similarity with permitted preparations. To avoid the disastrous effects that
the fentanyl epidemic might cause before its appearance on the market, it is necessary to:  
a) Increase the availability of naloxone and educate health professionals and the community about the characteristics of fentanyl and the dangers of its use, 
b) Strengthen low-threshold services, 
c) Prevent the transition of psychoactive substance users to injecting drug use, 
d) Strengthen monitoring of other psychoactive substances and prevent their spread, 
e) Preserve the role of primary health care in prescribing prescription drugs and 
f) Treat the causes of chronic pain whenever it is possible (11). The achievement of these goals requires intersectoral cooperation within and between countries. An integral part of these international efforts is strengthening the surveillance system, which should be more sensitive and based on primary data (13).

Dear Editor, thank you for your attention to this health threat. The consequences of this threat can be mitigated by warning the community and inviting professional bodies to engage in this issue.

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Figure 1. Annual opium production in metric tons and the area under poppy in hectares in Afghanistan

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REFERENCES


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