



DE Online Pharmacies COVID-19 Impact

April 16, 2020

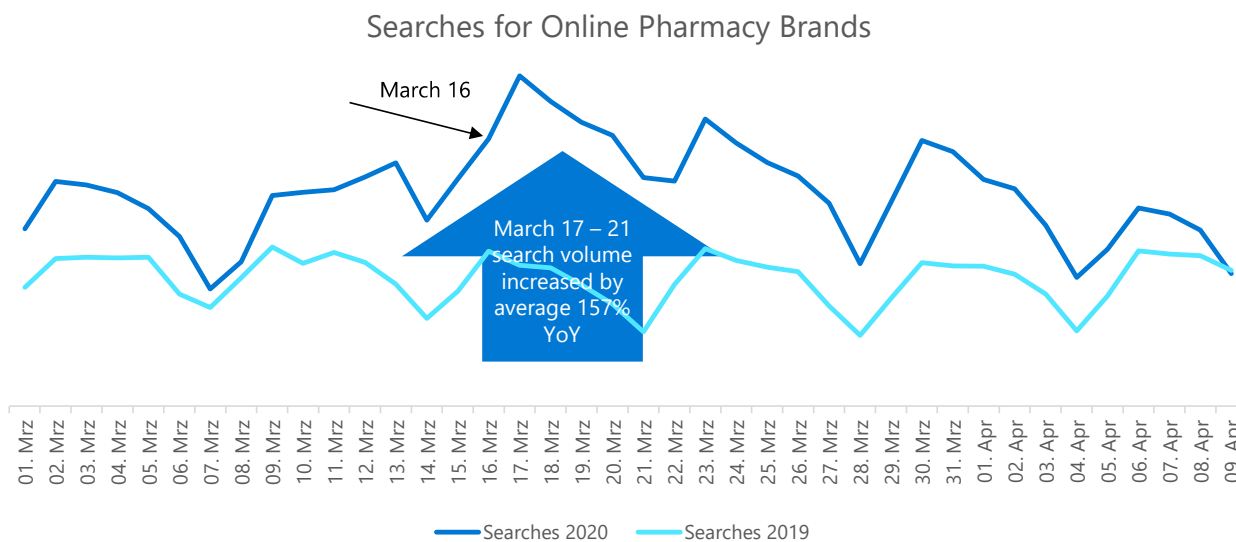
HYPOTHESIS

That the Covid-19 pandemic would have a strong impact on searches for online pharmacies.

In fact we are seeing signals that both branded and generic searches for pharmacies spiked in mid-March.

Additionally we assumed that certain products like face masks or sanitizers would be in high demand - this is also confirmed by the data.

Searches for online pharmacy brands up 68% year over year

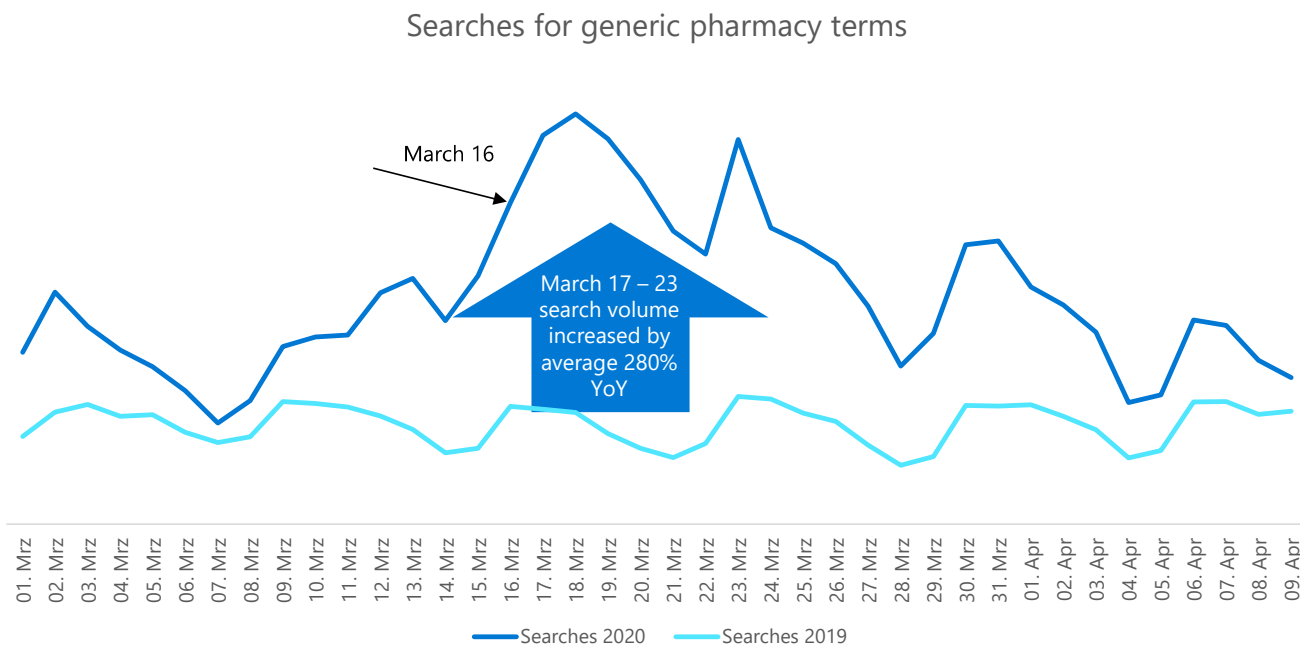


Since March 1st search volume for the most popular online pharmacies was consistently above last years (except Apr 9 when heading into the Easter weekend).

March 16 marks the day restrictions in Germany went into effect. Immediately after search volume increased significantly.

Source: Internal Data, Searches for popular online pharmacies, Germany; Mar 1 - Apr 9 2020 compared to March 3 – Apr 11 2019 to align for weekdays
Brands include Medpex, Sanicare, Bad Apotheke and seven more.

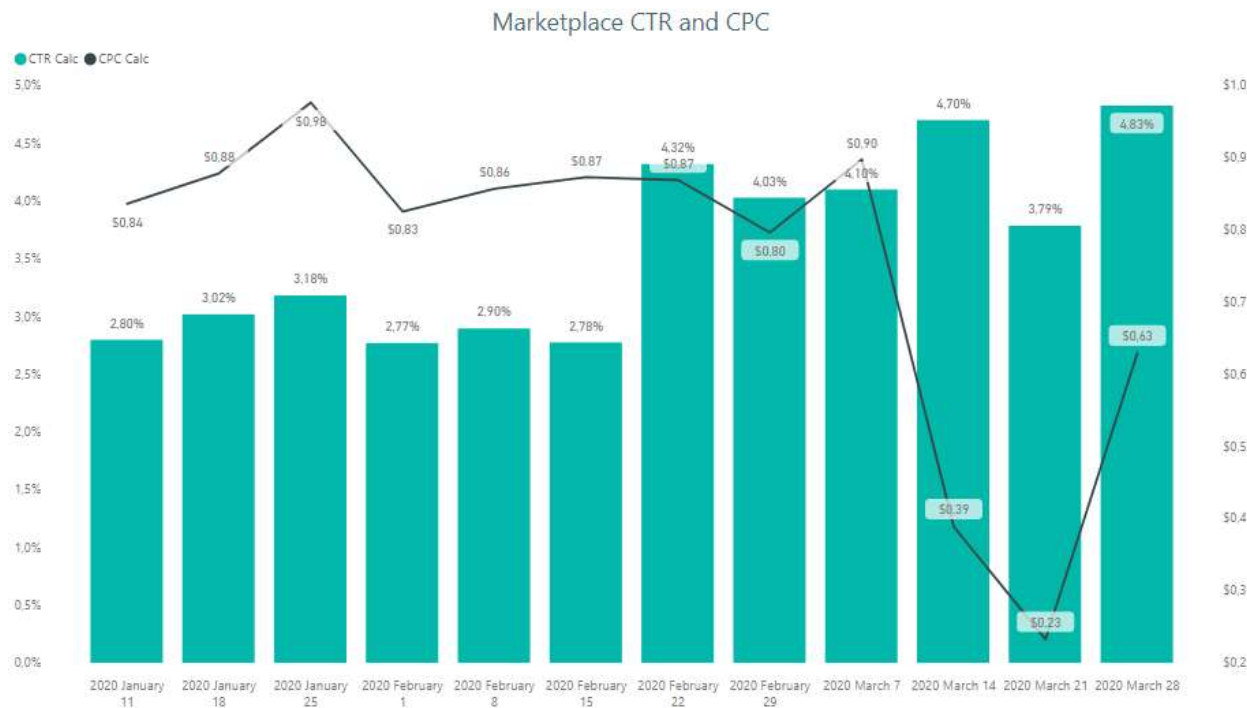
129% growth for searches for generic pharmacy terms year over year



Searches for generic pharmacy terms were even up by 129% year over year. This may indicate that many users are reverting to online pharmacies for the first time and do not have a brand preference yet. Right after March 16 we also saw a big increase in searches, up by 280%.

Source: Internal Data, Searches for generic pharmacy terms, Germany; Mar 1 - Apr 9 2020 compared to March 3 - Apr 11 2019 to align for weekdays
Queries include Online Apotheke, Apotheke, Versandapotheke and seven more.

CPC for generic pharmacy keywords dropping sharply while CTR rises after Corona outbreak



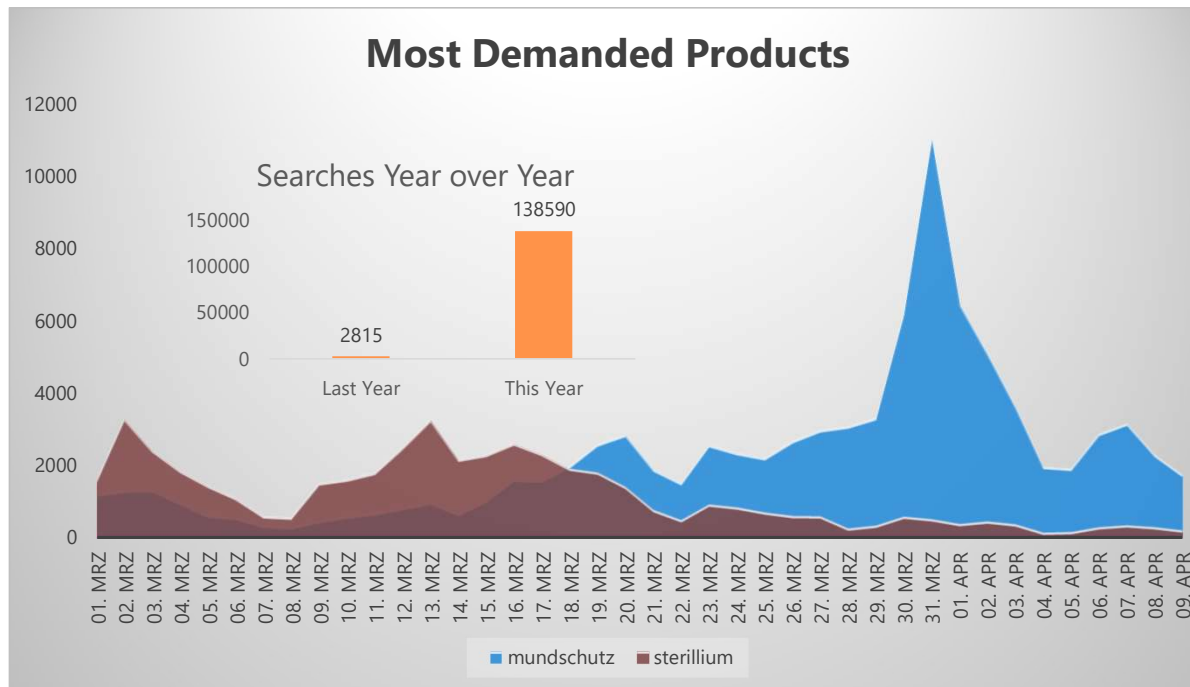
The Corona pandemic influenced both our users' search and click behaviour but also the bidding strategy of advertisers.

Since the last week of February CTR for generic pharmacy keywords grew by almost 2 percent points.

CPC decreased sharply in mid-March but started to climb again in the week leading into April.

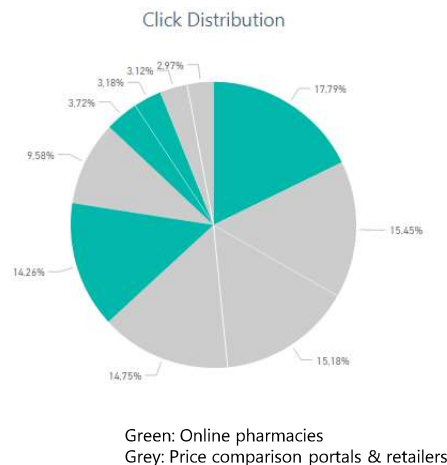
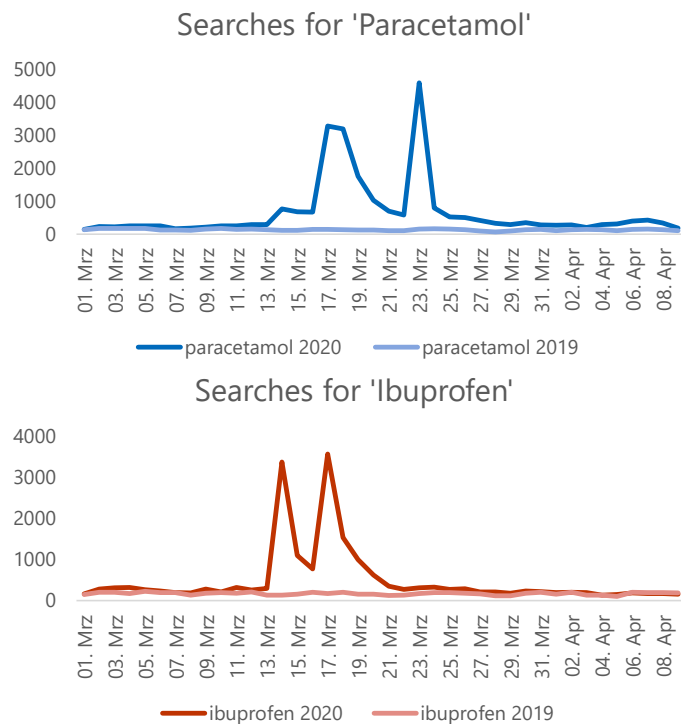
Source: Internal Data: Marketplace CPC and CTR for generic pharmacy terms, Germany; Jan 11 - Apr 3 2020
Keywords include more than 200 terms such as Online Apotheke, Apotheke, Versandapotheke etc.

The rush for face masks and hand sanitizers



Not surprisingly, Sterillium, a popular hand sanitizer, and face masks were the two products users searched for extensively online. Note how Sterillium was in higher demand in early March, while searches for 'Mundschutz' - driven by market shortage - rose substantially towards end of March. Clicks for these products however go overwhelmingly to price comparison portals and retailers, not to online pharmacies

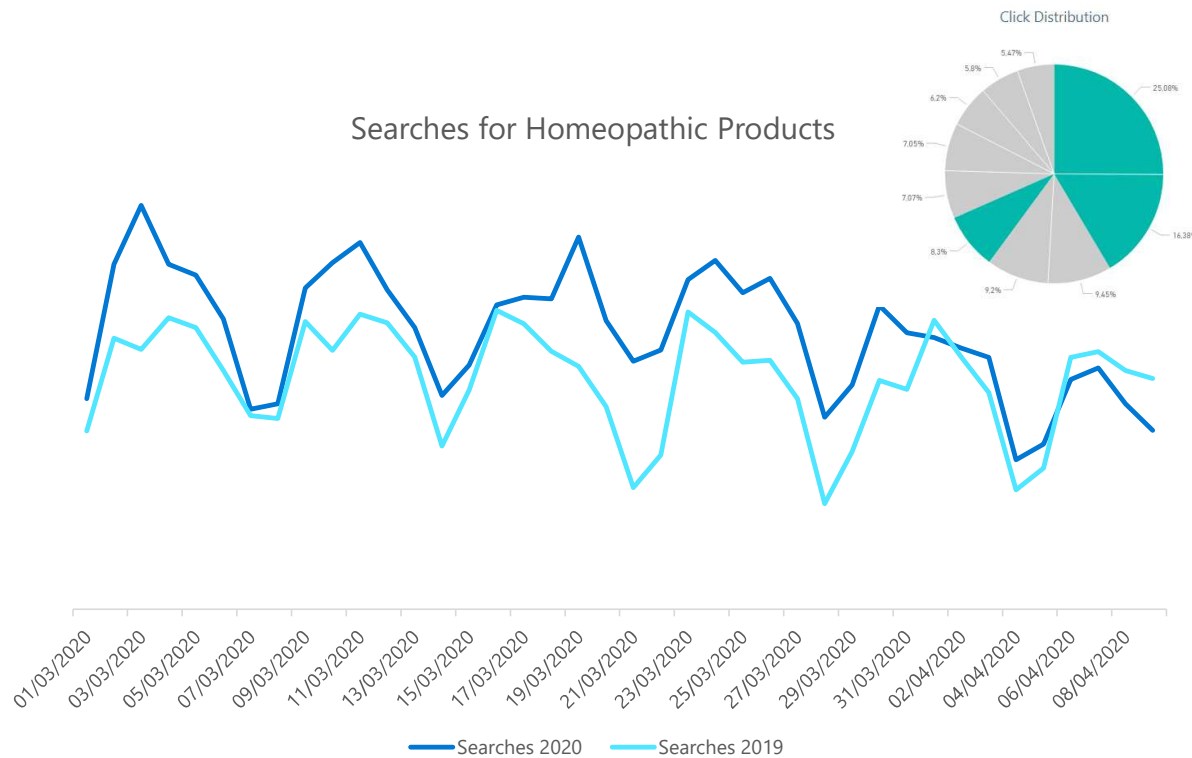
Strong shifts for medication searches as Corona restrictions get closer



Using two popular medications as example, search volume runs in parallel until March 12, then we see a strong increase for 10 days. Long lines at pharmacies may have motivated many users to search online for these pharmaceutical products . But even for these only half of all clicks went to online pharmacies, the other half being shared mostly by price comparison portals.

Source: Internal Data, Searches for selected medications, Germany; Mar 1 - Apr 9 2020 compared to March 3 - Apr 11 2019 to align for weekdays
Click analysis captures marketplace date from Feb 29 to Apr 3, 2020.

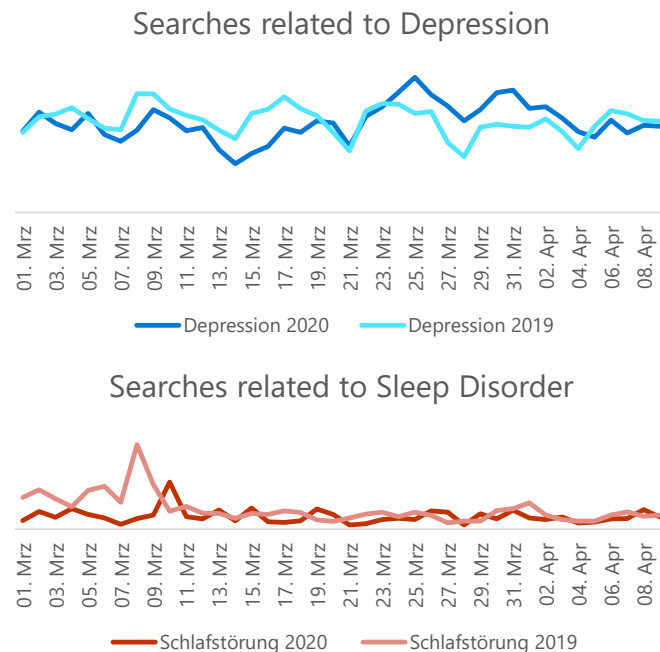
For homeopathic products COVID-19 has no relevant impact



Searches for homeopathic products grew by 20% year over year but unaffected by the pandemic. Two online pharmacies share most clicks, but again half of them went to price comparison portals.

Source: Internal Data, Searches for homeopathic products, Germany; Mar 1 - Apr 9 2020 compared to March 3 - Apr 11 2019 to align for weekdays
Click analysis captures marketplace date from Feb 29 to Apr 3, 2020.

Does COVID-19 create anxiety? No major changes in searches for symptoms

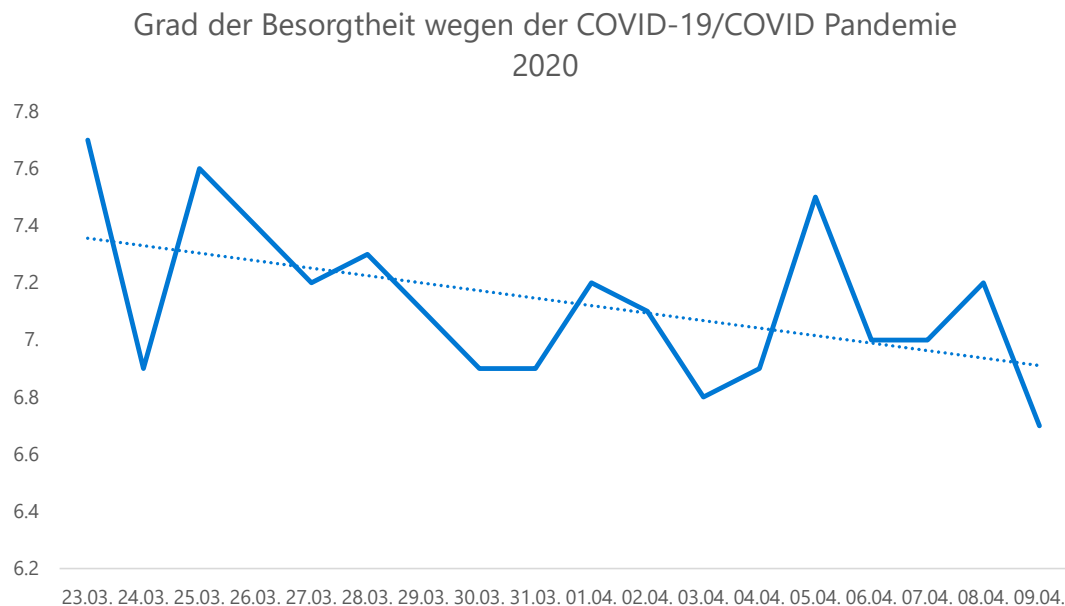


Many 3rd party surveys confirm, that the pandemic has created anxiety – health or finance related.

Online pharmacies often have symptom related keywords, we took two of them to see if the COVID-19 outbreak would show a change in search patterns.

The clear answer is no: neither one has seen a relevant increase in related searches.

For homeopathic products Covid-19 has no relevant impact



This is also confirmed through Statista's daily COVID-19 survey.

On a scale from 1 (not worried at all about COVID-19) to 10 (extremely worried) the trendline indicates that potentially the degree of worry in Germany is declining.

Popular keywords

| Apotheke (generisch) | Medizinische Geräte | Symptome & Beschwerden | Medikamente (generisch) | Medikamente (Produkte) |
|----------------------------|------------------------|---------------------------|-----------------------------|---------------------------|
| online apotheke | mundschutz | rosacea | arznei | paracetamol |
| apotheke | sterillium | tinnitus | arzneimittel | orthomol immun |
| versandapotheke | atemschutzmaske | verstopfung | heilmittel | wobenzym |
| apotheke online | fieberthermometer | schuppenflechte | medikamente online shop | umckaloabo |
| versand apotheke | schutzmaske | nagelpilz | medikament bestellen | neurexan |
| internet apotheke | atemmaske | akne | medikamente rezeptfrei | voltaren |
| onlineapotheke | rollator | trockene augen | arznei bestellen | ibuprofen |
| apotheken online | einmalhandschuhe | psoriasis | arzneimittel online | grippostad |
| apotheke versandkostenfrei | luftbefeuchter | reflux | medikament online bestellen | octenisept |
| apotheke preisvergleich | pulsoximeter | sodbrennen | medizin online bestellen | sinupret extract |

Key Takeaways

Searches for online pharmacies – both for branded and generic terms – increased year over year as rumors about restrictions started.

For most popular products like face masks or sanitizer we can see a direct correlation between the outbreak and spikes in searches.

Searches for specific medications increased at the beginning of the outbreak but normalized in early April. Homeopathic products are much less influenced and show the same pattern as last year.

Online pharmacies face fierce competition from price comparison portals and aggregators, indicating consumers are looking for best deals on pharmaceutical products.

The COVID-19 outbreak created some wild swings in CTR and CPC values but seems to return to previous average values.

This is too early to prove but we assume that the COVID-19 pandemic will overall increase acceptance of online pharmacies and add new users in the long term.