Moroccan traditional treatment for fever and influenza, similar to symptoms of coronavirus COVID-19 disease: Mini Review

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ABSTRACT
Coronavirus disease is caused by severe acute respiratory syndrome (SARS) and is the causative agent of a life-threatening disease that is of great concern to global public health. Currently, according to the definition given by Morocco's public health of this pandemic: "The symptoms described mainly evoke an acute respiratory infection (fever, cough, shortness of breath), but also breathing difficulties and pulmonary complications of pneumonia type are also described, as well as more severe forms. Digestive and ocular symptoms (conjunctivitis) have also been observed in some confirmed cases ". Human-to-human transmission of coronavirus infection has led to the isolation of patients who then received various drug treatments (chloroquine, lopinavir / ritonavir, teicoplanin, azithromycin, ...) who are likely to be administered are therefore those who allow to fight against its symptoms, on the other hand, the effectiveness of these drugs remains a big problem considering the large number of deaths mentioned in the totality. In the meantime, it's the global race to find a specific drug, stop this pandemic, we will present a traditional Moroccan treatment for fever and flu, the major symptoms similar to those of coronavirus disease, this treatment based on two (2) medicinal plants used in the countryside for several centuries (Since 19th century). May this minireview be helpful for conquering COVID-19 in the near future.

1. Introduction:
In December 2019, a cluster of pneumonia cases, caused by a newly identified β-coronavirus, occurred in Wuhan, China. This coronavirus, was initially named as the 2019-novel coronavirus (2019-nCoV) on 12 January 2020 by World Health Organization (WHO). WHO officially named the disease as coronavirus disease 2019 (COVID-19) and Coronavirus Study Group (CSG) of the International Committee proposed to name the new coronavirus as SARS-CoV-2, both issued on 11 February 2020. The Chinese scientists rapidly isolated a SARS-CoV-2 from a patient within a short time on 7 January 2020 and came out to genome sequencing of the SARS-CoV-2. As of 1 April 2020, a total of million cases of COVID-19 have been confirmed in the world including more than 50 000 deaths. Studies estimated the basic reproduction number (R0) of SARS-CoV-2 to be around 2.2, or even more (range from 1.4 to 6.5), and familial clusters of pneumonia outbreaks add to evidence of the epidemic COVID-19 steadily growing by human-to-human transmission [1-5]. Clinical characteristics of those patients who got infected with COVID-19 have similar characteristics of influenza virus, from where common symptoms at onset of illness included fever, cough, shortness of breath, nasal tampon, pharyngalgia, myalgia, fatigue, headache, and expectoration. In brief, the coronavirus disease 2019 (COVID-19) virus is spreading rapidly, and scientists are endeavoring to discover drugs for its efficacious treatment in all parts of the world [6-8].
In the other hand, Morocco has historically one of countries an important role as the crossroads for desert caravans between South and North Africa, also Europe [9-10]. All regions of Morocco considered among in which phytotherapy knowledge is very developed, particularly medicinal and aromatic plants. Its climate is arid inducing various terrestrial and marine flora with concentrated active substances [11-12]. There are numerous medicinal plants described for treatment of many diseases and herbal medicine is an integral part of Moroccan culture. In modern society, herbal medicine based on this heritage continues to flourish and plays a pivotal and indispensable role in the current public healthcare, implying the somespecific researches have been performed in different areas in order to describe local pharmacopoeia [13-17]. In the meantime, it's the global race to find a specific drug, stop this pandemic, we will present a traditional Moroccan treatment for fever and flu, the major symptoms similar to those of coronavirus disease, this treatment based on two (2) medicinal plants (Chenopodium ambrosioides L. and Marrubium vulgare L.) used in the countryside for several centuries (Since 19th century). May this minireview be helpful for conquering COVID-19 in the near future.

2. Material and methods:
2.1 Medicinal plants used:
The two medicinal plants used in Morocco to treat similar symptoms of coronavirus, particularly fever and influenza, are: Chenopodium ambrosioides L. and Marrubium vulgare L. These two medicinal plants are abundant in all regions of morocco particularly: Rif, Middle Atlas, Atlas Kabir of Morocco.

2.2. Procedures:
The medicinal use of the plant Chenopodium ambrosioides L. is used to treat the heat of the head with other plants (Lemon, garlic and onion). this plant used in the form of 2 methods: the first method is to crush the plant in hot water and place the assembly on the patient's head and dressed with it, and the second method is a hot drink (extraction by fusion plant) which is given to the patient three times a day. In the other hand, the medicinal use of the plant Marrubium vulgare L. is used to treat influenza on the nose scale, the method is to prepare a solution for nasal instillation contains a hot aqueous, ethanolic extract or the mixture of both. the dose used is 3 drops in each nostril, 2 to 5 times a day.

3. Discussion:
Chenopodium ambrosioides L. and Marrubium vulgare L. are widely used in traditional medicine for the treatment of a variety of diseases, including vasorelaxant and antihypertensive activities, antimicrobial, anti-inflammatory, antioxidant, analgesic, antispasmodic, hypoglycaemic and hypolipidaemic effects and respiratory disorders. The two medicinal plants are a popular remedy for cough as well as for digestive disorders. the major constituents of the essential oils of these two medicinal plants are listed in Tables 1 and 2. these molecules present a thetapeutic database in several medical treatments, particularly fever and rum.

![Figure 1. Major constituents essential oil of Chenopodium ambrosioides L.](image1)

![Figure 2. Major constituents essential oil of Marrubium vulgare L.](image2)
4. Conclusion:
This mini-review presents the phytotherapeutic use of two medicinal plants according to the Moroccan tradition to treat fever and influenza symptoms that are similar to coronavirus symptoms. All the methods mentioned are only proposals to conquer COVID-19 in the near future.

References:

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