



European Monitoring Centre
for Drugs and Drug Addiction

EMCDDA SPECIAL REPORT

COVID-19 and drugs

Drug supply via darknet markets

May 2020

Table of contents

Key messages	3
Introduction	4
Key methodological points	4
Statement regarding the United Kingdom	5
Results	6
Drug sales on three darknet markets	6
A focus on cannabis: quantity, price and value of sales	8
Qualitative data from online forums.....	11
Discussion and conclusions	19
References	22

Key messages

This report is a rapid and preliminary analysis of the impact of COVID-19 on selected online markets. Three relatively large darknet markets were reviewed for the purposes of this study, selected because of their importance to the EU market and because they could be accessed to provide information necessary to comment on activity levels. A limitation of this study is that not all major darknet markets could be included at the time of drafting (April 2020). Qualitative information from a number of online forums was also analysed to further inform the analysis provided here. The conclusions made are therefore necessarily tentative and only provide a snapshot, as the situation is evolving rapidly. The key points to take from this report are:

1. In the markets analysed, the COVID-19 pandemic and the response to it appear to have resulted in an increase in activity levels, mainly related to cannabis products, via darknet markets over the first three months of 2020.
2. The data on cannabis is suggestive of two competing but related drivers – those buying volumes of cannabis for physical resale have reduced their activities anticipating resale may be more difficult due to social distancing measures. At the same time, established buyers or possibly new buyers who are seeking cannabis for personal use or for use among their social network are increasing their activities on the market.
3. Cannabis prices appear to be decreasing for large volume purchases but staying stable at mid and lower volumes. When considered together, the processes at different ends of the market may explain the discrepancy between the rising number of sales over time but diminishing revenues.
4. Referrals to encrypted messenger services appear to be growing. If vendors and buyers switch to this type of technology, activities will not be visible through current darknet monitoring and interdiction will be more challenging.
5. There appears to be a decline in demand for drugs commonly used at large social events.
6. In the markets analysed, drug sales appear to originate primarily from the United Kingdom and Germany, however, the Netherlands is frequently cited as a source of some of the drugs on offer.
7. The estimated value of cannabis products sold via Cannazon, a market devoted to cannabis products, reached approximately EUR 4.3 million between January and March 2020, representing a volume of 1.6 metric tonnes.
8. Some vendors appear to be trying to maintain consumer confidence by informing buyers that they are operating in 'business as usual' mode.
9. Some have reacted to reduced demand by trying to stimulate sales using marketing techniques, such as introducing discounts and lower minimum order quantities.

The observational window for this study stopped at the end of March. Follow-up work is required to look at the April to May period in which the trends reported here may change as market conditions evolve.

Introduction

The COVID-19 pandemic has profoundly impacted on our daily lives in many ways. It is to be expected that it will also have an impact on the drug market although currently this is poorly understood. There is therefore a critical need to investigate the impact of these developments on drug markets in order to identify changes that may require an immediate policy or operational response. In addition, lessons may be learnt from the current situation in terms of how we might better anticipate emerging threats in the future and ensure we act quickly to meet immediate and longer-term data needs for informing policy, decision-making and operational responses.

This preliminary study looks at online darknet markets. It is a reasonable assumption that the current situation in respect to COVID-19 will impact on some established methods for drug supply and distribution to consumers due to social distancing measures and restrictions on movement designed to prevent the spread of the novel coronavirus.

We have seen a shift to online purchasing of licit commodities and it is possible that a similar shift will occur in respect to drug purchasing behaviour. This may potentially lead to a shift towards online drug supply using social media, secure messaging apps and darknet markets.

Previous work by the EMCDDA and Europol (2019; 2017) showed that Germany, the Netherlands and the United Kingdom play a key role with respect to drug supply on darknet markets. The analyses also showed that cannabis, cocaine and other stimulant drugs represented the majority of all European darknet drug sales. In addition, the studies indicated that the highest number of transactions was observed for cannabis and cocaine and the majority of sales were targeted at the retail level. The picture was different for MDMA where mid-level sales represented a relatively large proportion of all transactions.

The objective of this report is to provide preliminary evidence about how the novel coronavirus has affected drug supply on darknet markets. It does not provide a comprehensive or complete overview of the topic, but rather a focussed analysis of activity on selected darknet drug markets during the first three months of 2020. It should be noted that, given the very dynamic nature of the current situation, this review can only provide a snapshot of developments to date and will need to be complemented by continuing and more in-depth further study.

Key methodological points

A rapid analysis of activity was conducted on three active darknet drug markets covering the period 1 January 2020 to 31 March 2020.

Both quantitative and qualitative data were gathered, including vendor listings/posts, buyers' feedback reports of sales (henceforth called reviews) and posts on forum threads. The darknet markets crawled (to access quantitative and qualitative data) were Agartha, Cannazon and Versus. A total of 50 475 reviews from across the three markets were accessed (Agartha: n=10 126; Cannazon: n=37 433; Versus: n=2 916). Additional qualitative data were accessed, primarily from discussion forums, including dread, hiddenanswers,

thehub3-forum, envoy forum, didw-forum, club2crd-forum, avengers2-forum, flug-forum; over 850 posts were accessed on these threads.

The choice of these three markets was determined by the following main factors: i) size; ii) significance for the EU drug market; and iii) the fact that they offer accessible structure and useable review data (that is: reviews that are dated (Agartha, Cannazon, Versus) and could be linked to a specific drug listing (Agartha, Cannazon) and/or its reported shipping origin (Agartha, Cannazon)). Hydra, reportedly the largest darknet market at the time of writing, was not included as it serves primarily Russia and its neighbouring countries. Empire is a large market of importance for the EU; however crawling and data gathering from this market, while ongoing, is considerably challenged by the complex market structure and extensive periods of downtime.

Data from across the three darknet markets were analysed, with a focus on the EU. In practical terms, review data from these markets were included in the analysis if a review related to a drug listing reportedly shipping from an EU country (alone or in combination with a non-EU country). Additional price and quantity of listed drug items was available from Cannazon (a market dedicated to cannabis products ⁽¹⁾) and was included in the analysis. Based on an extrapolation of data from reviews it was possible to estimate the value of cannabis traded over time on Cannazon. While not exhaustive, this approach allows a first evaluation of drug-related activity on the three key markets trading to EU consumers over the study period.

Data were sourced via Voyager, a commercial cloud-based web crawling and intelligence platform (<https://web-iq.com/products/voyager>).

Statement regarding the United Kingdom

The reference period for this report (data collection and analysis) is January to March 2020. The United Kingdom left the European Union as of 1 February 2020. However, during the transitional period until the end of 2020 the United Kingdom continues to be a part of the European single market. Therefore, the data related to United Kingdom are analysed and reported along with those for the 27 EU Member States.

(1) Includes all forms of cannabis products (herb, resin, oil, concentrates).

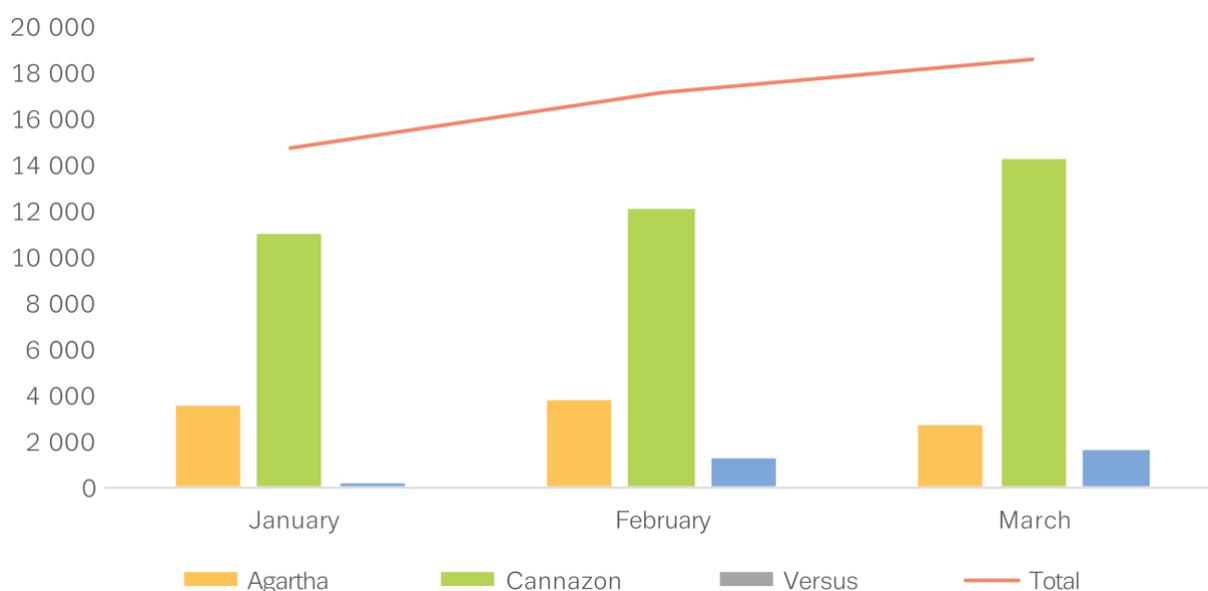
Results

Drug sales on three darknet markets

Number of buyers' feedback reports (reviews)

An assumption used in this analysis is that the number of reviews can be used as a proxy for aggregated sales data. There are a number of reasons for this that have been described in detail in previous reports on this topic (see EMCDDA-Europol, 2017). The aggregated monthly reviews reveal a gradual overall increase in market activity of just over 25 % (or just under 4 000 review items more in March compared to the start of the monitoring period). However, this is largely driven by activities on Cannazon. The number of reviews on Versus also increased, albeit from a low base (64 reviews in January) as this fledgling market began trading operations at the end of 2019. Conversely, there is a small, but pronounced, decrease on Agartha over the same period (Figure 1).

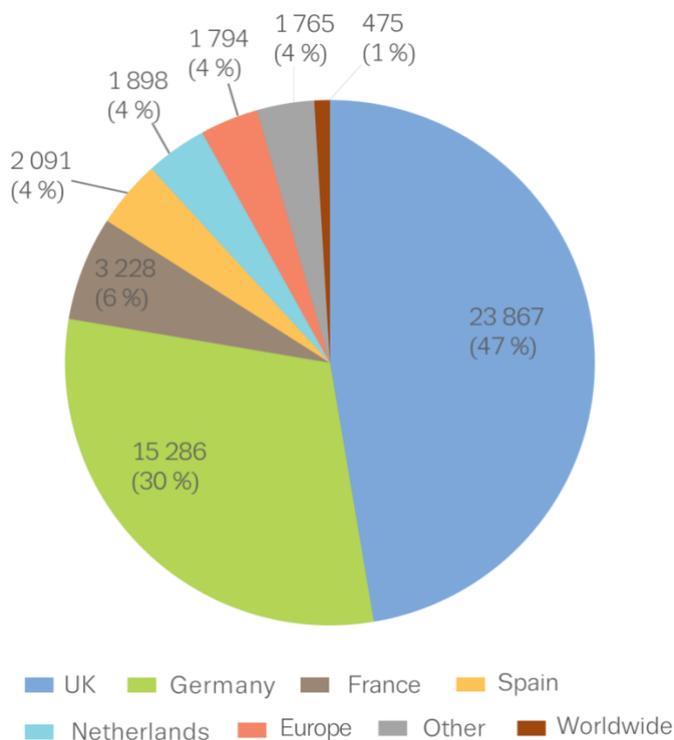
FIGURE 1
Number of reviews by market and by month, Agartha, Cannazon and Versus, January–March 2020



Reported shipping origins

The United Kingdom (47 %) and Germany (30 %) together accounted as shipping country for just under 80 % of drug sales with registered reviews, with considerably lower figures for France and Spain (6 % and 4 %, respectively) (Figure 2). The role of the Netherlands (4 %) as a shipping country appeared to be less significant than previously documented (EMCDDA-Europol 2019; 2017) but this may be due to the prominence of data from Cannazon in this analysis rather than markets where stimulant and synthetic drugs make up a greater proportion of activity levels.

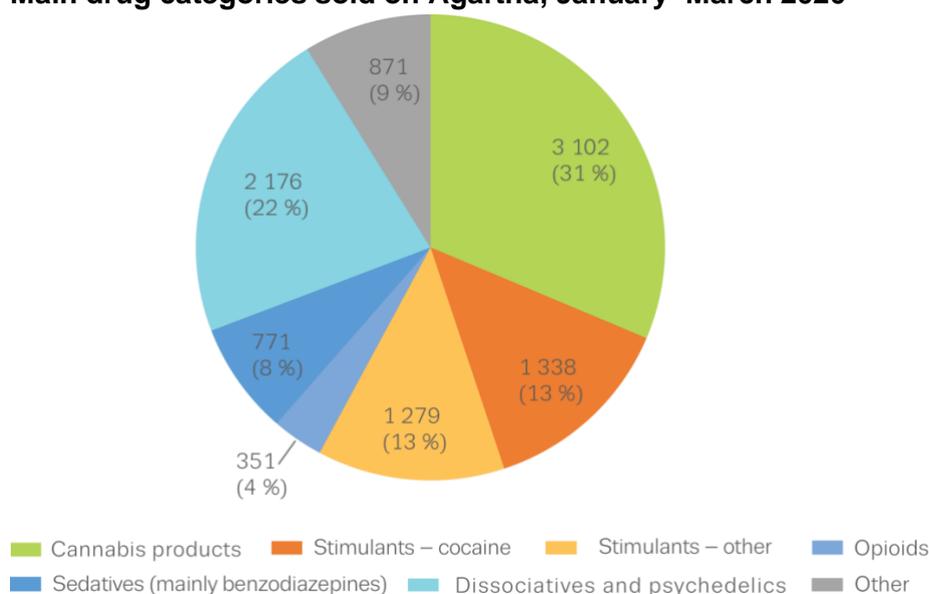
FIGURE 2
Reported shipping countries, Agartha, Cannazon and Versus, January–March 2020



Main drugs sold

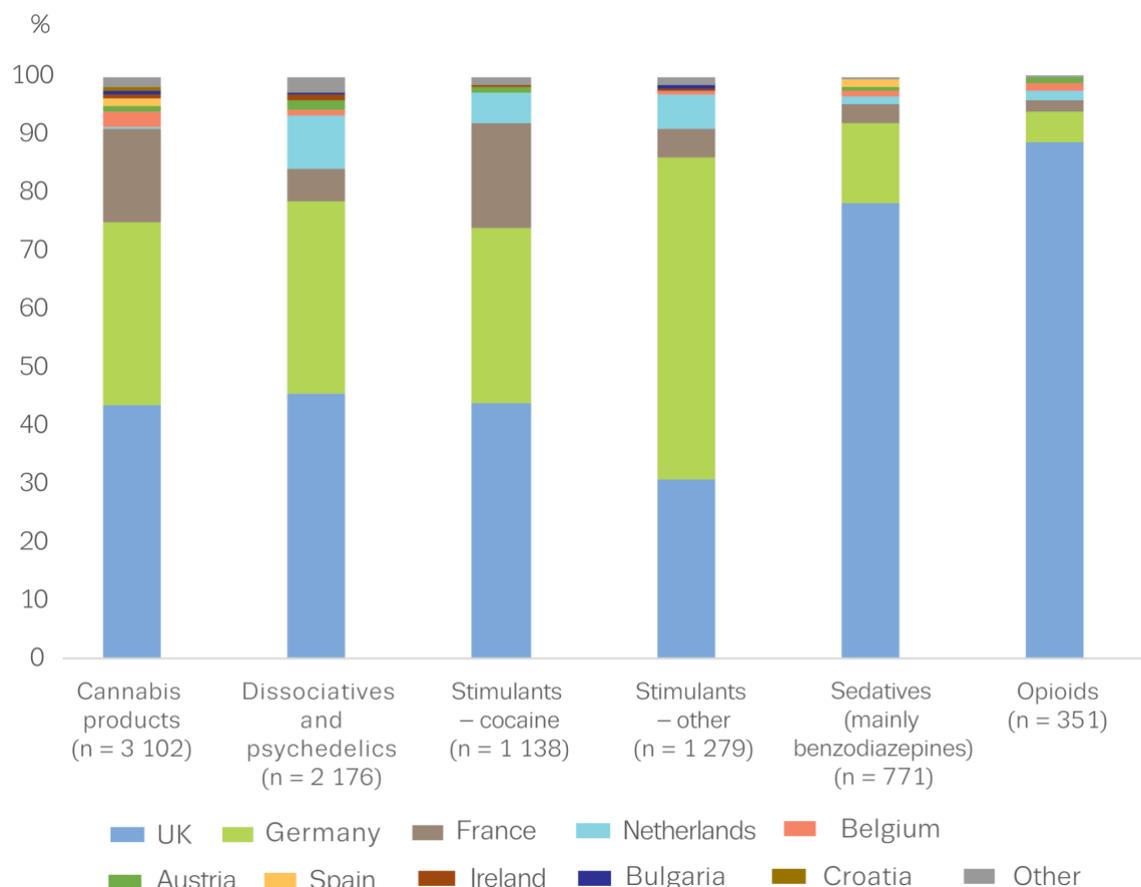
For reviews on Agartha, where both shipping country and drug category data were available (n=9 888), the reviews data suggested that drugs sales originating from the EU were usually related to cannabis (31 %) and stimulant (26 %) products (Figure 3).

FIGURE 3
Main drug categories sold on Agartha, January–March 2020



A distribution of the drugs by reported shipping country reveals between-country differences in this market: the United Kingdom is an important point of origin for shipping across all drug classes and predominates for opioids and sedatives (mainly benzodiazepines), with an important role also for the trade of cannabis, cocaine and dissociatives/psychedelics. In this data set Germany is prominent in the non-cocaine stimulants category (Figure 4), probably reflecting its position in respect to amphetamine and methamphetamine use.

FIGURE 4
Main drug categories by reported shipping origin, Agartha, January–March 2020



An examination of the data for any changes in the number of sales per drug type over time does not reveal any notable differences in this market.

A focus on cannabis: quantity, price and value of sales

The data available from Cannazon allowed a more detailed analysis of the most common weight category sold, typical prices and the value of sales.

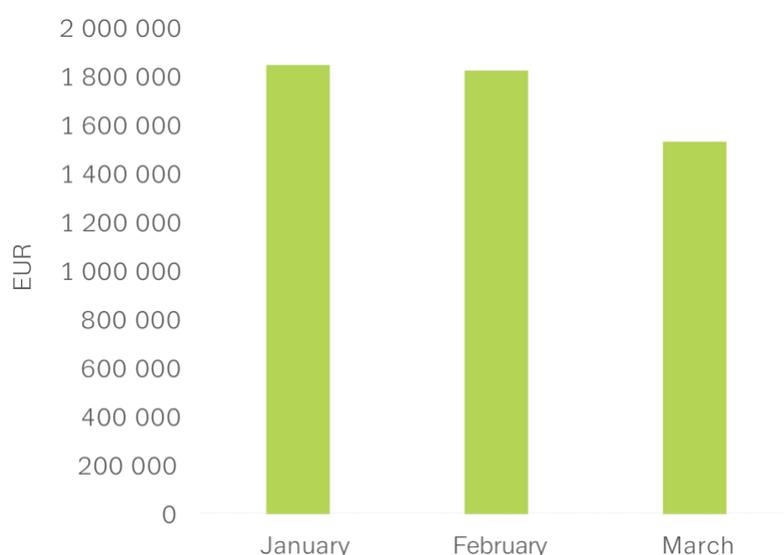
The most common weight category of cannabis product sold is 10 g, with a mean price of EUR 125. The most common weight sold in the United Kingdom and Germany was 28 g (one ounce) and 10 g respectively, with corresponding mean prices of EUR 196 and EUR

136. Note that in most of the EU, multiples of 5g are standard whereas in the United Kingdom, this is true for multiples of 7g (quarter of an ounce).

The value of cannabis products sold in this market between January–March 2020 is estimated at EUR 4.3 million, representing 1.6 metric tonnes.

Figure 5 shows a reduction by just under 20 % in the value of cannabis products sold on Cannazon during the first quarter of 2020, with the fall most evident between February and March. The two main countries, the United Kingdom and Germany, showed a reduction from just under EUR 900 000 to EUR 700 000 and from just under EUR 600 000 to EUR 450 000, respectively. However, over the same time period the number of sales of cannabis products on Cannazon increased by about 30 % (Figure 1). This suggests a shift towards an increased number of small value sales and a decreased proportion of higher value sales.

FIGURE 5
Monthly value of cannabis products, Cannazon, January–March 2020



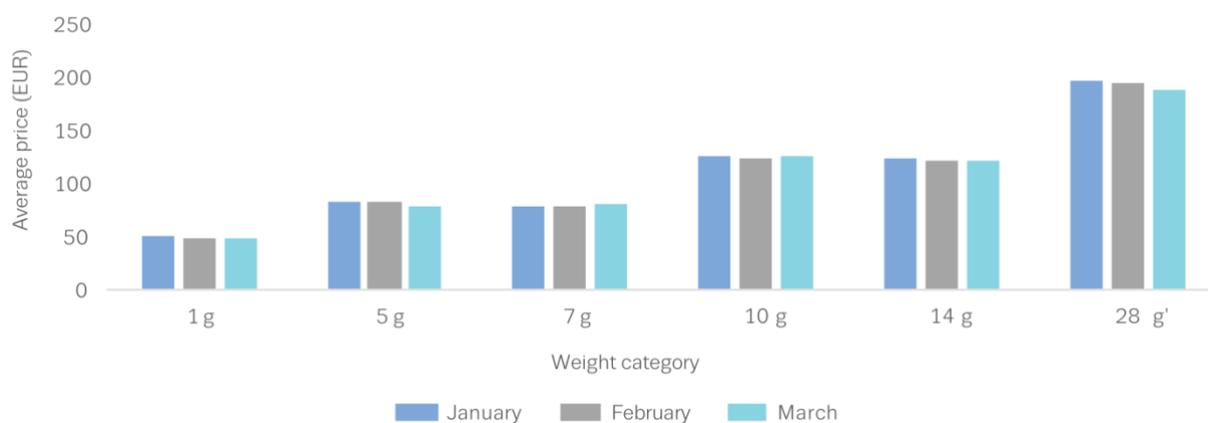
To explore what underpins these diverging patterns, the following four graphs (Figures 6 to 9) show the evolution of the number of sales and average price per weight category at different market levels.

When retail sales are considered, defined as purchases of small quantities presumed to be for personal use or among buyers' social network, there is a rise over time in the number of sales in the most common categories (1–28 g) (Figure 6). Average prices in these categories have remained largely static, as shown in Figure 7.

FIGURE 6
Number of sales for common retail-level weight categories by month, Cannazon, January–March 2020



FIGURE 7
Average price of common retail-level weight categories by month, Cannazon, January–March 2020



Beyond the retail market level, the reverse is true. There is reduction over time of the number of sales, particularly in the largest weight categories, which are probably intended for further distribution and resale (Figure 8). There is also a drop in the average prices in these categories (Figure 9).

FIGURE 8
Number of sales for large weight categories by month, Cannazon, January–March 2020

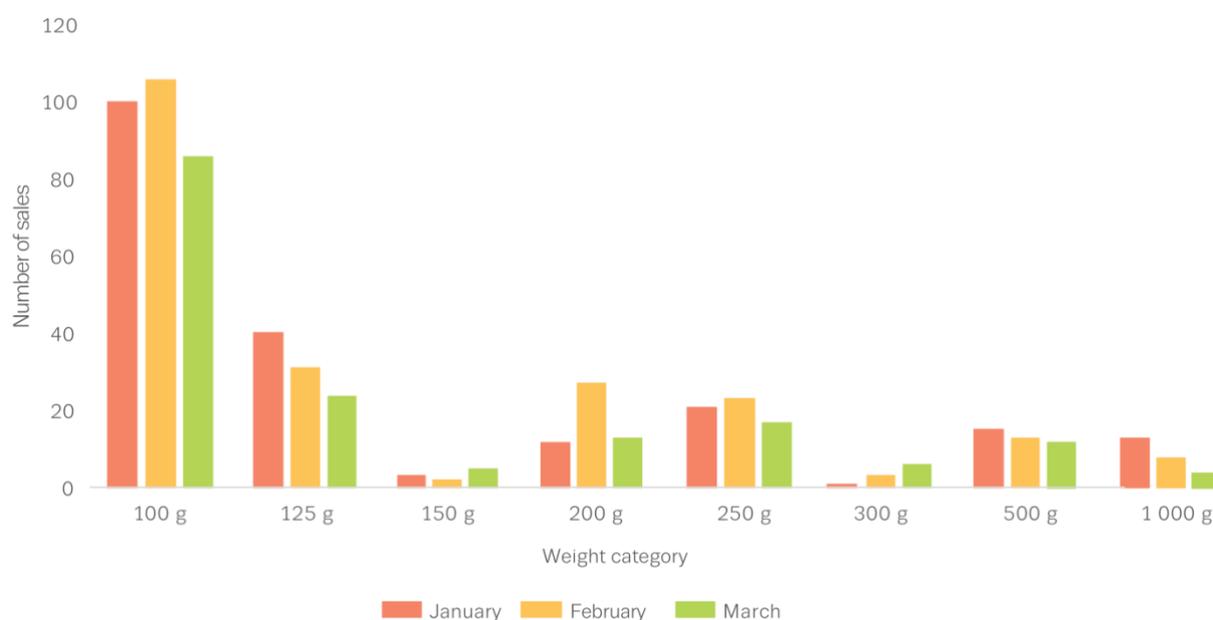
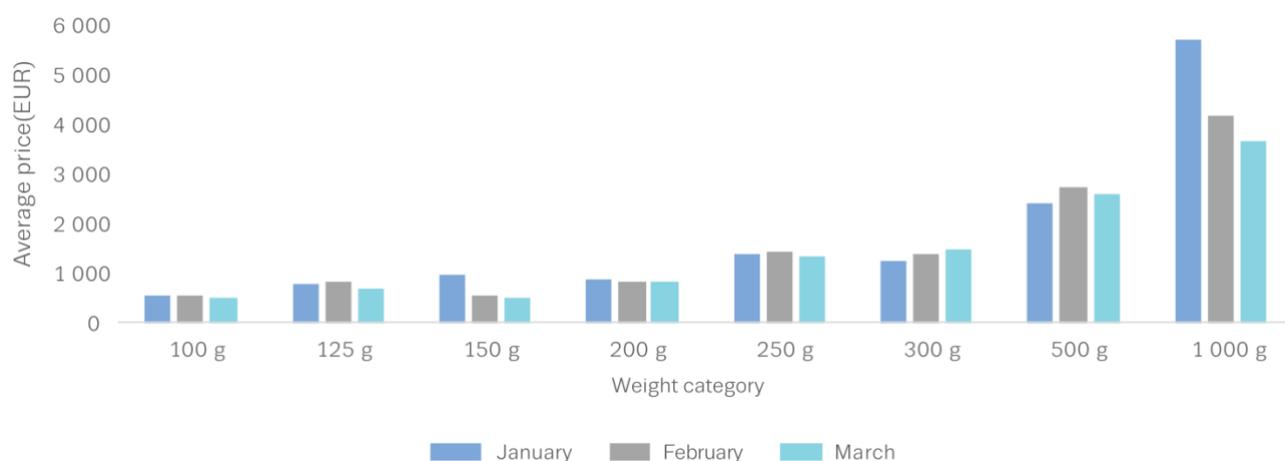


FIGURE 9
Average price of large weight categories by month, Cannazon, January–March 2020



Qualitative data from online forums

This section focuses on a textual analysis of the comments made on online forums on what vendors and buyers are communicating through drug-related posts (vendors), drug sales reviews (buyers) and forum discussions (buyers and vendors). While not comprehensive, these data do provide an interesting window on global darknet markets that can be used to validate or contrast with the sales data presented above.

The overall increase in sales evident on the three darknet markets examined is reflected in an increase in drug-related discussions on forums around darknet markets over the monitoring period (January–March 2020).

Many vendors have tried to convey to buyers that they are operating ‘business as usual’, without delays to delivery. For example:

1. *Eutyone, New batch available. 500kg in stock.*
2. *4fbca, 5faec-2201, New Synthetic Cannabinoids.*
3. *5cladba, hep, sgt78, mdpep, always stock available, stable supply.*
4. *Etizolam, Only 1kg in stock.*

Now delivery to USA, Canada, UK no delayed for corona virus.

(dread:post:d0aec428b8ef50e83676)

On the other hand, some vendors acknowledge the challenges and are mitigating them by making extra efforts to offer updates on shipments, proposing a range of delivery options including ‘dead drop’, providing reassurance on stable product prices or introducing discounts and lower minimum order quantities. Some comments also suggest that some vendors may be experiencing supply problems:

“With current situation that will require updates about shipping issues that we are experiencing due to the virus and running the weekly Xanax giveaway, I decided that a dedicated sub will be easier to maintain for all that.”

(dread:post:4347d5b8c500999f368f)

“We are active during Corona Virus! But, please be safe and take care about your health during this period responsibly!

EXIT SCAMMED A.P.OLL.ON STATS: 50 SALES / 26 POSITIVE/ 0 NEGATIVE. (IN 1 MONTH!)

NEW BATCH! FREE Bolivian Cocaine 0.1G SAMPLES 90%+ EUROPE / BALTICS.

Available Whitehouse Market!

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA512

Welcome to XXXXXX Cocaine shop!

You can find us on Whitehouse market by searching - XXXXXX

We provide one of the best quality Cocaine that you can find right now in Europe!

+ It is shipped from a calm (drug trading) wise country!

**Our product is not from Germany or Netherlands!!!*

**Everything what we sell goes straight from brick.*

**Transported directly to us by Ship.*

**Never Bashed.*

**Never Cutted.*

To keep you safe from getting caught, every order is send in a decoy. Our packages easily go through X-RAY scans and dogs.

Many double-checks before sending!

As I mentioned, all orders are send from a calm (drug-trading) wise country in

Europe. So there is a significantly higher chance

that it will not get caught in a post or by shipping with courier. (Mostly HOT zone countries posts are getting more checks from customs before letting packages go through)

Little FAQ:

**What do you mean HOT zones? - Hot from drug trafficking, that has many reports from posts in countries like Germany, Netherlands, UK...*

**Much higher chance that your order is not getting seized if it is shipped from*

our provided country.

OUR PRICES:

1g - 70 EU /

3g - 198 EU / 66eu/g

5g - 315 EU / 63eu/g

10g - 600 EU / 60eu/g

20g - 1160 EU / 58eu/g

30g - 1710 EU / 57eu/g

40g - 2240 EU / 56eu/g

50g - 2750 EU / 55eu/g

100g - 5000 EU / 50eu/g

500g - 23000 EU / 46eu/g / BALTICS DEAD-DROP

1000g/1kg - 43000 EU / 43eu/g / BALTICS DEAD-DROP

Tracked Shipping and Dead Drop for all orders starting from 20g!

**Price is higher for shipping because of the decoy and*

courier costs.

DEAD DROP: (Safest and Fastest Way of Receiving Your Package)

Secret location with instructions on how to find your treasure.

(dread:post:9186778df028341ed838)

"hello everyone,

due to recent global events we have reduced our minimum order so everyone can enjoy themselves during times of quarantine.

We are now accepting 1g and 3.5g orders, in addition to the usual 7g, 14g, and 28g orders.

please take care of yourself when using substances during this time."

(dread:post:9352877674005bb5f2f3)

"We have discounted all of our listings during the virus to help everyone. We have everything from Top shelf AAA Indoor Flower, golden Shatter, Wax, Crumble, Carts, budget shatter, and much more! We have top quality at unbeatable prices, so come give us a try! Put Dread in your notes and we will throw in a free sample!"

(dread:post:73cda8f9574671743bc0)

"We have all been in the grip of this virus and situations are still not easy but as of next week we will be shipping as usual again. We have changed, upgraded and moved our shipping infrastructure to keep providing the products as usual to most global locations!"

(dread:post:4740f734025366ec9526, 2020-03-28T19:03:13.631Z)

Some vendors are using the virus to generate more sales by increasing the sense of urgency for buyers to place orders:

“Times are very hard right now due to the current situation to do with COVID-19. so please everyone get your orders in as we dont know how long shipping is going to last as if we go on lockdown everything could potentially be on hold for a while so yeah get your orders in.”

(dread:post:04f65d60312effe87933)

Recognising the difficulties in operating under the conditions, other vendors have opted to suspend their activities or to explain to their buyers that they can expect some disruptions to the normal service (Figure 10). For example:

“Hi there,

We are going on Vacation mode for 7 Day's, all order made on or before the 16th of this month will be sent!

Sorry for the inconvenience but safety is our main goal for now! Pleas keep in mind that post movement are delayed in many places due the Covid-19 outbreak!

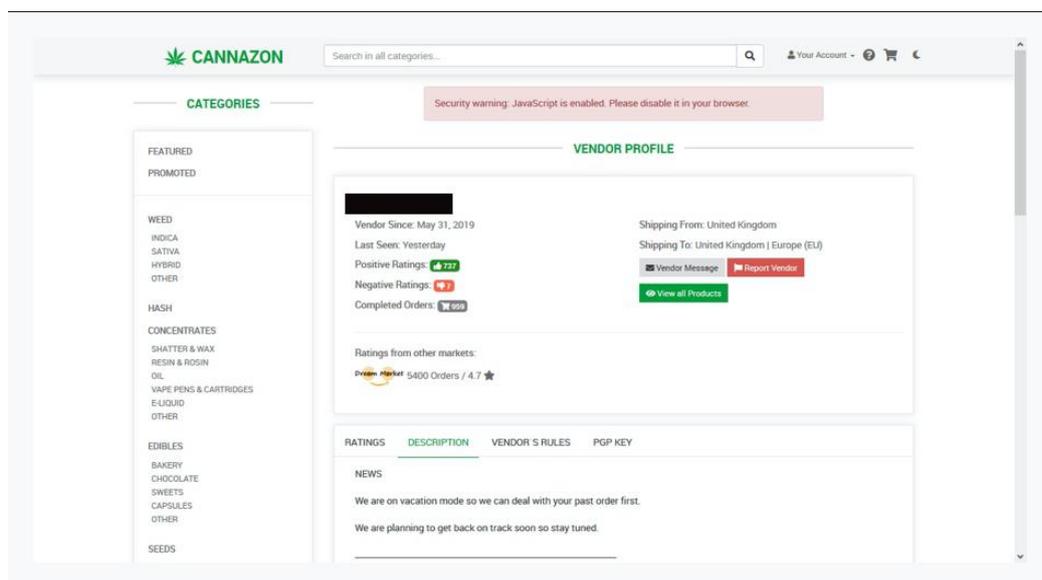
Stay safe and have a good one.”

(dread:post:bbca73cfabfdeaafc526)

“Due to the corona virus shutting down everything we shipped every order before the madness. But we have no idea when or where they arrived or not. We did some reshops but doing anything has been very difficult while keeping opsec high. So trying out mirrors on Empire was mostly impossible. Luckily I think I'm at a safe position to enter empire, if possible (writing this offline), to answer messages. But shipping is not possible at this moment. So vacation mode it will have to be. You can still contact us by email. PGP is required and you must put your public PGP key in it so we can reply.”

(dread:post:d39e66df2b3c622ab16a)

FIGURE 10
Vacationing vendor example, Cannazon



The disruption to deliveries experienced by buyers shows a wide range of variability, depending on, for example, buyer and vendor location and mode of delivery. The quotations below capture some of the frustrations expressed by some buyers:

“Same here, vendor says this is due to Coronavirus delays. Guess we’ll see. Got another pack from an unrelated vendor xxx in 3 days. This is the only one I have not seen movement on in the 5 other orders - unrelated - that I had. So the mail is def working. As is informed delivery.”

(dread:post:c-93f67c63f461bfd402)

“I disagree with this entirely. I’m writing a post right now that I promised xxxxxxxxxxxx I would do if he made things right with me and he did. I just got a pack from him literally yesterday. I can’t speak for anyone else that is having shipping issues with him, but give him time. He has also stated on empire that he stopped accepting new orders because of the virus. I would expect this to also impact his shipping time for existing orders.”

(dread:post:c-f0829c1215c7b3410d)

The Instant messenger application Wickr seems to have emerged as a popular app for vendors, and it is frequently mentioned in their posts. This instant messaging application allows users to exchange end-to-end encrypted and content-expiring messages and file attachments, including photos and videos. Such applications may be becoming more important for drug sales and may even displace activity on darknet markets as they facilitate secure communication between individuals who have may originally established a relationship through the use of darknet markets:

“YOU CAN CONTACT ME ON WICKR NAME IS xxxxxxxxxx”

There were 144 discussion items that mentioned social media. Of these, just under 30 % (n=41) identified Wickr; the rest included Google+ and Telegram (17 each), YouTube (9), Facebook and Twitter (8 each) or AIM, Jabber, Reddit and WhatsApp (7 each). In addition, the analysis confirmed the continued widespread use of encrypted email services, such as ProtonMail.

Based on the available data for the identified time period, it seems that drug demand rather than supply was driving change; and users of different drug types appeared to be reacting differently.

Cannabis and cocaine vendors and buyers seem to offer little evidence of disruption, as illustrated below with one vendor’s policy reiterating that if a package gets ‘lost or seized, we offer a 100 % reship after 14 days the order was sent’ and buyers posting reviews, indicating uninterrupted operations, such as ‘thanks from finland’, ‘fast arrival’, etc. (see Figure 11 below).

FIGURE 11a
Example of Agarthha-based cocaine vendor offering reshipping as per established practice

The screenshot shows a darknet market listing for Agarthha-based cocaine. On the left, there are 'References' and an 'Advertisement' with a URL: <http://agarthhaourmyhq3.onion/item/905529242457232...>. The main content area displays several customer reviews:

- fantastic coke, best i even use (Mar 23, 2020 00:00)
- super stuff thx from finland (Mar 17, 2020 00:00)
- fast arrival, extrem good coke (Mar 15, 2020 00:00)
- tolles Coke, gerne immer wieder (Mar 24, 2020 00:00)

Below the reviews is a section titled 'Created (1)' with a right-pointing arrow. It contains a vendor's welcome message and policy:

Welcome to our Store WE OFFER HIGH QUALITY PRODUCTS: COCAINE, HEROIN #3, CRACK, LSD, MDMA etc. ===== WHAT DO WE PROVIDE? ===== 1. The Best Prices Available. We will match or beat any other domestic price. 2. Perfect Customer Service, We try to respond to ALL messages within 24 hours. 3. We always test our products before we offer it. 4. We ship orders the same day you have ordered before 14h 5. Packages will fit through any standard letter box. ===== SHIPPING INFO ===== > We ship all our products from Germany to Worldwide without United Arab Emirates and Russia. TIME: West Europe 3-5 Business Days Scandinavia 3-7 Business Days East Europe 3-7 Business Days Asia 7-14 Business Days Australia 12-24 Business Days South America 10-15 Business Days if happen a letter get lost or seized, we offer a 100% reship after 14 days the order was sendet.

FIGURE 11b
Example of reviews from a cocaine buyer on Agartha market

The screenshot shows an advertisement for '3 g Peruvian Cocaine PURE HIGH GRADE AAA+' on the Agartha market. The ad includes a photo of the product, a title, site name, description, and various information sections like 'General Information', 'Detailed Information', 'Price Related Information', and 'Weight Information'. To the right, there is a list of reviews from buyers, such as 'coke supérieur, bonne protection, recommandé' and 'arrived today, just tried it, is amazing coke thanks'.

MDMA buyer reports suggest some of these to be limiting their purchases due to COVID-19:

“Quick response, high grade product and discrete packaging – what else could you ask for? Will order from xx again. Thanks! If not for COVID-19 I would have been ordering this weekend.”

(Agartha market:advertisement:7107722591285906619)

Although this must be regarded as speculative, it does seem plausible that reduced opportunities for social contact are driving a reduction in market demand in relation to this drug which is often consumed in recreational settings, such as music and dance events.

MDMA vendors, on the other hand, provide little indication of supply shortages, as expressed by one vendor of ‘Pure MDMA Champagne - 84%, Source region: Europe; Ecstasy (XTC) - 250Mg, Source Country: Netherlands; Colombian Fishscale Cocaine - 90%+, Source region: Colombia; Pure Speed Paste - 74%, Source region: Europe; Dried Speed - 74%, Source region: Europe; Pure Ketamine - 98%, Source Country: Netherlands’:

“Because of the corona virus right now we understand that business might be different than usual and prices may fluctuate differently than what you normally expect. We understand this and would like to meet everyone halfway during this time to help cope with the current situation and stay strong together. We are offering free extra products on top of your original order. Any order made in the next 8 weeks will receive 10% extra on top of their original order at no extra charge!! We hope, with these measures to

help you get more profit or get your desired product and help you through this uncertain period in our market.”

(dread:post:678ebcf9ced079121aee)

Discussion and conclusions

The data sets explored here give us a snapshot of what appears to be an increasingly dynamic situation in respect to online drug sales. An important caveat is that the data collection period covers the beginning of January up to the end of March. Lockdown and social distancing rules were coming into force during this time, and in some countries were only imposed towards the end of the period. It will be important to review the data for April and May to see how the situation changes. There does, however, seem to be some early signs of drug specific changes. In the data reviewed here, the strongest observations can be drawn from cannabis sales. The cannabis market is a large one and many regular cannabis users may have decided to stock up anticipating market disruption during the lockdown period. This is observed to some extent in the data, where an increase in online trade via darknet markets, driven largely by cannabis products, can be observed in February and March.

As shown in previous analyses (see EMCDDA-Europol 2019; 2017), the United Kingdom and Germany continue to dominate the darknet ecosystem. The Netherlands has been identified as one of the key European shipping locations for drug distribution via darknet markets in past monitoring periods. The current analysis, in stark contrast, showed a very small proportion of drugs reportedly being shipped from the Netherlands. There are a number of possible reasons for this, including: Dutch vendors may be conducting trade from darknet markets not included in the present analysis, they may have changed their shipping location to other EU countries (such as Germany), and/or they may be affected by recent disruptions to Dutch postal services (PostNL).

The data available from Cannazon allowed a more detailed analysis of the cannabis sector of the market. It should be noted, however, that the analysis from this market does not differentiate between cannabis herb, resin or other cannabis products – these may have different patterns of trade on the darknet.

The picture here is a complex one. On the one hand, the number of sales increased whilst at the same time the estimated value of the cannabis sold through this market declined. This appears to be explained by a fall in the larger volume trades in February and March, suggesting a decline in sales at the mid-level of the market. This may have been a demand side change as prices can also be seen to be falling for the larger volumes. A possible explanation of this is that mid- to large-size purchases to support further supply to consumers may have declined (re-sellers). This could be explained by those active in resale of cannabis purchased from online markets predicting that their opportunities will be disrupted and therefore not ordering new stocks. Over the same period, the number of smaller volume trades increased. This suggests that cannabis consumers were either stocking-up or moving to online marketplaces to mitigate potential supply problems. This distinction is an important one as the long-term impact of the current crisis could be more cannabis users becoming familiar with this way of accessing these products. Prices for lower

volume trades did not change significantly, suggesting that vendors were not yet experiencing any problems in obtaining stock.

The data on cannabis is suggestive of two competing – but related – responses to the pandemic: those buying volumes of cannabis for physical resale are reducing their activities, anticipating resale may be more difficult due to social distancing and movement restrictions. At the same time, established or possibly new buyers seeking cannabis for personal use or use among their social network are increasing their activities on the market. These processes at the different ends of the market together explain the discrepancy between the rising number of sales over time but diminishing revenues.

Some important differences need to be noted in key market features, such as functioning and market structure, which have implications for the accessibility of review data, the quality of the data accessed, the scope of the analysis and findings presented here. For example, Cannazon appeared to be by far the most structured and complete market (from reviews point of view). Information excluded from the analysis included a proportion of undated reviews and/or reviews that could not be linked to a specific drug product or shipping location thus limiting their usefulness. Work is ongoing to address these issues, where possible. The present rapid analysis identified initial darknet market trends. A continuing trend tracker would need to include a greater variety of darknet markets.

Not all major darknet markets with significance for the EU were included in the present analysis and an estimation is not available of the proportion of the darknet ecosystem that the markets analysed cover. Nonetheless, our analysis offers initial insight into how darknet market activity has evolved during the first months of the coronavirus disease's presence in the EU. An updated version of this EMCDDA analysis considering the continuing impact of the COVID-19 pandemic on the EU darknet drug market will aim to utilise a broader dataset, potentially offering a fuller understanding of the evolving darknet landscape, as shaped by the current pandemic.

These initial observations apply strictly to darknet markets and will not necessarily be reflected in conventional street markets. The extent to which darknet (and conventional) drug markets change in a longer time frame must be carefully monitored.

In order to gain a fuller understanding of how the market continues to react to COVID-19 pandemic restrictions, there is a need to triangulate with other data sources, in order to study dealer behaviour such as stockpiling, price changes, and so on, as well as the use and purchasing behaviours of buyers (stockpiling, using/sharing less). Such analysis would need to be informed by broader data and information on the EU drug market of which darknet is an element.

EMCDDA-Europol current and future joint work on drug supply via darknet markets

It is necessary to understand developments in the European drug market as they can have major implications for current policies and actions. The EMCDDA and Europol are committed to working closely together to provide both a strategic and operational understanding of market developments and the most recent analysis can be found in the EMCDDA-Europol [EU Drug Markets Report 2019](#). A key conclusion of this analysis was the dynamic nature of modern drug markets and the need to be proactive and timely in following up and reporting on major developments. The COVID-19 pandemic represents a major public health emergency that is having a profound impact on all areas of modern life. It is also likely to have important implications for current and future drug market operations. These will be addressed by the EMCDDA and Europol in a range of studies and a joint report.

We present here an initial analysis conducted by the EMCDDA exploring the possible impact of changes occurring in online drug purchasing behaviour in early 2020. This analysis is a preliminary snapshot of drug market developments linked to the impact of the novel coronavirus. The situation is evolving rapidly and, as such, the key messages expressed in this report are tentative and should be interpreted with caution. While not intending to be exhaustive, the approach used contains an early assessment of drug-related activity on three darknet markets (Agartha, Cannazon and Versus) trading to EU consumers over the study period. It is important to note that some changes in January and February may be due to factors unrelated to COVID-19. Nonetheless, this data is informative and will contribute to the EMCDDA and Europol's ongoing assessment of how the current situation is impacting on darknet drug markets.

A key limitation of this study is that some of the major markets could not be included at the time of drafting (April 2020) hence the findings are clearly not representative of the entire darknet market ecosystem. Notably, analysis of the data from Empire, a large market of importance for the EU had to be excluded for technical reasons. Another major market, Hydra, was not included as it primarily serves Russian-speaking countries. The three markets that feature in this study were chosen for their size, significance for the EU drug market and their amenability to analysis. It is important to note that the methodological and practical challenges of observing darknet drug sales are considerable and information available from sites may be false or misrepresented, reflecting the informal nature of these markets where 'scams' and misinformation may be a common occurrence.

This report provides a valuable early snapshot of one part of the darknet ecosystem. In particular, the strongest observations reported here related to cannabis sales in early 2020. It is clearly a preliminary and partial analysis and it will be complemented by further work by the EMCDDA and Europol to extend our coverage of darknet behaviour. The EMCDDA and partner Europol are working together to produce a broader and more rigorous assessment of the darknet ecosystem and an update of this analysis will offer more insights into how darknet drug sales are impacted by the current pandemic.

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More on COVID-19 and drugs:

<http://www.emcdda.europa.eu/topics/covid-19>

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