Internews

How to report on traditional medicines and COVID-19

Scientists around the world are trying to develop what is often referred to as a "science-based medicine" to stop the spread of COVID-19. The treatment of COVID-19 is not only a healthcare priority, it is also big business and when money is involved so too are lots of rumours and misinformation about so-called cures.

Since many people rely on what is often referred to as "traditional medicine" for their healthcare needs, rumours and misinformation about how a certain plant can prevent or even cure COVID-19 have also spread like the virus. People may be convinced to waste their money on unproven treatments, may unknowingly take a dangerous herbal mixture, or may risk infecting others in the community by not following preventative measures like mask wearing.

So how can traditional medicine be included in science-based medicine efforts to end this pandemic? Some traditional medicines have already been tested by science-based medicine and proven to reduce symptoms of other diseases. The next step is for some of these proven traditional medicines to undergo science-based medicine testing to see if they can be part of the solution.

It is the role of the journalist to keep the public informed about each step of this complicated process of science-based medicine testing traditional medicine to fight COVID-19.

What do you need to know?

Question 1

Which traditional medicines are being tested?

In short, that information is not available as of October 2020. The WHO has announced that they are starting with traditional medicines developed in Madagascar and there is interest in looking at other medicines from other African countries as well. With the long history of traditional remedies from plants and animals across Africa, science-based medicine is using international testing standards to confirm if any are effective in the fight against COVID-19.

The WHO wants to make sure the testing process is fully completed before they reveal which treatments have proven to be effective and which have not. This is to prevent people from self-medicating with a treatment that may be harmful or ineffective and to prevent people from profiting in selling these unproven treatments. In June 2020, the WHO created the Regional Expert Advisory Committee on Traditional Medicine for COVID-19 tasked with supporting countries to enhance research and development of traditional medicine-based therapies against the virus.

The goal of this group was to provide guidance on how to come up with the necessary scientific evidence on the quality, safety, and efficacy of herbal medicines for COVID-19.

The committee is made up of WHO members from research institutions, national regulatory authorities, traditional medicine programmes, public health departments, academia, medical and pharmacy professions, and civil society organizations.

Treatments that are being researched in clinical trials are known as candidates as they have to pass a number of tests to check if they work well and are safe for use in humans. Only when the candidate has passed these tests can it be called a medicine.

There are many traditional medicines which have already been approved as being safe for treatment in other illnesses according to existing reliable scientific data. Researchers are re-purposing these already-approved traditional medicines into candidates for testing on COVID-19. Until these candidates pass all the phases of the clinical trial testing, they cannot be called COVID-19 medicines.

Question 2

What are the testing phases?

Just like any candidate that is tested to determine if it is effective in the treatment of COVID-19, the clinical trials of these traditional medicine candidates will be done in phases. Before new drugs or treatments are tested on humans, they are usually tested in pre-clinical trials first to make sure they are safe. A preclinical trial will usually test using computer models and skin cells in a laboratory, and then test on animals. However, because these treatments have already been shown to be safe for human use, these traditional medicine candidates were able to move directly to clinical trials where their use is tested directly on humans.

Phase 1 trials test the candidate on a small number of volunteers - usually less than 100 people - to check if it is safe and if it has any effect. Often researchers also attempt to assess the dosage (how much) and the period of treatment (how long). Those candidates that seem safe and show signs of effectiveness are approved for the next stage of clinical evaluation.

Phase 2 trials are larger and usually involve hundreds of human volunteers. Researchers continue to assess safety, dosage, and efficacy. They also study how the candidate behaves on volunteers from different age groups and stages of illness. Phase 2 trials are crucial because they are generally extremely efficient in identifying ineffective candidates.

In mid-October 2020, the African traditional medicine candidates were in Phase 1 and Phase 2 trials. The important news that came out in September was that a panel of experts set up by the WHO, the Africa Centre for Disease Control and Prevention, and the African Union Commission for Social Affairs agreed on the protocols for Phase 3 testing of traditional medicines. This means that any candidate that passes the Phase 2 trials can now move on to Phase 3 testing.

Phase 3 trials, in general, usually include many hundreds and sometimes thousands of human volunteers in various locations. The participants are randomly assigned to receive either the candidate or a comparable treatment. To avoid bias, neither the volunteers nor the researchers know which participants get the candidate and which ones do not. Such trials are called "double blinded." In a Phase 3 trial, researchers assess how well the candidate works compared to other treatments that are now being used.

The candidate will need to:

- Perform better for all patients (reduce symptoms more efficiently)
- Perform better for some patients (patients that are not improving on existing treatments)
- Have fewer adverse side effects than the treatments already being used.

Question 3

What about adverse side effects?

In medicine, a side effect is an effect, whether good or bad, that is secondary to the one intended. The term is usually used to describe negative, effects or reactions. For example, if someone develops an itchy rash after taking a medication for a headache, that would be called a 'side effect'.

Most kinds of treatment, including traditional medicines, have some kind of side effects even those that have been in use for centuries. Adverse side effects can be very mild, for example a small headache, or very serious. During pre-clinical trials on animals, any candidate that causes severe adverse side effects is rejected. In clinical trials on humans, the adverse side effects are categorized as minimal to mild.

Researchers will check to see if the benefits of the new treatment outweigh the risks of any adverse side effects. The traditional medicines selected for the trials are already known to be largely safe for humans because they have been approved to treat other medical conditions. Every candidate needs to pass each phase of testing before it can be approved and then sold to treat COVID-19.

Question 4

What happens next?

If a traditional remedy passes Phase 3 of the clinical trials, then it will be approved for use in the treatment of COVID-19. But that is still the beginning of the story. Any traditional remedies that are judged effective could be fast-tracked for large-scale manufacturing.

Due to the many financial, logistical, and legal issues that will be involved should a traditional medicine be approved in the treatment of COVID-19, the details and progress of the clinical trials of traditional medicines have not been released to the public. That means there are a lot of important questions to be asked by journalists covering this ongoing story.

How can I report on this issue?

Do not let your opinion affect your reporting

As a journalist you may have your own opinion about whether traditional medicine should or should not be part of the efforts to stop the spread of COVID-19.

According to the WHO, as of 2018, 109 countries reported having a legal or regulatory framework for traditional medicines. That means a formal system for testing and approval of traditional medicines. The repository of data about the benefits of various systems of traditional medicine used all over the world is growing annually and there are many examples of where traditional medicine has not only been proven effective, but has also enhanced science-based medicine.

However, for those who might glorify the potential of traditional medicine, it would be irresponsible for journalists to say that herbal medicines have no side effects. Be sure to include facts about doses and regimens, about the diets that must accompany certain herbal treatments for them to work best, and about how unsubstantiated benefits based on hearsay should not be trusted.

In general, avoid sweeping statements about the benefits or the harms of traditional medicines and always ensure your reporting is based on fact, rather than opinion.

Remind audiences about preventive measures they should practice

While reporting on trials of traditional medicine for COVID-19, always include practical advice on how your audience can prevent the spread of COVID-19. You may feel these public health messages may have been repeated over and over again, but repetition is important to remind your audience that even though a treatment may be approved soon, there are important steps we still need to take to keep safe. These simple messages can save lives:

- Keep a physical distance of at least 6 to 10 feet away from others and avoid crowded places
- Wear a cloth face mask
- Wash hands regularly, particularly after touching potentially contaminated surfaces
- Understand the symptoms: fever, dry cough, tiredness, difficulty breathing

It is important to ensure this advice fits your local context. We call this a “reality check”. For example, face masks are an important tool to prevent the spread of COVID-19, but not everyone lives in a place where face masks are sold or affordable. So there is little point in telling your audience to do something that is not possible in their context. If face masks are not sold, how can someone make a simple face mask at home? If soap is not available for hand washing, what are the alternatives? This reality check ensures that the advice you provide is the most helpful for your audience.

Question everything

Any announcement about a new COVID-19 medicine – whether it involves traditional medicine or claims to be a vaccine - deserves the utmost scrutiny from journalists. It is essential to confirm all the details about any "breakthrough".

Since a legitimate COVID-19 medicine has to pass through clinical trials, it is important to ask as many specific questions as possible about the process. For example, some medication may work better on patients with a mild illness, but not a serious illness. Finding out details like this is crucial to proper health reporting.

- How many people were enrolled in the trials?
- How many men and how many women?
- What were the ages?
- Where did they live?
- What stage of illness did they have?

Regarding the outcomes of a trial, researchers might be motivated to portray their trial results in the most optimistic way possible and assert that the trial had a positive outcome. That is great news, but journalists should look at the raw data to confirm just how positive the outcome really is.

- How did the candidate benefit people?
- How was the outcome measured?
- How did the candidate compare with other treatments?
- What was the range of uncertainty in the results?

If terms like "range of uncertainty" are not clear to you or if the scientific jargon is difficult to understand, then ask the researchers to explain the findings in simple language. In order for you to explain clinical testing in a way that your audience will understand it, you must have a thorough comprehension of what the terms mean. The more a health journalist is familiar with scientific terms, the better the reporting. (Range of uncertainty is the range of possible values within which the true value of the measurement lies or, in other words, defining which results are acceptable for the purpose of the test and are consistent with other research).

If you do not feel you have the necessary scientific background to verify the reliability of the source of your information, then you should consult another medical scientist who was not connected to the study for their opinion.

Ask more questions

If an official announcement is made from a reliable source like the WHO, the Africa Centre for Disease Control and Prevention, or the African Union Commission for Social Affairs that the results of the Phase 3 trials show that a certain traditional medicine can be used to treat people with COVID-19, there are still plenty of questions to be asked. Think about all the health, financial, legal, and cultural implications that an approved COVID-19 traditional medicine would have on not just Africa, but the whole world.

Here are just a few questions to help you get started:

- Which organization will provide information about the progress of the clinical trials?
- When will the results of the clinical trial be made public?
- What traditional medicines are being tested in Phase 1, Phase 2, or Phase 3?
- Why were they selected for the clinical trials?
- Who will receive the traditional medicine once it is approved?
- Which people would this particular traditional medicine help the most?
- What part of Africa are these traditional medicines from?
- What will the new COVID-19 medicine cost to be produced?
- Who will pay for the production?
- What compensation will the traditional healers receive?
- Who would have royalties and patents on the traditional medicine?
- Which company will manufacture the traditional medicine once it is approved?
- Which country or countries will be involved in the production?
- How long after approval will it be available for distribution?

Words to avoid when reporting on medicines in Phase 3 clinical trials

Some of these words can make for eye-catching but misleading headlines:

“Cure” is a word that can be understood by various people in various ways. Journalists need to be specific if it means the absence of infection or the absence of disease. When pathogens or germs (viruses, bacteria, fungi, or parasites) enter your body and begin to multiply, you have an infection. When the multiplication is halted and blood tests show negative, the term “cured of the infection” can be used. Infection with a pathogen (or germ) causes disease (e.g. the cells in your body are damaged as a result of the infection and signs and symptoms of an illness appear). When there are no more symptoms, the term “cured of the disease” can be used. Science-based medicine usually says someone is cured of an infection when the pathogen (germ) has been successfully eradicated from the body.

- Does **“cure”** mean a disease will not recur in the person?
- Does it mean cured for a short or for a long period of time?
- Does a **“cure”** mean the same to a traditional healer as it does to science-based medicine?
- Do patients and doctors share the same understanding of what **“cure”** means?

Make sure to discuss with traditional healers and researchers exactly what is meant by terms such as **“cure”** so that everyone is clear about the effects of the medicine on humans. This is important to avoid raising false hope in your audience.

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"Miracle" refers to a religious or supernatural level. Medicine is a science that has very strict and precise testing routines to confirm its safety and efficacy.

Good doctors are not **"miracle workers"** who dispense **"miracle drugs"** that are **"miracle cures"**. They are well-trained hard-working professionals who try to increase the chances of successful health outcomes for their patients according to the best science available. Patients need to follow health guidance for better health outcomes. A successful outcome is the result of the patient and the doctor (and often the patient's family and the doctor's team) working together to achieve good health outcomes. This process does not involve **"miracles"**.

"Breakthrough", **"promising development"** and **"hope"** are the over-used terms that journalists often rely on even when the positive effect of a medicine is only has a small effect on a disease. **"Promising"** and **"hope"** are terms that do not give the audience any useful information about whether or not the medicine is useful. It is better and more accurate to say that the medicine is being tested in a trial rather than to play a guessing game about what the outcome of the trial may be.

To praise a medicine using a term such as **"breakthrough"**, we would need to follow its use and effects on populations for some years to assess if it has beneficial large-scale and long term impact on the health of people.

Be cautious when researchers tell you that they have made a medical **"breakthrough"**. Ask for details of why they think it is a real **"breakthrough"**. A **"breakthrough"** could refer to a small step in the research process that has been successful, however the candidate may be still a long way from being approved for use. What do other researchers say about this so-called **"breakthrough"**?

Cultivate reliable authentic sources

Develop a contact list of physicians, biologists, pharmacists, traditional healers, researchers, civil society groups, and UN agencies working in the area. The more consistently you follow the story, the better skilled you will become in asking questions and developing high quality commentary. Do not be afraid to call on these contacts to gather background information or to ask questions “off the record” to help you better understand the issues you are reporting on.

Follow the money

Countries around the world are involved in efforts to validate and standardize many of the traditional medicines through universally agreed upon research protocols. There are many challenges in this process. For example, diseases being understood differently between science-based science-based medicine and traditional systems of medicine.

Traditional or complementary medicine, as it is often called, is increasingly being embraced by governments partly for the potential health benefits but also for the potential for commercial exploitation. Journalists should be diligent in uncovering the influence of market forces in the development of traditional medicines. That includes holding researchers involved in the scientific testing of traditional medicines held accountable for the process.

Put a human face on the story when possible

Clinical trials, in the end, are more about people and less about the candidate medicine. Stories that describe the people who are the traditional healers, researchers, volunteers, funders, policymakers, UN agencies, manufacturers, distributors, and anyone else directly involved in the process can help audiences understand the various roles in the search for a treatment for COVDI 19.

Avoid scaring people out of ignorance

Reporting on a potentially fatal illness, particularly one that is transmitted through the air such as the COVID-19 virus, can easily lead reporters into scaremongering with doom-and-gloom stories. If researchers find that none of the traditional medicine candidates are helpful to people with COVID-19, then journalists should think carefully before writing gloomy headlines. The mental health toll of the pandemic is serious. It is important that your audience does not lose hope. Put the research of traditional medicines into the larger context of all the vaccine trials that are currently underway and always include actionable information in your reporting which highlights what the community can do to protect themselves while we wait for a vaccine to be released.

Do no harm

As journalists, you know that information is power. Just as information can save lives, so too can bad reporting with faulty information harm lives. Do no harm.

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