



CHLOROQUINE SELF-MEDICATION FOR THE CORONAVIRUS: WARNING

Preliminary note from the the CORAF¹ project. 21.03.20.

NB: The current events evolving very quickly this note is to be considered at its date of publication. Contact: m2sa02@gmail.com.

To strengthen the response to the COVID-19 pandemic, in the preparatory phase of the CORAF project (Coronavirus Anthro Africa), a mechanism is being tested by the CRCF with TransVIHMI and SoNAR-GLOBAL to identify social facts that may have an impact on the management of prevention and disease, and develop a rapid ethnographic survey to analyse their significance and impact. A summary note is written for the stakeholders in charge of the response.

In a video that circulated on social networks from 26 February 2020, Professor Didier Raoult, virologist at the Institut Hospitalo-Universitaire Méditerranée-Infections de Marseille, announced that chloroquine could cure COVID-19 and ensure the "endgame" of the pandemic². This is not "false news" (fake news) but premature and excessive claims,³ reported doctors and scientists who stressed the need to verify this efficacy through clinical trials and to take into account the possible toxicity of this drug. The presentation of the video, the words of the charismatic and atypical virologist, and a "good news" announced in the midst of an epidemic of fear, quickly rendered this message viral.

This message was rapidly spread out in social networks. The rapid ethnographic survey we conducted from 11 to 13 March⁴ shows that it circulated outside the medical circles in Senegal, Burkina Faso, Benin and Cameroon. Chloroquine, marketed since 1949 as an anti-malarial drug and well known by the populations for prophylaxis at a dosage of 100mg per day, was withdrawn from the formal circuit for this indication in the 1990s after the appearance of resistance by the parasite. Derivatives are currently marketed in limited volumes to treat people suffering from rheumatoid arthritis and lupus. This drug that can be toxic at high-dose (2g) is still used in West African countries for self-medication, especially by the poorest populations, to prevent and treat various common disorders, or to induce abortions or suicides.

In Dakar, on 11 March 2020, various informants mentioned that chloroquine was requested and available in Keur Serigne Bi, an informal drug market that is still active despite legislation prohibiting the trade of drugs outside pharmacies. Traders sell chloroquine (in the form of Nirupquin® 100 mg: chloroquine phosphate, Syncom formulations, India), whose prices have "soared", to customers who mention the coronavirus, including a doctor; stocks have been built up by vendors in response to demand⁵. In Benin and Cameroon, pharmacies receive many requests for chloroquine for the coronavirus and some are trying to obtain supplies, particularly from Nigeria. In Burkina Faso, chloroquine can be found among street vendors of medicines, who say they have run out of stock in the last few days⁶. In Cameroon⁷ the demand for chloroquine in pharmacies has increased since the first case of COVID-19 was reported on 6 March.

¹ Coronavirus Project Anthropology Africa. Team: A. Desclaux, K. Sow, CRCF (Centre Régional de Recherche et de Formation à la prise en charge de Fann), IRD (TransVIHMI), RAEF (Réseau Anthropologie des Epidémies Emergentes), SoNAR-GLOBAL, with R. Hounghinih (Benin), B. Bila (Senegal), M. Varloteaux (Cameroon).

² Promising anti-malaria drug to combat coronavirus, BFMTV, 26/02/20, <https://www.bfmtv.com/sante/un-medicament-anti-paludisme-prometteur-pour-lutter-le-coronavirus-1864297.html>

³ About the initial controversy in France and the international therapeutic trials, see <http://www.slate.fr/story/188601/coronavirus-covid-19-premieres-esperances-traitement-medicaments>

⁴ About the effects of the spread of even atypical infox in Africa, see <https://theconversation.com/la-globalization-of-infox-and-its-effects-on-health-in-Africa-example-of-chloroquine-134108>

⁵ Ethnographic survey carried out by M. Diop, CRCF Dakar, 11/03/20

⁶ Ethnographic survey carried out by Dr. B.Bila, A.Ouedraogo and A.Bila, IRSS Ouagadougou/ IRD, 12/03/20

⁷ Ethnographic survey conducted by M. Varloteaux and S.Bibeky, ANRS-Cameroon site, Yaoundé Central Hospital, 14/03/20.

Since then, other videos on Youtube, the announcement of the setting up of clinical trials⁸, and the approval of chloroquine in the USA declared by President Trump, have increased the possibilities of people's awareness of this treatment - who are not, however, aware of its safe conditions of use. Informal market supply channels have been able to develop since the date of our surveys. Chloroquine can be purchased on the internet (verified on 21 March 2020) at prices that are out of control (e.g. USD 1 per 250mg tablet).

In addition, chloroquine derivatives are currently used for the treatment of COVID-19 in a specialised medical setting, and will need to be made available to health professionals very quickly if clinical trials validate their indications. Quality-controlled drug delivery systems and validated protocols for treatment and prevention, with information for caregivers, will then be needed to ensure that they are used, prescribed and distributed in a way that is risk limited.

Addressing an exceptionally serious epidemic, any message about the effectiveness of a drug, even a potential drug, may lead to its mass purchase for prevention or treatment. In Africa, chloroquine finds its way into the informal market, where products are not controlled and may be outdated or "substandard or falsified" (according to the WHO classification).⁹ Moreover, the sale is currently not accompanied by a prescription or dispensation by a professional informed about their toxicity. The announcement of the efficacy of chloroquine on social networks increased its popularity in Africa prior to its international media coverage, including among health care providers, and prior to any introduction of measures to reduce its risks. In view of the toxicity of this drug consumed over a long period and/or at high doses, it is imperative to wait for the end of the clinical trials that will allow its marketing authorization and its informed and controlled distribution.

KEY POINTS

- Videos circulating on networks and social media have been promoting chloroquine as a coronavirus treatment since the beginning of March. In West Africa, this "old drug" against malaria is no longer available in the formal circuit. But it is still available in informal markets and is now sold for preventive and curative self-medication against coronavirus.
- Chloroquine is being studied for its efficacy against the coronavirus, but the risk linked to its current use without medical supervision (toxicity of the product in high doses, false safety of its preventive use that is not validated); to its purchase on the informal market (expired, adulterated products of unknown composition); and to the lack of knowledge of users regarding its effects, call for caution.
- Pharmacists, doctors and health authorities (pharmacy and drug authorities, poison control centre, pharmacists' and doctors' associations) should be informed of this off-label use of chloroquine, of the premature and hitherto unscientifically validated use for coronavirus, in a context of risk, particularly in the informal circuit.
- At the same time, the provision of treatment and information to healthcare professionals in a controlled setting must be rapid as soon as the results of current trials are available and communication with professionals must anticipate this development.
- Information and warnings against the use of chloroquine in self-medication should be relayed to civil society, particularly by the institutions involved in the Risk Communication and Community Engagement, and by the actors involved in coronavirus sensitization.

⁸ Clinical trials on the efficacy and indications of chloroquine derivatives and other treatments for COVID-19 are being prepared in Africa.

⁹ Products of inferior quality or falsified. WHO, 31/01/18, <https://www.who.int/fr/news-room/fact-sheets/detail/substandard-and-falsified-medical-products>