

# Corona Virus Pandemic: A Case of Prevention in Rural Malawi

By Fyson Kasenga

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## Abstract

Covid-19 has brought untold harm and human suffering worldwide. Deaths and economic recessions continue to increase in many countries of the world particularly in European countries. In the recent past, Africa presented itself as less affected than the rest of the world but now the situation is changing dramatically.

An intervention study was done in two districts of rural Malawi namely Thyolo and Mulanje to reduce infection rate of covid-19. Ten villages comprising of 852 households were included in the study. Personal protective equipment Resources (PPEs) coupled with preventive messages with an emphasis on hand washing, distancing, wearing of face masks and contact tracing were mainly the content of the messages. Washing buckets with taps, basins and soaps were provided in groups.

The villages were followed up six months later and established that diarrhoea diseases reduced among the under-fives and in the adult population. The findings of the study concluded that as communities adhered to the prevention measures of covid-19, other diseases related to poor sanitation reduced in the studied population.

Based on the study findings, it is recommended to increase the study population and resources for the prevention of covid-19 disease to yield positive domain effect. Conducting a country wide similar study would be beneficial and need to be considered which will prevent the general population from covid-19 and other water borne diseases.

**Key words:** Covid-19; sanitation; rural Malawi; intervention; prevention

## Introduction

The catastrophic and miserable situation that Covid-19 pandemic brought to human race worldwide cannot be underestimated. Thousands of lives have been lost and untold harm has been caused to many families. It was therefore in 2019, when Covid-19 disease was discovered in Wuhan, China. Following its epidemiological trend, the disease has spread so fast in many parts of the world with European countries being the worst hit of all the countries of the world. Based on this, Covid-19 was declared a humanitarian crisis globally (Coppola, 2011). Consequently, World Health Organization (WHO) declared Covid-19 disease pandemic in March 2020 (WHO, 2020).

It was therefore, in January 2020 soon after the advent of Covid-19 that Malawi got affected. Considering how information in the media surfaced with serious outcomes that included deaths and economic meltdown, Malawi Government through the Ministry of Health took an initiative to employ public health measures to curtail the pandemic. The Government's initiatives trickled down to public and private health facilities including civil agencies, academic and non-academic institutions.

Malawi has not been spared from Covid-19, a flu like disease which is very infectious and has no specific treatment to date. In April, 2020, Malawi registered the first case of Covid-19 (Fiko, 2020). In spite of preventive measures adopted and implemented by many countries of the world including Malawi, Covid-19 related cases and deaths continue to increase nationally and globally. This is sad and very devastating scenario as over 20,000,000 cases with 700,000 deaths have been recorded worldwide. Africa alone, has registered over 1,000,000 cases and 24,000 deaths. Malawi has currently recorded over 4,000 with 150 deaths (Worldometer, 2020). This has affected the economic situation of the world and Malawi is not an exception.

Like other countries, Malawi implemented restrictions regarding rules to stop or slow down the spread of covid-19 disease and this was in August 2020 (Chiuta, 2020) and the outcome of the implementation strategies are yet to be realised. However, by comparison other countries particularly European ones are worst hit by covid-19 than Malawi and it is not known for how long the situation will remain as it is. The paper is therefore

showing multiple benefits of addressing covid-19 so as to diversify the resource base to curtail the effects of this public health disease.

## Methods

### Study area

Mulanje and Thyolo are among the Malawi districts where Tea is grown, communities in these areas are rural and do subsistent farming. Communicable diseases such as Malaria, worm infestations, HIV and AIDS, Tuberculosis and diarrhoea diseases are common. Long before the advent of Covid-19 pandemic, Malamulo Mission in Makwasa, Thyolo and Sungani Medical Clinic in Chonde, Mulanje have been hubs of Tisamalane Project where sanitary pads are made and distributed to girls freely to keep them in schools. In addition, clothes, furniture, consumables and hospital equipment and laptop computers have been distributed to schools, health facilities and deserved communities from these hubs. Tisamalane Project has been able to impact positively on the needy communities with support from National Police Aid Convoys (NPAC), UK Charity based non-governmental organisation (NGO).

It was in January 2020 when Covid-19 pandemic was declared world crisis and let alone Malawi when Dr. Heather Roberts through NPAC sourced funding to do some interventions on covid-19 in communities around Sungani Medical Clinic and Malamulo Mission.

Administratively, Tisamalane Project is managed by the Country Director, Administrator, site Coordinators and volunteers. The headquarters office is based at Sungani Medical Clinic in Mulanje.

### Sampling of informants

Communities in 10 villages around Sungani Medical Clinic in Mulanje and Malamulo Mission in Thyolo were targeted. Of the 10 villages, 5 were from Mulanje and 5 were from Thyolo. Men and women participated in the study. Village chiefs and village health committees in both districts were engaged. Random sampling technique was used to select the study participants.

### Data collection

This was done from March – June 2020. Meetings with the chiefs, community educators, and village health committee members. A total of 852 households accessed personal preventive equipment Resources (PPEs) in the form of soap, basins, tap buckets and educational messages that consisted of hand washing, distancing from each other 1 meter or more, avoiding overcrowding, face masks, use of hand sanitizers and reporting strangers and anyone with strange disease to the DHOs for intervention.

### Data analysis

Data analysis was done manually based on the number of households in the villages of the two districts visited. Qualitative and quantitative methods were used in the analysis process. The hand written notes were managed manually. After thorough reading of all the notes, the content was systematically analyzed for identification of key factors. Responses from the chiefs, District Health Office Representatives and participants from the communities were grouped according to the objectives of the study. Data were compared to enrich the areas studied and be able to explore factors reducing the spread of covid -19 among the rural communities.

### Methodological consideration

The author's prolonged engagement in Tisamalane Project, experiences of working with the communities and data collection activities were crucial for the trustworthiness of the study. To encourage openness among the participants involved other stakeholders who explained the issue of confidentiality and also asked the participants to agree not to share

information from the discussion outside the group. Since the author is a Country Director as well as a representative of the Tisamalane Management Team (TMT) the research team made extra efforts to describe his role in the research process.

In the research team, we held regular peer debriefing and analysis sessions contributing with different competences, beneficial for interpreting the results.

### Ethical clearance

Consent was obtained from the Chiefs, DHOs and individuals in the households. Further, consent was also obtained from the study participants. The respondents were given their oral informed consent. All the study participants were assured that information given would be treated with strict confidentiality.

### Results

A total of 852 participants were included in the study, of these, 180 (21.1%) were males and 320 (37.6%) females. On average, each household had 5 children and 2 or more dependents.

Personal protective equipment included soaps, basins, tap buckets. These were distributed to groups of households. A total of 10 households were sharing one tap bucket, soap and a basin. The groups were to be responsible for replacing the soap once it got finished. In addition, each group of 10 households, one person was appointed to ensure that resources given were put to the right use.

Covid 19 preventive messages were presented in the form of training to community educators, village health committee members, traditional leaders of the 10 villages selected in two districts. The training sessions were done in two sections; one in Mulanje district and the other in Thyolo district.

The content of the training included frequent hand washing with soap and water, use of hand sanitizers, avoiding overcrowded places, social distancing or limiting closeness at least one meter or more from each other. Reporting strangers to the DHO for testing and consequently quarantining, use of face masks and coughing using the elbows, avoiding hand shake.

Facilitators of the training were officials from the district health offices of the two districts – Mulanje and Thyolo. These were experienced district health coordinators used to work with communities within the districts. Other facilitators came from the Malawi Adventist University, Malamulo College of Health Sciences Campus. The administrator and the director were co-facilitators. During the training, practical sessions were done where participants took turns in hand washing after the facilitators had demonstrated the best way to do it.

Twenty community health educators were trained, of these ten were from each district namely Mulanje and Thyolo. The community educators visited all the selected households in the districts. These community educators were disseminating messages regarding covid-19 prevention. They also demonstrated how best to do the hand washing and this was done in the presence of all individuals in the households.

Periodically, that is, monthly supervision of the households was done to determine how individuals were utilizing covid-19 prevention measures. Buckets and basins were still placed in strategic places and being utilized after 6 months down the line.

Random selection of 50 households indicated that the covid-19 preventive measures were useful in that people were washing their hands frequently than before. They even said that they looked smarter than before.

The change of lifestyle in the villages in that children, women, men and the elderly communities took hand washing as a norm.

Incidences of diarrhoeal diseases reduced, community togetherness increased, relationship between the communities and the District Health Offices and the opinion leaders increased.

## Discussion

Covid-19 intervention study has come up with the implications as stated below;

The study has revealed that the advent of covid-19 has changed the norms and beliefs of the society in that African culture particularly Malawi Culture has a strong sense of closeness amongst people. People like to stay together in happiness or in sorrows such as sickness or funerals. Therefore, telling people not to do hand shaking during greetings or charting appears to be a taboo. However, associating the negative gravity effect covid-19 has, a sign of sigh had been lingering each time there was funeral or sickness as a result of covid-19 when people particularly relatives were not able to touch their relatives when infected with this disease. Therefore, Covid-19 was likened to leprosy where the lepers lived in isolation as before (Shu Kurizky et al, 2020). In that study, it was established that the diseases have something in common as both are very contagious and cause significant public health problem.

Men, women and children learned a different culture altogether so covid-19 preventive measures were acculturated as in shops, banks, homes and everywhere putting on masks, hand washing and social distancing were eventually and easily accepted the study has established. This has implications in that when parents grasp a particular behaviour be it positive or negative, it becomes easier for the children to follow suit as before (Chen and Zhou, 2019). In that study, it was established that parents' emotional expressivity was also predicted by children's cultural orientation and by discrepancies between their own and their children's cultural orientation. It is therefore important as parents or significant others to be role models at all times to determine the better future where everybody is satisfied.

In matters regarding health, covid-19 preventive measures has increased health seeking behaviour the study has established. Individuals have been living a life of suspicion as a result of this, people associated each unpleasant feelings they had with covid-19 and this has the following implications; people may frequent themselves to the health facility for medical check-ups and in the course of doing so particular illness or illnesses may be discovered and treated which would have been detrimental to their health if they never visited the health facility or they may be practising a certain behaviour which would advantage them in preventing many diseases from occurring such as diarrhoea diseases or many communicable diseases which are prevented simply by good hygienic standards. Health seeking behaviour is crucial in disease prevention. For instance, cervical cancer is detrimental to women's health but it is easily preventable particularly if women are screened and the disease is detected as early as possible. The study done in Ethiopia, revealed that low awareness level about the disease and risk factors, beliefs about disease, poor access to preventive services, affordability of the service and current health system can influence decision to seek health care for cervical cancer (Habu et al., 2018). This entails that prevention is better and has positive economic outcomes than treatment which is expensive.

Covid-19 preventive measures have increased the relationship between the communities and the district health offices, the study has observed. This may suggest that in crisis, convenient togetherness may form so long the effects are beneficial to both parties, while addressing covid-19, other equally important communicable diseases may as well be addressed or facilitation of openness's in matters of health may be encouraged where people could directly air their views to the district health offices personnel to help them with other health problems. Diseases such as Tuberculosis and HIV and AIDS, need communities to work hand in hand with the

health authorities. It was found that early tuberculosis case finding and adequate chemotherapy are essential for interrupting disease transmission and preventing complications due to delayed care seeking (Yirgu et al., 2017). This is applicable to covid-19 disease which can be managed if awareness is created and massive testing is done.

## Limitations

The limitations of the study included inadequate financial resources, timing and the fact that covid-19 is a new disease. However, the study has a strength in that it was able to assess the synergistic effects covid-19 preventive measures have on the health of the general population. It was important to note that the outcome of what is going well and what is not has come out clearly in the study particularly on covid-19 prevention.

## Conclusions

An intervention study on covid-19 preventive measures in rural Malawi communities has revealed important findings. The disease has created demand for practising preventive measures. This has made men, women and children alike to adhere to preventive measures such as hand washing, putting on face masks, social distancing and avoiding handshaking programmes at the college. This is simply because the disease is so infectious and detrimental to people's health. Inadequate funds pose a challenge as it becomes certainly difficult to meet the demand that has already been created by the disease.

It is against this background that institutions and communities in general need to leverage the resources to meet the growing needs of covid-19 prevention. Perhaps diversification of sources of income base through innovative means such as coming up with income generating activities (IGAs) might seem to be beneficial to communities at all levels in long term prevention of covid-19.

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