

Rwanda's Community Health Workers: A Model for Marburg Virus Disease Response



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Introduction

Three years ago, I had pleasure of interviewing Olive Tengera, Head of the Midwifery Department at the University of Rwanda, recipient of the American College of Nurse Midwives (ACNM) Pederson Award. This year, I attended the International Confederation of Midwives (ICM) Regional African and Eastern Mediterranean conference in Kigali-Rwanda.

Rwanda's recent outbreak of Marburg Viral Disease (MVD) has highlighted the country's resilience and the crucial role of community health workers in mitigating such crisis. Despite the severity of the MVD, Rwanda has put in place responses and implementation of effective containment measures that have helped to limit the spread of MVD.

Rwanda confirmed their first case of MVD on September 27, 2024. As of December 19, 2024, 66 illnesses and 15 deaths have occurred, mainly health care

workers in ICU settings. WHO reported that all confirmed cases are isolated and there was no evidence of community transmission (WHO, 2024, p.1).

What is MVD?

Marburg Virus Disease is a rare and deadly disease that has, at times, caused outbreaks in several African countries. The disease is named after the city in Germany where it was first reported in 1967. Marburg is spread by contact with blood or body fluids of a person infected with or who has died from Marburg. It is also spread by contact with contaminated objects (such as clothing, bedding, needles, and medical equipment) or by contact with animals, such as fruit bats and non-human primates, which are infected with Marburg virus. Marburg is a viral hemorrhagic fever. (CDC, 2024, p.1)

What are the signs and symptoms of MVD?

1. High body temperature
2. Diarrhea
3. Vomiting, abdominal and throat pain
4. Redness of eyes
5. Muscle aches and joint pain
6. Skin rashes often on torso
7. Bleeding from nose, mouth eyes, or vagina

How is MVD transmitted?

People with Marburg usually start getting sick 2-21 days after they were infected with the virus. A person becomes infected with Marburg when they encounter the blood and other bodily fluids of another person. Those most at risk for Marburg

include: People in contact with Egyptian rousette bats or their excretions. People caring for individuals sick with the disease without proper protective equipment. People in contact with infected non-human primate. It is not spread by airborne transmission (CDC, 2024, p.1).

What is the Treatment for MVD?

There are no approved vaccines or treatments for MVD. According to the midwives in Rwanda, the government has instituted strict policies to mitigate this disease:

1. Cleanliness of the place where they live and washing hands properly is an important method in the prevention and control of MVD.
2. Understanding MVD (knowing its symptoms, how it is transmitted)
3. Prompt quarantine if a person is suspected of being infected with Marburg.
4. Promptly notify the health care provider or other authorities in management. Security agencies are around whenever someone shows up with the MVD symptoms mentioned above.
5. Avoid touching a person with fever and suspected MVD.
6. Avoid making unnecessary trips in the areas of the country where there is a plague of MVD.
7. Avoid handling the dead body of a person who died of Marburg disease.
8. Avoid touching wild animals.

Community Health Workers (CHW) in Rwanda and MVD

The community health worker in Rwanda



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plays a major role in health education, identification of affected individuals and reducing the transmission of this disease.

The community health worker (CHW) has a chain of command to get information to the upper levels of the healthcare system: Community Health Workers (in the village) → CHWs supervisor at Health center(sector) → Head of health center(-sector) → General director of District Hospital (District).

What is recommended to the CHW to control, avoid, and prevent MVD?

While no MVD has been reported in the village:

- Provide the public with reliable and timely advice and information on MVD.
- Provide clarification clears up confusion about rumors and misinformation on MVD. Campaign on MVD in the community; explain what the disease is, how it is transmitted and how to prevent it, and encourage community to provide information to a health counselor when available.
- Monitor and report on MVD outbreaks. The alarm of MVD is characterized by the following:
 - Anyone with an illness that begins with a high fever does not decrease despite the patient taking antipyretics, AND one of the symptoms of MVD, including the following: confusion, headache and fatigue severe, sore throat, chest pain, nausea, vomiting, stomach or chest pain, nausea, vomiting, physical dissolution, and bleeding in various places such as in mouth, nose, nosebleeds or coughing up blood.
 - Anyone who is sick and looks very sick
 - Anyone with signs of bleeding
 - Unexplained and sudden death
- Sensitize the people in promoting the culture of hygiene and cleanliness in the area, where they live, where they work, and on their bodies and other good hygiene habits.

- Provide information about families and potential people have been at risk of Marburg infection but have not yet shown symptoms surveillance agents for suspected Marburg disease.

What should a CHW do if someone has suspected MVD symptoms?

- Separate him/her from other people without touching him/her and stay there
- Notify the Health Counsellor at the Health Centre

How can a CHW prevent himself/herself from being infected with MVD?

It is recommended to follow the following tips:

- Avoid contact with anyone suspected of having MVD or killed by MVD.
- Washing hands often with soap.
- Keeping a distance of at least 2 meters between him and the patient.
- When he did something or something happened that made it possible for him to be infected with MVD, immediate hand washing and report it to the superior for follow-up by those in charge.

Conclusion

As stated by Rwandan midwives: Rwanda's ongoing battle against MVD supported by the tireless efforts of community health workers stands as a beacon of hope and a model for other nations. The country's health system continues to evolve, demonstrating that with determination and collaboration, even the most daunting health challenges can be overcome. ■

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