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LETTER TO THE EDITOR

# COVID-19 and (hydroxy)chloroquine–azithromycin combination: Should we take the risk for our patients?

The coronavirus disease 2019 (COVID-19) pandemic has caught the scientific community and hospitals off-guard, and the race is on as clinicians grapple with novel treatment strategies and constantly changing recommendations. Patients with mental health disorders are particularly vulnerable to the coronavirus outbreak for various reasons, including cognitive impairment, little awareness of risk, diminished efforts regarding personal protection and more barriers in accessing timely health services.[1]

Only few therapeutic options are being tested for COVID-19 with no evidence yet of effectiveness or safety. One of the options presently under evaluation is the combination of (hydroxy)chloroquine with azithromycin.[2] Despite the limited clinical data on the use of (hydroxy)chloroquine in COVID-19, this drug is attracting considerable attention from the media. Individuals and lobby groups have called for widespread prescription of these drugs. This attention is undermining the structured approach with which any drug should be evaluated.

In this rapidly evolving situation, we need to alert prescribers that the extensive use of (hydroxy)chloroquine–azithromycin would place patients, and particularly those with mental health conditions, at an important increased risk of QTc-prolonging and, consequently, *torsade de pointes* (TdP) and death. Only a few clinical studies have analysed the cardiovascular effects of these drugs,[3] although they are clearly acknowledged with a known risk for QTc-prolonging according to CredibleMeds (on the list 1 of drugs with a known risk for TdP). CredibleMeds provides the American official lists of drugs associated with a risk of QTc-prolongation, powered by international pharmacovigilance data.[4,5]

However, patients with mental health problems are already highly exposed to the risk of increased QT for a number of reasons. First, many psychoactive substances are associated with an increased risk of QTc-prolonging, such as antipsychotics (chlorpromazine, levomepromazine, haloperidol, pimozide, sulpiride, sultopride and thioridazine), antidepressants (citalopram and escitalopram), methadone, cocaine or donepezil. Second, our patients have often numerous comorbidities and underlying risk factors making cases of COVID-19 more challenging to treat. For instance, patients on antipsychotics are more likely to be men, at a higher risk of obesity, hypertension, metabolic syndrome and for more serious health outcomes. Moreover, their sedentary lifestyle and other risk factors, such as smoking and poor diet, put them at an elevated risk of respiratory failure and early death. Thus, a careful and thorough assessment of risk factors is crucial in these patients, including sex, age, smoking, acute electrolytes disturbances, metabolic syndrome, cardiac and pulmonary disease.

The COVID-19 pandemic calls for rapid testing of new treatment strategies. However, special care is needed when treating vulnerable populations. If the combination of (hydroxyl)chloroquine–azithromycin is recommended in the near future for COVID-19, we will need to establish precise and integrated health monitoring programme. We urge that the potential risks and benefits be carefully weighed up in each situation. Whatever the case, close cardiac monitoring is vital in people with mental health conditions treated with (hydroxyl)chloroquine–azithromycin. It is essential to bear in mind that exposure to this combination among patients with mental health disorders will increase their risk of QTc-prolonging and death.

## KEYWORDS

azithromycin, COVID-19, hydroxychloroquine, QT prolongation

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## COMPETING INTERESTS

There are no competing interests to declare.

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