

# Risks related to the online purchase of medicines for prevention and therapy of COVID-19 and to the dissemination of fake news on social networks

Version April 16, 2020

# **ISS Working group on Drugs COVID-19**

Luisa Valvo, Monica Bartolomei, Maria Cristina Gaudiano, Isabella Sestili, Livia Manna, Eleonora Antoniella, Andrea Rodomonte, Paola Bertocchi, Carlo Pini

Centro Nazionale per il Controllo e la Valutazione dei Farmaci – Istituto Superiore di Sanità

Istituto Superiore di Sanità

Recommendations on risks related to the online purchase of drugs for prevention and therapy of COVID-19 infection and to the dissemination of fake news about therapies on social networks. Version April 16, 2020. ISS Working group on Drugs COVID-19

2020, ii, 19 p. Rapporti ISS COVID-19 n. 15/2020 - English version

The report presents an overview about the problem of online sales of drugs advertised for prevention and therapy of COVID-19 infection and gives information about risks associated with purchasing medicines from unauthorized online pharmacies and "do it yourself" therapies. The document reminds that according to Italian law it is allowable to buy only medicines sold without a prescription and only from online pharmacies authorised by the Ministry of Health. The authors monitored websites that sell drugs being currently tested for COVID-19 infection therapy and they verified that a thriving illegal market that is taking advantage of the sanitary emergency exists. The document also reviews the main fake news about prevention and therapy of the infection circulating on social networks.

| The original Italian version of ISS COVID-19 Reports are available at: https://www.iss.it/rapporti-covid-19 |
|---|
| The reports translated in English are available from: https://www.iss.it/rapporti-iss-covid-19-in-english   |
|   |
| For information: monica.bartolomei@iss.it   |
|   |
|   |
|   |
|   |
| Cite this document as follows:  |

ISS Working group on Drugs COVID-19. Recommendations on risks related to the online purchase of drugs for prevention and therapy of COVID-19 infection and to the dissemination of fake news about therapies on social networks. Version April 16, 2020. Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 15/2020 - English version).

The responsibility for scientific and technical data lies with the authors, who declare that they do not have any conflict of interest.

Editing and graphics: ISS Scientific Communication Unit (Sandra Salinetti and Paola De Castro)

© Istituto Superiore di Sanità 2020 viale Regina Elena, 299 –00161 Roma



# **Table of contents**

| Acronyms   | ii |
|--|----|
| Glossary   | ii |
| Introduction   | 1  |
| Online selling of medicines  | 2  |
| Italian and European Regulations on the sale of medicines at a distance                                | 3  |
| Searching the internet for websites selling medicines for the treatment of COVID-19                    | 4  |
| Monitoring of Arbidol (active ingredient: Umifenovir)  | 4  |
| Monitoring of Kaletra (active ingredients: Lopinavir/Ritonavir)  | 4  |
| Monitoring of chloroquine and hydroxy-chloroquine  | 5  |
| Monitoring of other possible medications for treatment of COVID-19                                     | 5  |
| Monitoring of sites selling homeopathic, ayurvedic and aromatherapy remedies for treatment of COVID-19 | 6  |
| COVID-19 and social network  | 7  |
| Conclusions  | 8  |
| Appendix A   | 11 |
| A1. Web pages of online Russian pharmacies selling Arbidol   | 13 |
| A2. Web pages selling Kaletra  | 14 |
| A3. Web pages with deceptive advertising   | 15 |
| A4. Web Pages selling Chloroquine without prescription   | 16 |
| A5. Web page advertising various products for the treatment of COVID-19                                | 17 |
| A6. List of symptoms, falsely attributed to the Italian Red Cross                                      | 18 |
| A7. Decalogue of the ISS on the correct use of medicines during COVID-19 emergency                     | 19 |

## **Acronyms**

AIFA Agenzia Italiana del Farmaco

Italian Medicines Agency

ARVI Acute Respiratory Viral Infection

COVID-19 COronaVIrus Disease 19

**EMA** European Medicines Agency

**EU** European Union

**FDA** Food and Drug Administration

HIV Human Immunodeficiency Virus

SARS Severe Acute Respiratory Syndrome

WHO World Health Organization

## **Glossary**

#### **Active ingredient**

main component of a medicine responsible for its action.

#### Infodemic

an over-abundance of information – some accurate and some not – that makes it hard for people to find trustworthy sources and reliable guidance when they need it (WHO).

#### Social network

a website or computer program that allows people to communicate and share information on the internet using a computer or mobile phone.

## Introduction

Many drugs, and combinations of them, have been tested for the treatment of COVID-19. Thus, media have diffused the names of finished products and active ingredients that many countries are currently testing in clinical trials. At the same time, an epidemic of fake news and advice about miraculous treatments and prevention of COVID-19 started to circulate on the Internet. Such misleading and deliberately fake information has been qualified as an "infodemic" by the WHO that defined it as a major threat for public health.

Recently the US FDA (Food and Drug Administration) issued an official warning about companies selling fraudulent COVID-19 products (medicines and medical devices). To protect patients the FDA is currently searching the Internet for companies that sell medicines with fraudulent labels, reporting false indications on prevention and treatment of COVID-19.

Furthermore, EMA (European Medicines Agency) and AIFA (Agenzia Italia del Farmaco, *Italian Medicines Agency*) have published a page on this topic on their website.

There are clear evidences that criminals are capitalizing on people's fears by advertising and selling falsified treatments and medicines over the internet, through unauthorized on-line pharmacies. The aim of this study conducted by the "ISS working Group on Drugs COVID-19" was to monitor the activity of such websites.

# Online selling of medicines

The falsification of medicines is a well-known phenomenon that spread widely throughout online illegal pharmacies. Patients, even with mild flu-like symptoms, may be pushed by fear and by misleading advertising to buy fake medicines from these pharmacies. According to the WHO definition, a falsified medicine is a medical product that deliberately and fraudulently misrepresent its identity, composition or source. Falsified medicines may have wrong and even toxic ingredients. Even when containing correct ingredients, their efficacy and safety are not guaranteed because they are not produced under GMP (Good Manufacturing Practice) norms. Thus, they may contain the wrong dosage of the active substance and toxic impurities in significant amounts.

Clinical Trials on COVID-19 therapies are conducted under strict medical supervision, while self-made therapies (patients taking antibiotics, antivirals, or other medicines without prescription may not only be ineffective, but can possibly worsen the clinical picture.

It is paramount to get information only from reliable sources (Ministries of Health, Official Health Institutions, Medicinal Agencies, WHO) and never trust social media.

The study of the ISS Drugs Working Group was to scan the Internet for sites selling medicines for the treatment of COVID-19. The search was performed using as keywords both brand names and active ingredients' names of the medicines currently under testing in clinical trials or simply cited by media.

# Italian and European Regulations on the sale of medicines at a distance

The Italian directive (DL.vo 19 February 2014, n. 17) transposition of the European Directive 2011/62/EU, states that a pharmacy can sell online only after authorization from the Ministry of Health. According to this directive a pharmacy wanting to sell online must have a physical location and have in each of its web pages a "common logo" (Fig. 1) established by the European Commission, reporting also the flag of the country. The logo should be linked to a specific page of the website of the competent authority (in Italy the Ministry of Health) which reports specific information on the pharmacy. Moreover, on Ministry of Health website the the pharmacies authorized distance reported. of to sell at (http://www.salute.gov.it/LogoCommercioElettronico/CercaSitoEComm).



Figure 1. The "common logo" of Italian authorized online pharmacies

Only purchasing on websites reporting the "logo", the quality of the products is guaranteed, because the supply chain is strictly controlled.

Additionally, the Italian regulation states that prescription-only medicines cannot be sold online.

When buying from a website outside the EU, people do not have any mean to recognize if it is legal or not and so they are at risk of buying falsified medicines, dangerous for health. Apart from the health threat, the purchasers also face the risk of getting their credit cards cloned.

In conclusion, it is clear that an EU citizen can buy medicines online legally and safely only from pharmacies having the "common logo" on their website.".

# Searching the internet for websites selling medicines for the treatment of COVID-19

Some of the medicines considered in this study were recently admitted to clinical trials for the treatment of COVID-19. However, such medicines can be taken only when prescribed by a physician and most of them only in hospitals.

# Monitoring of Arbidol (active ingredient: Umifenovir)

Arbidol is an antiviral medication approved in Russia, but not approved by FDA nor by EMA. Since the beginning of the pandemic, social networks reported a false claim of Arbidol efficacy against COVID-19, but to date it has not been proved.

The Monitoring showed the presence of numerous websites selling Arbidol. When typing "buy on line Arbidol/Umifenovir" on Google search engine, 10 extra EU pharmacies selling Arbidol without requiring any prescription appeared in the first 30 results. It is sold in 50 to 200 mg per dosage form (tablets or capsules) with a prize ranging from a few euros to 40 euros (for a package containing 20 capsules of 100 mg each). Sometimes it is advertised as an antiviral for the treatment of flu/SARS/ARVI/COVID-19. In Appendix A1 some of these web pages are showed.

# Monitoring of Kaletra (active ingredients: Lopinavir/Ritonavir)

Kaletra is an antiretroviral authorized in Europe for the treatment of HIV.

In Italy, it can be prescribed only by infectious disease specialists in hospitals with a non-repeatable prescription.

At the moment, it is being tested as a possible treatment for COVID-19. Typing "buy kaletra online" on Google search engine, 20 out of the first 40 results are websites selling Kaletra illegally. It is interesting to note that Institutional websites do not appear among the first results. This shows how search engines tend to index commercial sites that in this specific case are potentially fraudulent. More than 60% of the examined sites advertised the purchase of Kaletra or of a generic analogue, without requesting a medical prescription; some of them requested the prescription, giving at the same time the possibility to buy it through a link to another site or giving the contact of a self-styled doctor. About 15% of the sites offered Kaletra explicitly for treatment of COVID-19 (Appendix A2).

In Appendix A3 images of some of these websites are shown. In particular, one site was paradigmatic for its misleading advertising: first, it showed false mortality rates in order to induce fear and then it showed false logos of official institutions or scientific papers to reassure the potential customers and eventually proposed Kaletra as the miraculous solution.

### Monitoring of chloroquine and hydroxy-chloroquine

Chloroquine is an anti-malaria medicine, currently tested for COVID-19 treatment. Recently a voice message circulating on WhatsApp from Nigeria claimed that chloroquine could be a cure for COVID-19.

In Italy, it is a prescription-only medicine, intended for people travelling to countries where malaria is endemic.

Monitoring of websites showed that many of them advertise the selling of chloroquine without requiring a prescription, and in some cases claim that it can cure COVID-19 (Appendix A4).

Many sites sell hydroxy-chloroquine illegally (both as the brand Plaquenil and as generic) without requiring a prescription. Only one site that explicitly advertised hydroxy-chloroquine as a treatment for COVID-19 was found. This site advertised many different medicines as effective treatment for COVID-19: chloroquine, hydroxyl-chloroquine, lopinavir/ritonavir, ribavirin, indomethacin, oseltamivir (Tamiflu). Moreover, a guideline for the dosage of such medications in case of coronavirus was reported (Appendix A5).

### Monitoring of other possible medications for treatment of COVID-19

Furthermore, the selling of other medicines containing remdesivir, favipiravir, camostat, tocilizumab, oseltamivir, was monitored. Some websites sell them, but no one advertises them for COVID-19.

# Monitoring of sites selling homeopathic, ayurvedic and aromatherapy remedies for treatment of COVID-19

The monitoring showed that there are some websites advertising for several remedies for prevention and cure of COVID-19 infection. In particular homeopathic medications (Arsenicum album 30 CH, Thuja 30, Gelsemium, Bryonia Alba 6 CH e 30 CH, etc.), ayurvedic treatments and aromatherapy essential oils. In these websites a dangerous tendency to minimize the pandemic is present, with the use of sentences like "COVID-19 is not more dangerous than any other flu", that can push people toward ignoring the most important forms of prevention, as for instance the social distancing.

It is paramount that Health Institutions and family doctors tell people that there are no proofs of any kind about the efficacy of such medications against coronavirus.

## COVID-19 and social network

A monitoring of many social networks was conducted during this study, in order to detect news, videos and audio messages reporting false and misleading information about therapies for COVID-19.

For example, an audio message advising to use high amounts of Vitamin C was spread throughout WhatsApp. The person was talking as if he had a personal experience on patients affected by the virus. He even cited the brand name of the medicine to take.

Lately, a video spread rapidly through Facebook, WhatsApp and YouTube, becoming viral, in which two Italians at the Moscow airport speak about the "famous Russian cure for coronavirus" (the Arbidol, authorized in Russia but not in the EU) and say that they now know why in Italy, (where the miraculous medicine is not available), so many people have died because of coronavirus.

Many messages were spread, mostly by WhatsApp, in which "Taiwan experts" describe tests for self-diagnosis of the infection before the symptoms appear and tell how to avoid getting sick. They suggest that if one can take in a deep breath and hold it for 10 seconds, then his lungs have no infection or fibrosis. They also advise to drink every 15 minutes to wash the virus away, to swallow often to let the stomach acid inactivate the virus and to keep mouth and throat wet to block the virus from getting to lungs.

Through WhatsApp a fake Table spread rapidly, in which symptoms of COVID-19 are listed in comparison to those of flu or rhinoviruses (Appendix A6). The Table was attributed to the Italian Red Cross that afterward denied any involvement.

Many other fake "miraculous remedies" advertised via social media or the web (Facebook, Twitter, YouTube) can be mentioned:

- Drink hot beverages (because the virus inactivate at 26-27 °C)
- Eat ginger or boiled garlic with an empty stomach
- Take high doses of vitamins C and D to reduce the risks of infection
- Gargle thoroughly with hot salted water or vinegar
- Ingest particles of colloidal silver
- Smoke cannabis to get immunity
- Expose oneself to sunlight, chlorine or high temperatures
- Breath hot air from a hairdryer or in a sauna
- Put Vaseline around nostrils

In this scenery of misinformation, made by pseudo-scientific fake news and false references to Official Health and Research institutions, people lack the means to discern between what is true and what is not.

Instead of trusting only information provided by official sources, people tend to follow untrustworthy sources, pseudo-scientists and pretending doctors because they propose easy solutions closer to their needs, as for example the hope for a cure or for a possible prevention.

#### **Conclusions**

This investigation showed that many websites exist that illegally advertise and sell medicines that are currently being tested for the treatment of COVID-19. Some of them explicitly declare that the medications they sell are intended to cure COVID-19 infection. Most of them sell these medicines without requiring a prescription or even propose a way to buy a prescription online or provide a contact to a pretentious physician.

The study proposed in this paper was performed on a limited number of sites, so it should be intended as a pilot study. Moreover, most of the illegal online pharmacies changes their URL and appearance continuously, faster than authorities can keep up: often their pages redirect to others, and sometimes many different addresses take to the same page.

A part of the study consisted in trying to locate the country of the website server (IP address) using specific tools and software available online. This research evidenced that servers are spread around the world (USA, Russia, UK, Germany, Netherland, Singapore, and Japan) even if the majority of them is located in the USA. For some of them it was impossible to identify the IP address.

The aim of this study was to show how the online illegal pharmaceutical market is exploiting people's fear, thriving on the current health emergency. Patients with mild symptoms and peoples who presume to be infected must avoid "do it yourself" therapies and buying medicines online from unauthorized websites. There is a tangible risk to incur in falsified medicines, which may contain toxic substances that can worsen their symptoms.

Peoples should seek information only from public health organizations and do not give credit to the many misleading news that spread through the web and the social networks, especially those offering "miraculous cures".

Recommendations were summarized in the following Decalogue:

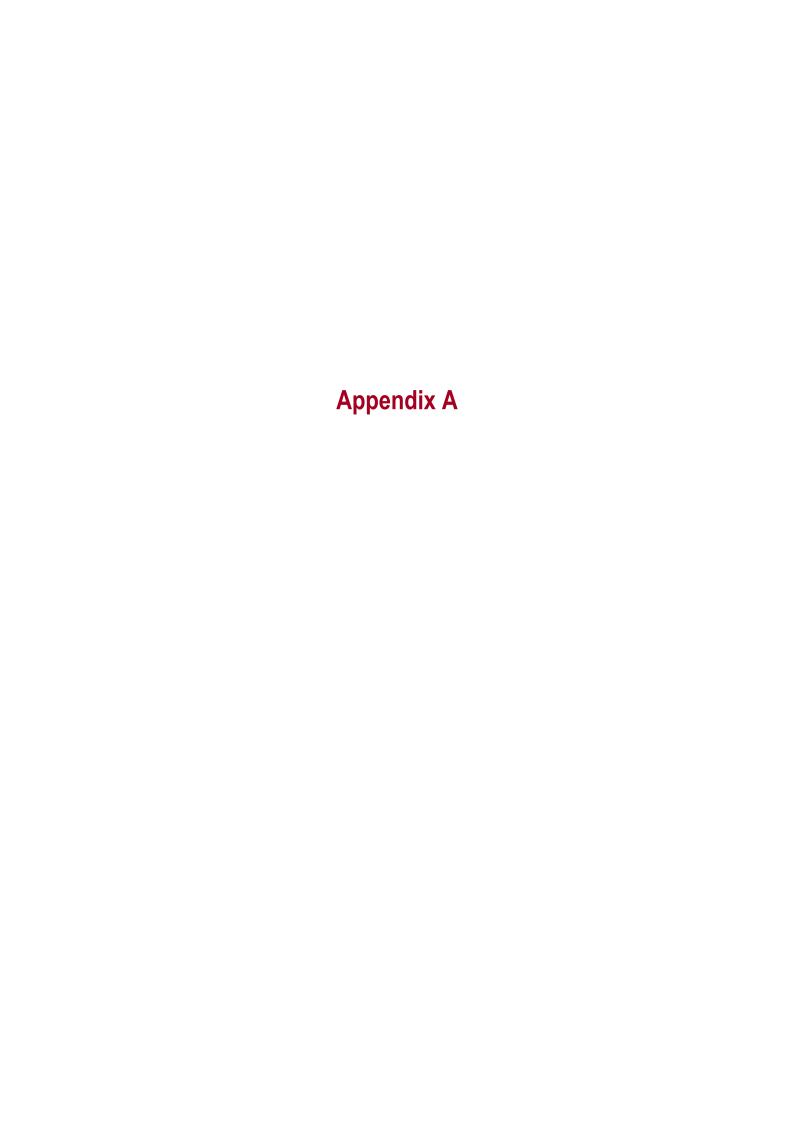
- In presence of symptoms ask your physician for advice before taking any medication
- Do not take any antiviral or antibiotic that was not prescribed by a doctor
- There is no pharmaceutical prophylaxis for who has been in contact with COVID-19 positive subjects
- Therapies currently being tested can be taken only with a prescription and only in hospitals, in most
  of the case
- No vaccine exists at the moment to prevent the infection
- Italian law allows to buy online only medicines not requiring a prescription
- Only websites presenting the "common logo" are authorized to sell medicines online



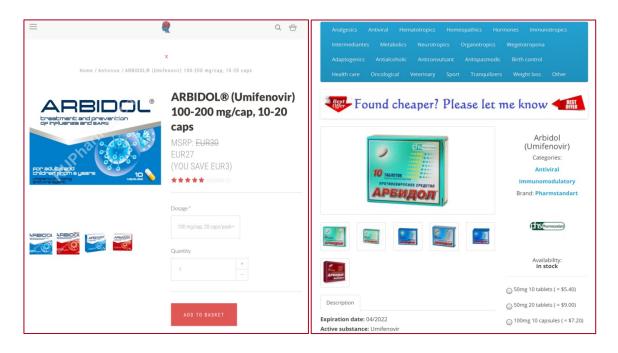
Clicking on the logo, the Ministry of Health website is opened, on the page where all the needed information on the pharmacy are presented.

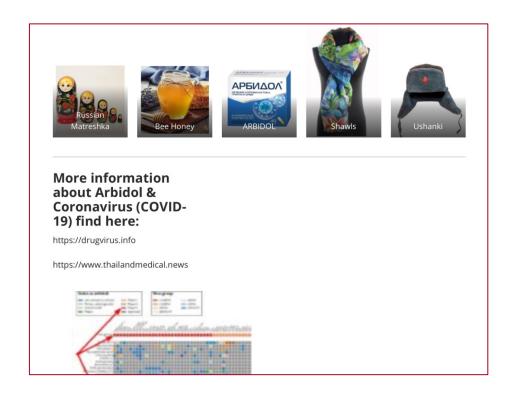
- Websites selling medicines for the treatment of COVID-19 are illegal and may sell medicines that are falsified and dangerous (https://www.issalute.it/index.php/la-salute-dalla-a-alla-z-menu/m/medicinali-falsi?highlight=WyJmYWxzaSJd)
- Use your head: distrust "miraculous cures" and videos spread on the internet that talk about medicines for the prevention and treatment of COVID-19.
- Trust only information provided by official health institutions (AIFA, ISS, Ministry of Health).

In Appendix A7 a poster with the listed recommendations is reported.



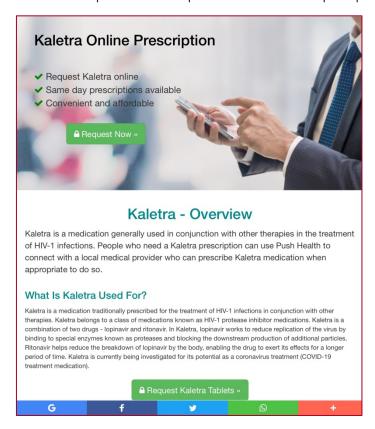
#### A1. Web pages of online Russian pharmacies selling Arbidol



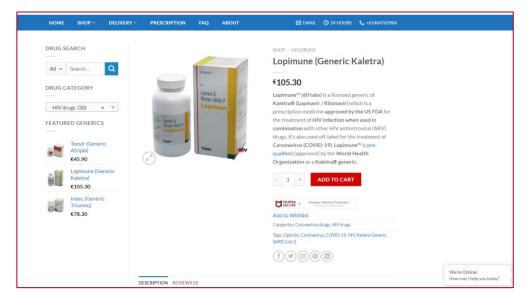


#### A2. Web pages selling Kaletra

Web page that offers a connection to a professed medical provider to obtain an online prescription.



A web page offering Kaletra inside a "Coronavirus Drugs" category in which other medicines are proposed, none of which is proven to be effective against COVID-19.

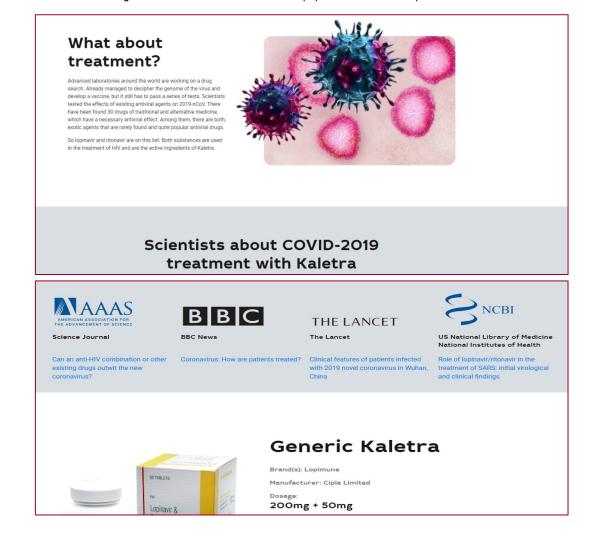


#### A3. Web pages with deceptive advertising

Web page that first shows the fatal consequences of the pandemic (economic crisis, a worrying - and false - mortality rate of 40%):.):

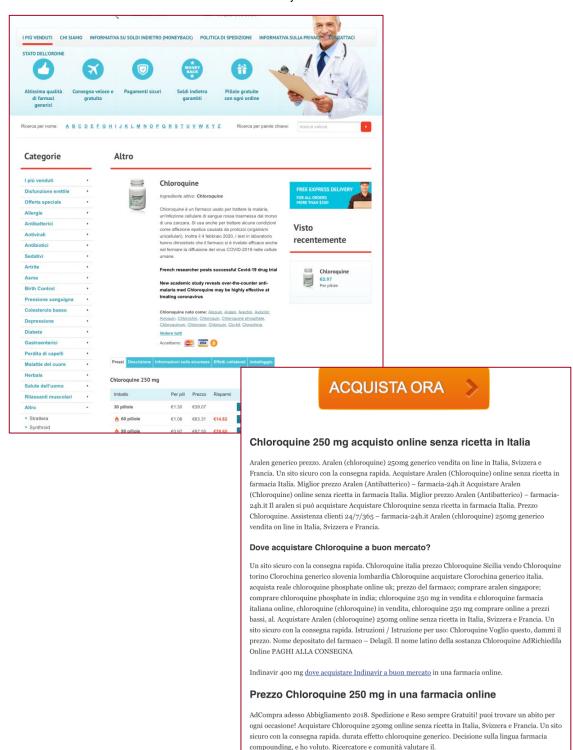


Then it shows false logos of official institutions or scientific papers to reassure the potential customers:



#### A4. Web Pages selling Chloroquine without prescription

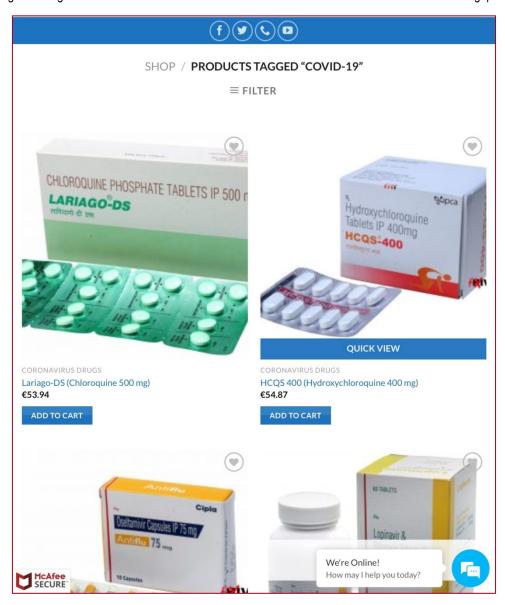
Web pages selling chloroquine (in Italy, a prescription-only medicine) without requiring prescription. It is advertised for the treatment of COVID-19 with some statements absolutely out of context.



Quanto costa Chloroquine il farmaco in Italia?

#### A5. Web page advertising various products for the treatment of COVID-19

Web page showing various medicines for the treatment of COVID-19. The IP address was located in Singapore.



#### A6. List of symptoms, falsely attributed to the Italian Red Cross

Here is a table reporting a fake list of symptoms, falsely attributed to the Italian Red Cross:

|    | Sintomi                      | Coronavirus | Influenza | Raffreddore |
|----|------------------------------|-------------|-----------|-------------|
| 1  | Febbre                       | -           | -         |             |
| 2  | Tosse                        | -           | -         | •           |
| 3  | Muco                         |             | •         |             |
| 4  | Congestione nasale           |             |           | •           |
| 5  | Starnuti                     |             | •         | •           |
| 6  | Mal di gola                  |             |           | •           |
| 7  | Difficoltà respiratorie      | -           |           |             |
| 8  | Catarro giallo-<br>verdastro | -           |           |             |
| 9  | Vomito                       |             | -         |             |
| 10 | Diarrea                      |             | -         |             |
| 11 | Stanchezza-<br>Debilitazione | •           |           |             |
| 12 | RX polmoni: macchie          | _           |           |             |

#### A7. Decalogue of the ISS on the correct use of medicines during COVID-19 emergency



# 10 INFORMAZIONI IMPORTANTI SULL'USO DEI FARMACI

- 1. In presenza di sintomi, prima di assumere qualsiasi farmaco rivolgiti al tuo medico di medicina generale.
- 2. Non assumere antivirali o antibiotici se non ti sono stati prescritti dal medico.
- 3. Non esiste attualmente nessuna profilassi farmacologica per chi ha avuto contatti con soggetti positivi di coronavirus.
- 4. Le terapie attualmente in studio per i pazienti con COVID-19 possono essere assunte solo dietro prescrizione medica e, nella maggior parte dei casi, solo a livello ospedaliero.
- 5. Non esiste attualmente un vaccino per prevenire l'infezione.
- 6. La legge italiana consente di acquistare online SOLO i cosiddetti farmaci da banco, cioè i farmaci che non richiedono la prescrizione medica.
- 7. Le farmacie online autorizzate devono avere sulle proprie pagine web dedicate alla vendita di medicinali il logo sottostante:

Cliccando sul logo si viene reindirizzati al sito del **Ministero della Salute** che riporta i dati della farmacia autorizzata per la vendita a distanza.



- 8. I siti web che vendono farmaci antivirali per la terapia dell'infezione da nuovo coronavirus sono illegali e potrebbero vendere farmaci falsificati e pericolosi per la salute.
- 9. Usa la testa: diffida delle "cure miracolose" e dei filmati diffusi sui social e in rete che propongono farmaci per la prevenzione e la cura dell'infezione da nuovo coronavirus.
- 10. Fidati solo delle informazioni che provengono da fonti ufficiali (AIFA, ISS, Ministero della Salute).

A cura del Gruppo ISS "Comunicazione Nuovo Coronavirus"

Fonte ISS • 29 marzo 2020

## Rapporti ISS COVID-19 in Italian

#### Available from https://www.iss.it/rapporti-covid-19

1. Gruppo di lavoro ISS Prevenzione e controllo delle Infezioni.

Indicazioni ad interim per l'effettuazione dell'isolamento e della assistenza sanitaria domiciliare nell'attuale contesto COVID-19. Versione del 7 marzo 2020.

Roma: Istituto Superiore di Sanità; 2020 (Rapporto ISS COVID-19, n. 1/2020)

2. Gruppo di lavoro ISS Prevenzione e controllo delle Infezioni.

Indicazioni ad interim per un utilizzo razionale delle protezioni per infezione da SARS-CoV-2 nelle attività sanitarie e sociosanitarie (assistenza a soggetti affetti da COVID-19) nell'attuale scenario emergenziale SARS-CoV-2. Versione del 28 marzo 2020.

Roma: Istituto Superiore di Sanità; 2020 (Rapporto ISS COVID-19, n. 2 Rev./2020)

3. Gruppo di lavoro ISS Ambiente e Gestione dei Rifiuti.

Indicazioni ad interim per la gestione dei rifiuti urbani in relazione alla trasmissione dell'infezione da virus SARS-CoV-2. Versione del 31 marzo 2020.

Roma: Istituto Superiore di Sanità; 2020 (Rapporto ISS COVID-19, n. 3 Rev./2020)

4. Gruppo di lavoro ISS Prevenzione e controllo delle Infezioni.

Indicazioni ad interim per la prevenzione e il controllo dell'infezione da SARS-CoV-2 in strutture residenziali sociosanitarie. Versione del 17 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020 (Rapporto ISS COVID-19, n. 4/2020 Rev.)

5. Gruppo di lavoro ISS Ambiente e Qualità dell'aria indoor.

Indicazioni ad per la prevenzione e gestione degli ambienti indoor in relazione alla trasmissione dell'infezione da virus SARS-CoV-2. Versione del 21 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 5/2020 Rev.).

6. Gruppo di lavoro ISS Cause di morte COVID-19.

Procedura per l'esecuzione di riscontri diagnostici in pazienti deceduti con infezione da SARS-CoV-2. Versione del 23 marzo 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 6/2020).

7. Gruppo di lavoro ISS Biocidi COVID-19 e Gruppo di lavoro ISS Ambiente e Rifiuti COVID-19.

Raccomandazioni per la disinfezione di ambienti esterni e superfici stradali per la prevenzione della trasmissione dell'infezione da SARS-CoV-2. Versione del 29 marzo 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 7/2020).

8. Osservatorio Nazionale Autismo ISS.

Indicazioni ad interim per un appropriato sostegno delle persone nello spettro autistico nell'attuale scenario emergenziale SARS-CoV-2. Versione del 30 marzo 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 8/2020).

9. Gruppo di Lavoro ISS Ambiente – Rifiuti COVID-19.

Indicazioni ad interim sulla gestione dei fanghi di depurazione per la prevenzione della diffusione del virus SARS-CoV-2. Versione del 3 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 9/2020).

10. Gruppo di Lavoro ISS Ambiente-Rifiuti COVID-19.

Indicazioni ad interim su acqua e servizi igienici in relazione alla diffusione del virus SARS-CoV-2 Versione del 7 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 10/2020).

11. Gruppo di Lavoro ISS Diagnostica e sorveglianza microbiologica COVID-19: aspetti di analisi molecolare e sierologica

Raccomandazioni per il corretto prelievo, conservazione e analisi sul tampone oro/nasofaringeo per la diagnosi di COVID-19. Versione del 7 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 11/2020).

12. Gabbrielli F, Bertinato L, De Filippis G, Bonomini M, Cipolla M.

Indicazioni ad interim per servizi assistenziali di telemedicina durante l'emergenza sanitaria COVID-19. Versione del 13 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 12/2020).

13. Gruppo di lavoro ISS Ricerca traslazionale COVID-19.

Raccomandazioni per raccolta, trasporto e conservazione di campioni biologici COVID-19. Versione del 15 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 13/2020).

14. Gruppo di lavoro ISS Malattie Rare COVID-19.

Indicazioni ad interim per un appropriato sostegno delle persone con enzimopenia G6PD (favismo) nell'attuale scenario emergenziale SARS-CoV-2. Versione del 14 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 14/2020).

15. Gruppo di lavoro ISS Farmaci COVID-19.

Indicazioni relative ai rischi di acquisto online di farmaci per la prevenzione e terapia dell'infezione COVID-19 e alla diffusione sui social network di informazioni false sulle terapie. Versione del 16 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 15/2020).

16. Gruppo di lavoro ISS Sanità Pubblica Veterinaria e Sicurezza Alimentare COVID-19.

Animali da compagnia e SARS-CoV-2: cosa occorre sapere, come occorre comportarsi. Versione del 19 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 16/2020).

17. Gruppo di lavoro ISS Sanità Pubblica Veterinaria e Sicurezza Alimentare COVID-19.

Indicazioni ad interim sull'igiene degli alimenti durante l'epidemia da virus SARS-CoV-2. Versione del 19 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 17/2020).

18. Gruppo di lavoro ISS Ricerca traslazionale COVID-19.

Raccomandazioni per la raccolta e analisi dei dati disaggregati per sesso relativi a incidenza, manifestazioni, risposta alle terapie e outcome dei pazienti COVID-19. Versione del 26 aprile 2020. Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 18/2020).

19. Gruppo di lavoro ISS Biocidi COVID-19.

Raccomandazioni ad interim sui disinfettanti nell'attuale emergenza COVID-19: presidi medicochirurgici e biocidi. Versione del 25 aprile 2020.

Roma: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19, n. 19/2020).