AN EXPLORATION OF HOME-BASED CARE PROGRAM AS A STRATEGY TO MANAGE COVID-19 PATIENTS IN KENYA

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Abstract

The rapid spread of the Covid-19 infections across the globe has compelled the Kenyan government to ensure that the disease is not only managed, but also contained. The impact of the disease on health facilities is immense. One of the most common policy responses has been the integration of home-based care and treatment as a way of decongesting hospitals. The Kenyan government came up with this proposal at a time when the health facilities were outstretched. There exists scant literature on the issue of home-based care on Covid-19 patients, especially in the developing countries. This study therefore sought to not only assess the available models, components, practices and benefits of home-based care, especially in the management of Covid-19, but it also sought to identify possible challenges that could face this program and recommended solutions to these challenges.

Materials And Methods: The study utilized a desktop review in collecting and collating data from both primary and secondary sources and qualitatively analyze by answering the objectives of the study.

Results: The study established that several models that are being used for the home-based care have strengths and weaknesses; hence each one of the models needs to be employed Contextually.

Recommendations: The study recommends that social support be given to the households that are implementing home-based care. It is anticipated that the study will contribute to the debates that will generate practical and well-thought out interventions against the Covid-19 disease and its ravaging effects.

Key Words: ***Community Home Based care, COVID-19***

Introduction

Towards the close of 2019, there were reported cases of pneumonia-like symptoms among some of the residents of Wuhan Province of China. However, unlike other cases of pneumonia, these particular ones did not have a definite cause (Stratton, 2020). Samples were taken for analysis and it was revealed that the disease was caused by a virus that led to acute respiratory syndrome. Consequently, the World Health Organization (WHO) issued a communiqué on 11th February 2020 terming the disease as Corona Virus Disease. Covid-19 (Genmaro et.al, 2020). The spread of the disease was so sporadic that by mid-March 2020, 114 countries had reported cases of Covid-19 that had resulted in 4,000 confirmed deaths (WHO, 2020). Following these developments, the WHO declared Covid-19 a pandemic.

In Kenya, the first case of Covid-19 was reported in March 2020. Since then, just like in the rest of the world, the numbers have continued to grow. According to the Ministry of Health (MOH), currently, the numbers stand at close to 3,000 as at July 9th, 2020 and up to 34,00 by the end of August. Those who have recovered from the disease total 17,000 while those who succumbed to the disease are 400(MOH, 2020). The epidemiology curve thus in the country is on an upward trajectory in all regions; currently, there is a third wave

which has seen the rise in numbers of infections. As at March 11th Kenya had reported 110,356 cases with 1,898 deaths and 87,903 recoveries (MOH, 2021).

Because of the strain that the disease has had on healthcare facilities in terms of the high infection rates and the available capacities in health facilities, the Kenyan government announced its intention to introduce safe home care for Covid-19 patients as a way of decongesting hospitals and preventing them from being overwhelmed (Okech, 2020). According to Chan (2020), different strategies can be used depending on the severity of infection and local epidemiology. He further suggests that home-based management is appropriate for asymptomatic patients. These patients, as Chan (2020) states, need daily assessment of body temperature, blood pressure, oxygen saturation and respiratory symptoms for at least 14 days; these are practices that can be done from the confines of their homes without straining the health facilities and hence leaving them to handle more serious cases. This management at home is intended at ensuring that those people who are affected do not transmit it to others.

Because of the biting effects of the Covid-19 pandemic and its strain on the health infrastructure, the Kenyan government has been compelled to contemplate the integration of home-based care in managing the disease. Therefore, it becomes necessary to investigate the practicability of this program in the context of the disease based on existing models of home-based care and treatment to not only establish their merits, but also assess the possible challenges as well. Such an investigation will enable the careful selection of the best model and approach that will achieve the intended objectives of managing the disease away from health facilities.

Materials and Methodology

Objectives

The study aimed to fulfill the following objectives: To assess the available health models on home based care and how they can be used in the management of Covid-19 in Kenya; to assess the use of traditional medicine in the management of Covid- 19; to analyze the components, practices and benefits given by the Ministry of Health (MOH) of the home-based care for management of Covid-19 patients and to identify the possible

challenges that are likely to face the home based care model in managing Covid 19 disease and recommend the solutions to these challenges.

Study Design

This study used qualitative methodology to collect, collate, and analyze data. In so doing, existing documents were reviewed and content analysis undertaken. Basically, the study was a desktop review of relevant information contained in various sources such as Ministry of Health Regulations on home-based care, documents from NGOs which contain information on home-based care, WHO reports on home based care as well as secondary data from books, journal articles and archival materials.

Procedure

Data analysis also followed the qualitative pattern; the information gathered from the wide array of sources were arranged to suit the two objectives namely: the available models of home-based care and the possible challenges that these models are likely to face in the wake of Covid- 19 response and the solutions to these challenges. This information was in form of a critical analysis.

Findings

Home based Health Care Models

Comprehensive Home-based Care Model

Russel (2000) enumerates several Home-Based care Models that have been used in a wide array situations and contexts to manage diseases. The first model is the Comprehensive Home Based care. This model, as Russel (2000) states, has been used to take care of patients that are suffering from terminally illnesses. The program offers social support, counseling and income generating activities for those patients. It has worked well for those patients suffering from HIV/AIDS. In Malawi, Schneider (2001) avers that this program was employed by the government for PLWA were offered with counseling services, given an opportunity to engage in income generating activities, Voluntary Counseling and Testing services, health education, prevention activities and de-stigmatization. For this model to work effectively, community support and participation is very important. This is because of the fact that the receptibility and acceptability of the

program will depend on whether the people who are affected, their family members and the society they reside in will cooperate. At the same time, the caregivers must be well acquainted with the community that they are serving in because this will enable them to not only communicate to them in a language they understand, they will be able to understand the complexities that may affect the program such as perceptions, stigmatization, costs and related issues.

Can it work for COVID 19 scenario in Kenya?

The program represents a milestone in reaching out to the community by the health practitioners. It enables the healthcare givers to reach out to the community and mobilize them towards managing certain diseases. However, the only undoing is that as much as it works for the non-communicable diseases such as HIV/AIDS. Covid 19 is unique in the sense that the high affinity of the disease to spread due to contact makes community contact impossible. Hence such things as counseling will be impossible. At the same time, unlike the terminal illnesses which take longer to manage Covid 19 stays in a person's body up to 14 days only from the time it attacks the person till when the person is healed. This being so, it may not need long term counseling programs to the patients and social support such as Income generating activities.

Home Visitations Model

According to Ncama (2005), home visitations entail volunteers visiting patients and talking to them besides educating them. The program brings forth not only the volunteers, but also the health care givers who include the professional health workers such as nurses, clinicians and public health officers. The one distinctive aspect of this model is that it heavily relies on NGOs, FBO's and CBO's. The model is ideal for health services that entail counseling, medical treatment of minor ailments, nursing care, spiritual care and social support.

Through this model, diseases that can be managed at home can be taken care of and in so doing, attain two objectives; freeing hospitals and strengthening community response. Ncama (2005) avers that through the visitations, the care givers are able to take

care of any serious signs in the patients and take action, if it is grievous; the patient is immediately referred to a health facility for further treatment. At the same time, needs such as empowerment to take care of themselves are put into consideration; this is done by the NGOs who can originate a fund to enable them and their households meet the costs of taking care of the patient at home. From the spiritual side, religious leaders are also part of this program; they not only offer pastoral counseling to the patients, they also give them hope and encouragement.

Is it workable with the Covid- 19 Scenario?

Just like the comprehensive care model, this model has elements which are instrumental in supporting Covid-19 patients. For example; it can be appropriate on the element of offering medical treatment of minor ailments by health workers. This could be in form of constant monitoring of patients at home with a view of taking action on any remedial actions against the disease. This is needed because their temperature ought to be checked and any other symptom such as shortness of breath, diarrhea and fever (MOH, 2020). This helps in checking and ensuring that there is no escalation of the condition during the 14-day isolation period. However, this model is complicated in the midst of the Covid-19 rules which require the care givers to link up with the patient remotely and only come in when the condition is reportedly worsening. At the same time, just like in the first model, this in not workable in the sense that the time a person suffers from the disease is short and cannot as a result warrant the mobilization of resources for income generating activities unlike other terminal illnesses. As far as counseling services are concerned, the model is not appropriate for Covid- because of the requirement of minimal contact. However, if it can be modified so that the patients establish a remote contact with the counselors and the caregivers, it can still be managed.

Specialized/ Private Model

This model, as Ncama (2005) posits, favors those countries that are developed. This is because of adequacy in resources and it was proved to be ideal in the management of HIV/AIDS. The program was pragmatic in offering services such as counseling,

supervision towards adherence to medications, symptoms control, education and support. In this model, specialists are linked with patients and a treatment plan is followed to the letter. If and when patients develop complications, quick referral is initiated to a hospital. Kaleeba (1997) avers that the works well in situations where there are enough medical workers and that the referral mechanisms are adequate and efficient. At the same time, he states that this method has been found to be successful in developed countries because there are few cases of HIV/AIDS and that their systems are highly efficient; means of transporting the patient from home to hospital is quick since there are ambulances which are on standby in case they need to respond to the call and the hospitals are well equipped and ready to deal with emergencies. They have well laid down protocols that see to it that patients are well monitored.

Can it work for Covid- 19?

The model has several elements and components that can be inferred in the management of Covid- 19; first on the issue of symptoms management and adherence to medications. Since patients suffering from Covid- 19 need to be managed in ensuring that their symptoms do not escalate to chronic situations, the model will allow the health workers to closely monitor the patients and take precautionary measures. This is so especially among the patients who may be having unknown underlying conditions. Secondly, on the issue of referrals, it can also be employed; the MOH (2020) in their guidelines on the management of the disease, they stipulate that in case the condition escalated, then there ought to me a way the patient should be referred to a health facility.

However, the model, as Schneider (2001) states, has been successful in developed countries because they not only have enough medical personnel, but also facilities are adequate and able to respond appropriately to the referral cases. Nevertheless, even in the developed countries, Chan (2020) reports that this model has been overwhelmed in the midst of Covid- 19 as the health workers have been fully overwhelmed in dealing with the surging numbers of cases that have occurred in these countries. At the same time, the demography of Covid- 19 in developing countries has made it difficult to pursue a home-based approach to the disease as it has been chronic in most cases

necessitating respirators and hence the only alternative is to hospital. In addition, the referral system in Kenya in the café of Covid- 19 is bound to face a challenge because of the fact that the emergency response is not as fast and the health facilities are devoid of enough medical equipment (MOH, 2020).

Collaborative Model

This model brings together several partners and agencies. Ncama (2005), reports that collaborative model is commonly used in developing countries. The wide array of partners who work hand in hand with the government include families, community caregivers, hospices, clinics and health centers as well as NGOs and CBOs. Anderson (1994) underscored the success programs that employ collaborative model in Kaborole area of Uganda especially in managing HIV/AIDS. The WHO (2000) gave an appraisal of collaborative model by indicating that it helps in the avoidance of over-medical zing long term care in patients suffering terminal illnesses. At the same time, it brings to suffice the complimentary relationship that exists between medical agencies and the community; it is a bottom-up approach towards the management of diseases.

According to WHO (2000), the disadvantage of this model lies in the fact that it can likely lead to government abdication of its mandate and handing it over to NGOs and communities. However, on the positive side, a study conducted by Kaleeba (1997) revealed that this program enabled families to cope positively with the patients suffering terminal illnesses. The program was also instrumental in enhancing a change of attitude in people and shaping knowledge and lifestyles in people. Above all, the program was found to be ideal in combining prevention and care (Kaleeba, 1997).

Discussions

The MOH (2020) released guidelines that will form the basis of home based management of COVID 19 patients. The guidelines were conceived because, as Agutu (2020) reports, almost 70% of all COVID cases are normally asymptomatic and can be managed from home as long as the guidelines are followed. Agutu (2020) avers that the implementation of this program will be done by the community health volunteers in liaison

with the health workers and the families of those affected. These guidelines provide for a wide range of activities starting with expounding the eligibility care of patients, monitoring, and criteria for recovery and community participation. The key partners in this program entail NGOs, well-wishers and *NyumbaKumi*(Community Policing) establishments.

The guidelines, according to MOH (2020) stipulate that where the home-based care is being adopted, there must be separate bedrooms or an isolation place where the patient can recover without sharing facilities with other members of the household (MOH, 2020). At the same time, the guidelines provide for there being resources for food and other basic necessities and the household members must have access to appropriate, recommended Personal Protective Equipment, gloves and masks.

The health workers have been given the mandate of ensuring that the conditions are adhered to. Furthermore, those designated homes are required to have a thermometer and a person able to read and record the temperature of the Covid- 19 patient. At the minimum, there should be no one at risk of getting Covid- related complications such as those above 65, young children, expectant mothers those with low immunity and those who have heart, lung or kidney complications.

At the same time, the issue of movement of the patient is also provided for; the guidelines recommend limited movement of the patient at home and minimal time spent in places like kitchen and bathrooms (MOH, 2020). It is the duty of the caregivers to ensure that all places that are commonly shared are well ventilated. Similarly, the home care givers have been barred from any direct contact with body fluids and must always use gloves and a mask when providing oral or respiratory care. Isolation takes 14 days from the date the patient is assessed as eligible for home based isolation.

It is apparent that this model borrows heavily from both the specialized model and the collaborative model. However, just as earlier argued that these models have challenges especially in the management of Covid- 19 patients, in the same way, the MOH model is bound to experience several challenges. The model enumerates three key components in the management of Covid- 19 patients, namely: homes with several rooms and facilities professional expertise and monitoring as well as some knowledge on health

matters by members of the household. If these components are adhered to, then the management of Covid- 19 patients will be the ultimate solution for the decongesting of health facilities in Kenya.

Use of Herbal Medicine in the cure of COVID-19

According to Vickers (1999), herbal medicines are important for their anti-inflammatory, expectorant, anti-spasmodic or immune stimulation stimulatory properties. In fact, conventional medicines such as Aspirin, Digoxin, Quinine and Morphine have herbal origin. Vickers (1999) avers that herbal medicine has been used in Kenya with a doctor patient ratio of 1:987. Regarding its use in the management of Covid 19, countries such as Madagascar has employed 'Covid Organics' which is a plant-based cure which is extracted from Artemisia plant and a wide array of concoctions that help in curing the virus. However, the World Health Organization cautioned against it and other unproven drugs (Africa News, 2020). In fact, despite the treatment in the country, cases of Covid 19 continue to rise exponentially, by July 29th, there were 10,000 cases, out of which there were 93 deaths. The total recoveries were 6, 113 9Africanews, 2020). Therefore, the use of herbal medicine still continues to enlist a myriad of contentions regarding their efficacy in the cure of Covid 19 as there is still no scientific proof to ascertain their success. Bhat (2019) enlists the advantages of herbal medicine as being not only cost effective, but also available for the low-income individuals.

Challenges of the Kenyan model in management of Covid- 19

As much as the model, as seen, can be very instrumental in complimenting government efforts when it comes to COVID 19, it presents picture that can likely threaten the achievement of the anticipated goals of home based care. To begin with, a majority of people who live in slum areas may not be able to keep the guidelines. For example, Wangari (2020) reports that maintaining social distancing in slum areas such as Kibra slums in Nairobi and Old Town in Mombasa is impossible. In Kibra, for example, Wangari (2020) notes that people live in overcrowded homes with few windows or ventilation. This explains why most of the infections in Nairobi occur in slum areas (MOH, 2020). Given

these conditions, the model that has been provided for by the MHO may not be workable, especially in these areas.

At the same time, with poverty comes susceptibility to diseases such as HIV, TB and other chronic conditions that acerbate the risk of not only catching Covid- but also accelerating its impact. The other challenge that emanates from this model is that of stigmatization. This has been a big problem in the management of the disease in Kenya. Those infected have been treated to discrimination by friends, relatives including their own family members (Wangari 2020). The WHO (2020) that in the context of Covid- 19, many people are labeled, stereotyped, discriminated against, treated separately or loses status because of the perceived link to the disease. The fear that people have towards the disease has cultivated a habit of stigma on those diagnosed. This, in itself, will obviously threaten the achievement of the guidelines that have been given by MOH which anticipate a partnership approach towards the management of the disease.

Another challenge relates to personal discipline in terms of the control of infections and being infected by Covid- 19. The MOH (2020), states that personal discipline is a key pillar in the management of the disease. However, since personal discipline is not enforceable, it will be left to the patients and their families to ensure that they adhere strictly to the protocols given to the letter. In case they do not, then they will end up escalating community infections. The last challenge is that of the availability professional healthcare givers at the disposal of the patients. Since it is apparent that the healthcare system is overwhelmed, it will be a challenge managing patients who are both in facilities and homes as well. This may make it hard for prompt, accurate and timely responses to the health conditions of the patients, especially those who need urgent medical attention.

Conclusion

It has been established that there exists models that have been employed in the past world over to manage diseases using a home based care approach. These include the Comprehensive Home based Care, Home visitations model, Specialized model, and the Collaborative model. It has also been seen that in the context of Covid-19, these models

have shortcomings because of the uniqueness of the disease in terms of its spread, incubation and management.

The model proposed by the MOH in management of Covid- using home based care is a conglomerate of these models. The model, however, just like the ones mentioned, is bound to face a myriad of challenges, especially if the issues that emanate from its implementation are not fully addressed. Therefore, this study sought to provide an analysis which brings to the fore the merits and demerits of each so that a synthesis can be engineered towards improving and making the model workable for Covid 19 home based management.

Recommendations

Based on the analysis, the following recommendations are made: First, the Kenyan government, through the Ministry of Health (MOH) should constantly monitor the adherence to the protocols given on home based management and update them regularly. Secondly, more research be conducted on the effectiveness and impact of the program in managing Covid- 19. Lastly, social support be given to the households that are undertaking the program to cushion them from adverse socio-economic impacts.

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Competing interests

The authors declare that they have no competing interests.

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