



COMMENTARY

# Living with COVID-19-triggered pseudoscience and conspiracies

Takele T. Desta<sup>1</sup> · Tewodros Mulugeta<sup>1</sup>

Received: 26 May 2020 / Revised: 11 June 2020 / Accepted: 15 June 2020 / Published online: 29 June 2020  
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## Abstract

**Objective** This piece of work proposes a way for the wise management of pseudoscience and conspiracy theories.

**Methods** This work encompassed a review of relevant literature and synthesized the critical thoughts on the proper management of pseudoscience and conspiracy theories.

**Result** The coronavirus disease 2019 (COVID-19) overwhelmingly challenges the competency of the digital generation. Consequently, public had been left stranded, helpless and anxious, especially during the peak season of the pandemic. However, this crisis creates a conducive environment for pseudoscience and conspiracy theories to proliferate. Pseudoscience and conspiracy theories negatively impacted the effort made to contain COVID-19.

**Conclusion** This piece of work, however, argues that although pseudoscience and conspiracy theories are real threats to conventional science, effort needs to be made to develop a sort of database to archive and curate them for downstream use.

**Keywords** Pseudoscience and conspiracy theories database · Curate · Downstream uses The aggressive severe acute respiratory syndrome—coronavirus 2 (SARS-CoV-2) and the associated—coronavirus disease 2019 (COVID-19) is undoubtedly extraordinary challenge mankind has ever confronted since World War II. Currently, COVID-19 has been confirmed in more than 200 countries and has caused millions of illnesses and hundreds of thousands of deaths in the detected cases (Worldometer 2020), which firmly come upon competencies of the modern-day the-state-of- art knowledge and has imposed a widespread shock and plunge in the global economy. High fatality and infectivity of the circulating COVID-19 and the widespread use of mainstream and social media have created a favourable environment for pseudoscience and conspiracy theories to ride at liberty the global air. Consequently, they have effortlessly and repeatedly rapped thoughts of billions of people who have been anxious and wearing of when and how the pandemic could last.

Hot and debatable issues like the ones triggered by the novel COVID-19 provide a fertile ground for pseudoscience and conspiracy theories to proliferate (Marchal et al. 2020; Institute for Strategic Dialogue 2020). These unfounded speculations mis(dis)inform the public—which in turn jeopardizes the effort made to manage the COVID-19 crisis. Irrefutably, our understanding of the aetiology of COVID-19 is evolving and developing rapidly—making the media swamp with a growing surge of mis(dis)information (Earnshaw and Katz 2020). Nonetheless, with the mere absence of curative and preventive treatments, containing the pandemic primarily relies upon social and behavioural changes (Eaton and Kalichman 2020)—change

in social norms, however, could be easily ambushed by circulating infectious conspiracies.

The forge of pseudoscience and conspiracy theories on COVID-19 treatments is pronounced by traditional healers and cocky politicians who are themselves not well-aware of the condition the public is living in and the nature of the virus. For example, to our surprise, Madagascar has announced with diligence the invention of home-brewed remedy to COVID-19 amidst a surge of anxiety although the protocols adopted and the compounds used to produce the thought to be medicine have been remained vague. Traditional healers and even the public prescribe traditional medicines and ritualize to evade COVID-19 or widely prophesize on the fate of the pandemic. Plants like garlic, ginger, hot pepper, lemon have been widely recommended to reduce the impact of the pandemic. Though these plants may possess some anti-viral compounds and they are normally included in our daily meals, their efficacy against the COVID-19 would be the subject of further studies. It has also been noted that high profile politicians, barely

✉ Takele T. Desta  
takele\_taye@yahoo.com

<sup>1</sup> Department of Biology, College of Natural and Computational Science, Kotebe Metropolitan University, Addis Ababa, Ethiopia

knowing the health profession, have tried to prescribe treatments to ease the suffering of COVID-19 patients. There is politically motivated high echoing rumour whether the virus was naturally evolved, escaped from a lab, or artificially created to serve as a bioweapon (Larson 2020).

Intentionally, misinformation could also be fabricated for the conspiracist advantage. However, it is natural to widely speculate when peoples are anxious and feeling helpless amidst the crisis, and when technical capacities and resources are limited to fight with the pandemic. For example, in the less developed countries, peoples have been busy while praying on and/or swearing of the pandemic. In this regard, it is important to understand the local context before blaming at circulating unfounded thoughts. Moreover, some of the pseudoscience and conspiracy theories could create unanticipated opportunities if they are thoroughly ratified and classified into reliable, questionable, misleading, conspiratorial, or inaccurate information. Interestingly, efforts have been made to quantify the spread and infectivity of unfounded speculations (Gallotti et al. 2020). We recommend creating a worldwide database to archive all sorts of speculations and to develop a pipeline to curate this information, and to utilize those validated thoughts and practices in downstream mitigation strategies. As it was recommended by Larson (Larson 2020) sooner than blocking the speculations, it is advisable to create behavioural change to confer adaptive immunity against devastative and false information to intensify the battle against pseudoscience and conspiracy theories.

## Compliance with ethical standards

**Conflict of interest** The authors declare that they do not have a conflict of interest.

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