

“Kit-covid” and the Popular Pharmacy Program in Brazil

O “kit-covid” e o Programa Farmácia Popular do Brasil

“Kit-covid” y el Programa de Farmacia Popular en Brasil

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SARS-CoV-2 infection is challenging countries and their health systems as the greatest public health emergency of international concern ever declared ¹. The heavy loss of life adds to the difficulties in managing the disease, still without an effective treatment available.

Since the beginning of the pandemic, many drugs already used in other diseases have been proposed as possible therapies for COVID-19, the so-called “repositioned” drugs, including chloroquine and its byproduct hydroxychloroquine, ivermectin, nitazoxanide, remdesivir, and azithromycin. However, nearly a year after the pandemic, there is no scientific evidence to back the use of these drugs in either the prevention or treatment of COVID-19 ^{2,3,4,5,6}.

Countries that initially saw a hope for cure in some of these drugs have now eliminated them from their protocols ⁷. In June 2020, the U.S. government suspended the emergency use authorization that had allowed chloroquine phosphate and hydroxychloroquine sulfate to be used for treating hospitalized patients with COVID-19, outside of clinical trials. The note issued by the Food and Drug Administration (FDA) said that the possible benefits attributed to chloroquine and hydroxychloroquine failed to compensate for the known risks of their use ⁸.

Even in this scenario, the position by the Brazilian government was to encourage the drugs’ use, lauding chloroquine and hydroxychloroquine as the “silver bullet” against COVID-19. Ministry of Health protocols still in force include these drugs as indications for the management of patients with mild, moderate, and severe symptoms and in the various phases of COVID-19’s clinical evolution ⁹.

Promotion of the use of chloroquine and hydroxychloroquine had various consequences. A study by the Federal Council of Pharmacy compared the sales of drugs and food supplements from January to March 2019 with those of 2020, showing a 68% increase in hydroxychloroquine sales in this period ¹⁰. As a result, there was a widespread shortage of this drug in pharmacies, harming patients that depended on it for other health conditions ¹¹.

In late May 2020, the Brazilian Federal Government announced that it had received a donation of two million doses of hydroxychloroquine from the United States ^{12,13}. The donation coincided with the abandonment of the drug’s use for treating COVID-19 in the United States. It was received by the Brazilian Army’s Chemical and Pharmaceutical Laboratory, adding to the amount already produced by that agency ¹⁴. This investment by the Brazilian government became the object of an investigation by the Federal Accounts Court ¹⁵ and was also questioned by the Chamber of Deputies, due to the

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amount spent on producing a drug with no scientific evidence in COVID-19, potentially violating the principle of efficiency in the public administration ¹⁶.

A report that analyzed misinformation patterns among countries during the pandemic showed through hypergeometric and qualitative analyses that Brazil leads the world in terms of drug-related misinformation. Brazil has continued to cite chloroquine and hydroxychloroquine as possible treatments throughout the pandemic, indicating that the scientific evidence is not being adequately captured by the country's public debate ¹⁷. This fact bears a strong relationship to the stance by government authorities and agencies, like the Ministry of Health itself, revealing misinformation as a tactic tied closely to the country's domestic political disputes.

In Brazil, the defense of "early treatment" based on chloroquine/hydroxychloroquine and other drugs has become a symbol of political bias in dealing with the epidemic. The alternative provided by the Brazilian government involves the supply of the so-called "kit-covid" in primary healthcare services and adopted by some Brazilian municipalities aligned with the Federal Government's premise ¹⁸. "Kit-covid" consists of a range of combinations that invariably include chloroquine/hydroxychloroquine, azithromycin, ivermectin, and other drugs, depending on the location. The Federal Government is now also signaling the availability of "kit-covid" in pharmacies included in agreements with the Popular Pharmacy Program of Brazil (PFPB) ¹⁹.

The PFPB was originally created to expand access to medicines in the country, targeting the most prevalent health conditions and the lower-income population. According to estimates, notwithstanding criticisms over budget fund transfers to the private sector (to the detriment of public investment), the Program succeeded in achieving its purpose according to the principles of the National Pharmaceutical Services Policy and the National Medicines Policy. The Program covered a large contingent of users and displayed great diffusion in the country's territory, through the government's own pharmacies and private pharmacies under the above-mentioned agreement ^{20,21}.

In the initial stage of the COVID-19 pandemic, the PFPB, in keeping with social distancing rules, organized to expand the amounts per patient of the Program's drugs that were authorized for dispensing, besides facilitating drug pickup by third parties (e.g., patients' family members), aimed at decreasing the circulation of persons, especially those belonging to risk groups ²². However, in December 2020, the PFPB appeared in the media again due to the possibility that it was dispensing "kit-covid" ¹⁹.

This is not the first time that the PFPB has played a role during health emergencies. Oseltamivir phosphate (Tamiflu), used in the treatment of H1N1 influenza, began to be dispensed by the PFPB in April 2010 ²³. The Institute of Drug Technology, Oswaldo Cruz Foundation (Farmanguinhos/Fiocruz) was responsible for the drug's production, based on the active pharmaceutical ingredient the Ministry of Health had in its inventory. All the Program's own units – some 530 at the time – supplied the drug, totaling more than two million treatments for patients with flu symptoms ²⁴. Oseltamivir was also supplied by private pharmacies under the agreement mentioned above, subsidized by the government. The Ministry of Health also recommended that state and municipal health secretariats should decentralize their reserves of the drug in order to facilitate immediate access ²⁵. The drug's indication, which had been approved in the country, determined that oseltamivir should only be used in patients with symptoms of severe respiratory illness and with onset of the symptoms in the previous 48 hours.

There was an initial moment of panic at the time, along with the product's mass advertising by industry. Thus, oseltamivir, which the scientific community later showed to have limited efficacy for treating H1N1, was turned into an object of desire for persons with any suspicious symptoms ²⁶, increasing the volume of prescriptions. The drug's dispensing throughout Brazil in the PFPB units, sponsored by the Federal Government, provided an opportunity for a discussion on the quality of this use and its appropriation by the Program for distribution of the drug's reserves.

With the COVID-19 pandemic, the use of the Popular Pharmacy has been proposed again to promote drug distribution. However, this time there is no evidence of efficacy and safety benefits for the disease in question, while there is clear evidence of potential risks. The use of chloroquine and its byproducts can aggravate the clinical status of patients with prior cardiac disease ²⁷. There are also other issues involving the prescription and dispensing of drugs for uses not approved by the regulatory agency, further expanding the health risks related to the pandemic.

Off-label use, by definition, is not authorized by the regulatory agency, but it is often absolutely necessary when the procedures for authorization fail to keep pace with the evidence of benefit, or when the lack of clinical trials in some patient groups prevents the indication that is deemed safe and potentially effective in those groups ²⁸.

Off-label use of chloroquine and hydroxychloroquine was admitted at the beginning of the pandemic, when there were still hypotheses concerning its efficacy in COVID-19. The position taken by the Federal Council of Medicine was that the prescribed use of these drugs in COVID-19 could result from agreement between physician and patient ²⁹. However, this position has been seriously shaken since the publication of consensus statements by specialists in Brasil ^{30,31,32,33} and studies pointing to the lack of clinical benefit from these drugs ^{3,4,5}, further increasing the questioning of persistent prescription and dispensing of these drugs for COVID-19.

Pharmaceutical Services, an integral and essential component of the Brazilian health system, is responsible for making medicines available to the population, prioritizing the principles of safety and efficacy and always with rational use as part of its activities. In a pandemic scenario, with uncertainties surrounding the use of medicines, pharmaceutical counseling is more necessary than ever. The PFPB today, unlike at the moment of the H1N1 epidemic, is represented exclusively by drug retail. In private pharmacies, dispensing can be done by individuals without technical training or the requirement to provide clarifications and counsel patients on the rational use of medicines ³⁴. Thus, what are the expected results of the unmonitored supply of drugs in the "kit-covid" by the PFPB?

The possibility of the Brazilian government using the PFPB as a repository and distributor of drugs that are devoid of evidence of efficacy and safety may first cause a waste of public funds for distribution of the drugs and for reimbursing the possible operational costs incurred by private pharmacies. Such funds could be redirected to effective activities in response to the pandemic. Second, the most worrisome point is the Brazilian population's exposure to inadmissible risks, potentially related to the nonrational use of these drugs.

We are thus witnessing the subversion of the PFPB's role by the Brazilian government, which appears to place its political agenda ahead of the population's health priorities and wellbeing.

Contributors

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