

Changing Practices Amid COVID-19 Pandemic: Lessons Learnt During a Review and Planning Meeting For Neglected Tropical Disease Control Programing in Ekiti State, Nigeria

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Research note

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Abstract

Objectives: Review meetings are critical activities aiding successful implementation of mass administration of medicines (MAM) for Neglected Tropical Diseases (NTD) control. The objective of this study was to assess the changes in practices amid COVID-19 pandemic during the review and planning meeting for 2020 MAM.

Results: A total of 42 NTD implementers participated in this study [59.5% females and 40.5% males]. Majority of the participants were Local Government NTD (LNTD) coordinators (40.48%), State NTD officers (26.19%), LGA NTD data managers (23.81%) and NGDO partners (4.76%). Majority of the participants expressed their level of satisfaction on these modes of invitation (97.5%), admission (92.5%) and coordination (97.5%) during the meeting. Our findings have shown the importance of online platforms such as WhatsApp groups and email as communication channels between programmers involved in NTD control. Furthermore, compliance level to WHO guidelines were optimal for venue spacing (100%), usage of facemasks (85%) and physical distancing (72.5%), but sub-optimal for hand-washing (67.5%) and respiratory etiquette (52.5%). There were gaps in the provision of adequate handwashing facilities for the attendees. There is a need for more refined guidelines to steer investments in the provision of adequate hand-washing points in consideration of the population during subsequent meetings or mass gatherings.

Introduction

Nigeria reported its first COVID-19 case on the 27th of February 2020, and has a total of 59,738 cases after 8 months, with the virus spreading to all the 37 states. Ekiti State ranks 25th in terms of prevalence with a total of 386 confirmed cases and 6 deaths as of December 9th, 2020 [1]. In response to the pandemic, the Nigerian government imposed a lockdown order on March 31, 2020 placing restrictions on social gatherings and other community-based activities. These restrictions had put on hold planning for, and implementation of Neglected Tropical Diseases (NTDs) control programme.

Neglected tropical diseases (NTD) affects more than 1 billion people worldwide, placing an enormous health and socio-economic burden on people living in poor and marginalized communities [2]. Over 500 million affected people reside in sub-Saharan Africa (SSA) with Nigeria bearing about 25% of Africa's NTD burden [2,3,4]. Similar to other infectious diseases control programs like nets distribution and immunization campaigns, NTD control or elimination requires huge investments, rigorous planning and resource distribution. The World Health Organization (WHO) recommends periodic large-scale administration of efficacious, safe, and inexpensive drugs without a prior diagnosis to at-risk populations in endemic areas [5]. This strategy known as Mass Administration of Medicines (MAM) could be implemented either once a year (annually), twice in a year (biannually), or once in two years (biennially) depending on the prevalence of infection in the community [6]. It is therefore not an uncommon practice to hold regional meetings amongst major stakeholders to review immediate past MAM activity and discuss implementation bottlenecks with a view of providing solutions and understanding what works best.

From an organizational perspective, review meetings are considered a critical activity in the planning and implementation of MAM in Nigeria. It is a systematic and objective process of evaluating key performance indicators from NTD programmers across different Local Government Area (LGAs) in Nigeria. Such evaluation aims to understand factors aiding or hindering higher levels of therapeutic and geographic coverage during MAM, and recommending solutions to the identified bottlenecks while promoting the adaptation of what works best. Typical with most review meetings, is the gathering of stakeholders at a particular spot over an extended period of time. However, with the advent of COVID-19 pandemic, it becomes imperative to hold such meetings in-line with WHO recommended guidelines on public gathering amid COVID-19 pandemic [7,8].

The Ekiti State Neglected Tropical Diseases Unit of the State Primary Health Care Development Agency (SPHDA) in collaboration with the Mission to Save the Helpless (MITOSATH) and Federal Ministry of Health (FMOH) organized a meeting to review 2019 MAM activities and prepare a workplan for 2020 MAM activities in Ekiti State. This study, therefore, assessed the changes in practices amid COVID-19 pandemic via-a-vis level of compliance to best practices for preventing COVID-19 transmission and participants' satisfaction regarding coordination, resource allocation and safety assurances.

Methods

Study area

This study was carried out in Ekiti State, one of the six southwestern states in Nigeria. It has 16 Local Government Areas (LGAs) with Ado-Ekiti as the capital (Figure S1). The state is endemic for four major preventive chemotherapy NTDs including Onchocerciasis, Lymphatic Filariasis, Schistosomiasis and Soil Transmitted Helminthiasis.

Questionnaire Administration

This study was cross-sectional in design involving the administration of semi-structured questionnaires to collect both quantitative and qualitative data. The questionnaire was administered to study participants during the review meeting (precisely at a more convenient time such as tea/lunch break session). Information such as participants' demographic data, and opinions about the meeting vis-à-vis coordination, resource allocation and safety assurances were collected. Secondly, a rapid questionnaire was used to assess the level of compliance during the operational phase of the meeting with the WHO recommended guidelines for public gatherings during COVID-19 pandemic [9]. Assessments were made in categories which include: (1) moderation related to the venue (2) moderation related to the participants (3) moderation related to the duration of the event. All assessments were conducted in the English language by two data collectors.

Sampling and recruitment of study participants and Inclusion criteria

A total sampling of all invited stakeholders was employed. Only attendees who have experienced or participated in 1 or more previous review meetings for NTD control programming were recruited into the study. Samplings was done systematically as the participants were seated and effort were made to recruit all participants except those who did not consent to the study procedures. Caution was also taken not to allow the questionnaire completion affect participants' participation at the meeting.

Data collection, processing and analysis

Data obtained from this study were entered into Microsoft Excel 2019 software. Quantitative data were analyzed using descriptive statistics in SPSS. 20.0. Qualitative data obtained through open-ended questionnaires were analyzed thematically following standard data analysis steps.

Results

Demography

A total of 42 attendees who were NTD practitioners across the 16 LGA in Ekiti State participated in this study, 25(59.5%) were females and 17(40.5%) were males (Table S1) (Figure S1).

Level of compliance to WHO guidelines for public gathering during COVID-19 pandemic

The level of compliance to WHO recommended guidelines for public gathering during COVID-19 pandemic was assessed during the operational phase of the meeting. As regards the venue of the meeting, the compliance level was 50%. The meeting was held indoor and was completely a physical meeting. Also, there were no regular and thorough cleaning and disinfection of the venue by a designated staff during the period of the meeting. Two-third (66.67%) of the modifications required for the participants were met. This includes advising people to observe physical distancing and instructing those with a higher risk of transmitting COVID-19 not to attend. The modifications required for the duration of the meeting was not met as the meeting took more than 5 hours (Table 1). Table 2 presents the changes in practices during the review meeting as compared to previous review meetings.

Participants' satisfaction regarding coordination and *adherence to best practices for the prevention of COVID-19 during the review meeting*

About 98% participants' satisfaction were attributed to the fact that the invitation offered them opportunity for capacity building in NTDs programming (Table 3).

"...it will build my capacity for NTD programming"- (Participant, Irepodun/ifelodun)

"to update my knowledge about NTD and plan for 2020"- (Participant, Ekiti East)

Also, there were satisfactions ascribed to timely notification of the meeting through newly created online platforms such as Whatsapp and email.

"the notification for the meeting came earlier because of the prior information"- (Participant, Ijero)

"modern way of invitation in that a Whatsapp platform was created for participants" – (Participant, Ado)

Similarly, about 65% of the attendees agreed that the review meeting is different from that of the previous year as it combined both review of the previous years' MAM and the planning for the year's MAM (Table 3). Other comparisons were in terms of a more conducive environment, abiding with all COVID-19 regulations and early notification about the meeting which allowed the participants to have adequate time to prepare.

"last year was only a review meeting of 2018 but this year was both a review meeting and plan for 2020 Workplan"-(Participant, Irepodun/ifelodun)

"We have a very conducive environment"-(Participant, IdoOsi)

"notification came earlier and there was adequate preparation for it"- (Participant, Ijero)

On the other hand, majority of the attendees (92.5%) expressed their level of satisfaction about the mode of admission and coordination during the review meeting (Table 3). These satisfactions were attributed to spacious and well-ventilated venue, in addition to the COVID-19 precautionary measures put in place by the organizers (Table 3)

"...before you enter into the venue, you should wash your hand with water and soap, sanitizer your hand too"- (Participant, Ado)

"I saw the MITOSATH people fumigating their materials before the commencement of the meeting"- (Participant, Ekiti East)

"...the venue...it allows members to space themselves, the use of face mask was done and provision of sanitizer"- (Participant, Gboyin)

Usage of face mask was on top of the priority list of best practices during the meeting, with 85% of the participant adhering to it, this was followed by maintaining physical distancing (72.5%), hand hygiene measures including washing and sanitizing (67.5%) and respiratory etiquette (52.5%) (Table S2). In addition, majority of the participant felt there were no challenges that could expose them to COVID-19 during the period of the review meeting. One of

the major reason was the fact that the venue for the meeting was spacious and rules guiding the organization of meetings during COVID-19 pandemic was adhered to (Table S2).

"The place is well okay for everyone and COVID-19 rule was strongly observed" (Participant, Ido-osi)

"COVID-19 rules were followed if not attendees health would have been in danger" (Participant, Ikere)

"No challenge so far as the hall used for the programme is big enough for spacing"- (Participant, Irepodun/Ifelodun)

Discussion

Beyond the aim of assessing implementation progress and addressing associated bottlenecks [11], our findings emphasized the importance of review meetings in building capacities of programmers which is expected to translate into efficient performance during the MAM process. Also, our findings highlight the importance of using online platforms (WhatsApp groups and email) in establishing contacts with programmers. Majority of the participants expressed their level of satisfaction on these modes of engagement as it is modern and more flexible medium of communication that gives them prompt access to information, compared to the traditional paper-based channel of communication through their LNTD coordinators. These findings corroborate with those of Kamel Boulus et al. [12], HIFA [13] in Uganda and Woods et al. [14] in South Africa. Including WhatsApp to the communication and teaching toolbox would facilitate timely responses among programmers, ensure wider dissemination of public health messages to more people and help create virtual communities of enquiry and practice [12].

With the advent of COVID-19 and the consequent regulations guiding the conduct of public meetings, the first phase of this study investigated the level of compliance of the NTD review and planning meeting with WHO recommended guidelines. Generally, the compliance level was optimal for the usage of facemasks and physical distancing. This was reiterated by the study participants who expressed their satisfaction with the mode of admission and coordination during the meeting. However, compliance levels were sub-optimal, most especially for modifications related to the venue and duration of the event. There were gaps in the provision of regular and thorough disinfection of the venue during the period of the meeting.

Furthermore, before the outbreak of COVID-19 pandemic, the importance of WASH (water, sanitation and hygiene) has been acknowledged through the 6th Sustainable Development Goal (SDG) which is aimed at "Ensuring availability and sustainable management of water and sanitation for all" with three specific health targets by 2030. Hand washing is one of the most important components of WASH resource programming been advocated by UNICEF. The presence of handwashing facilities with soap and water on-premises has therefore been identified as the priority indicator for global monitoring of hygiene under the SDGs [15]. However, findings from our study revealed that only one hand washing facilities (i.e. 1 veronica bucket with water, 1 soap and 1 sanitize) were provided at the entrance of the venue for the over 50 participants at the venue. The current WHO guidelines for handwashing during public gatherings amid COVID-19 pandemic have focused more on availability of handwashing facilities, with little or no emphasis on the adequacy of such facilities as the number of the participants in the gathering increases. There is thus need to review such guideline in line with the conditions previously described by Adams et al. [16].

Conclusion

Our findings have shown the importance of review meetings and as well highlighted new communication channels to be explored between programmers involved in NTD control. However, there is a need for more refined guidelines to steer investments in the provision of adequate hand-washing points.

Limitations

Restriction orders enforced on public gatherings in some states in the country limits our sampling methodology, hence our findings should be used with caution.

Abbreviations

MAM: Mass Administration of Medicines

NTD: Neglected Tropical Diseases

NGDO: Non-Governmental Development Organization

WHO: World Health Organization

COVID-19: 2019 Novel Coronavirurs

MITOSATH: Mission To Safe the Helpless

LGA: Local Government Areas

LNTD: Local Neglected Tropical Diseases Coordinator

SNTD: State Neglected Tropical Diseases Coordinator

SPHDA: State Primary Health Care Development Agency

FMOH: Federal Ministry of Health

SSA: Sub Saharan Africa

Declarations

Ethics approval and consent to participate

This study received ethical approval from the State Primary Health Care Development Agency, Ekiti State, Nigeria. However, before the commencement of the study, the study procedures were announced to all attendees and those willing to participate in the study were given printed consent forms to complete. Each participant provided written consents.

Availability of data and material

Datasets obtained and generated during the study is available as supplementary file

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Consent for publication

Not applicable

Competing interests

The authors declare that they have no competing interests.

Author's contributions

FOO and HOM conceived the study. HOM and UFE designed the study plan. HOM and JA collect field data and carried out the statistical analysis. HOM wrote the first draft of the manuscript. All authors read and approved the final manuscript.

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Tables

Table 1: Level of compliance to WHO guidelines for public gathering during COVID-19 pandemic

Prevention and control measures applicable during the operational phase of the meeting	Score (%)
Modifications of the meeting (related to the venue)	
Hosting the event, at least partially, online/remotely/virtually	0
Hosting the event outdoors rather than indoors	0
Adjusting the official capacity of the venue	1
Ensuring availability of hand-washing facilities with soap and water and/or hand rub dispensers	1
Ensuring regular and thorough cleaning and disinfection of the venue by designated staff	0
Regulating the flow and density of people entering, attending, and departing the event	1
Total	2 (50.0)
Modifications of the meeting (related to the participants)	
Advising people to observe physical distancing, respiratory/cough etiquette, and hand hygiene practices	1
Advising people with a higher risk of transmitting COVID-19 that they should not attend the event	1
Advising people with a higher risk of developing severe illness from COVID-19 (that they should not attend the event, or making special arrangements for them)	0
Total	2 (66.67)
Modifications of the meeting (related to the duration)	
Keeping the duration of the event to a minimum to limit contact among participants	0
Total	0 (0.00)

A score of 1 denotes that the meeting met the WHO recommended guidelines, while 0 denotes that the guideline was not met.

Table 2: Changing practices during the 2020 review and planning meeting for NTD control programming in Ekiti State Nigeria.

Practices	Previous review meetings before COVID-19 pandemic	Current review meeting during COVID-19 pandemic	Cost-implication
Number of Participants	65	57	15% increment
Duration of the event			
Venue moderations (size/capacity and other moderations)	Less moderation	(a) Physical distancing via modified sitting arrangement (b) Sharing of items or materials was discouraged and prohibited (c) A large hall was used	70,000 naira (\$160)
Use of Personal Protective Equipment (PPE)	None	(a) Face masks was given to each of the study participants (b) Hand sanitizers were given to each participant.	400 naira (1 dollar per participant)
Other protocols for preventing spread of COVID-19 such as handwashing and use of sanitizers	None	(a) Hand washing by participants before entering meeting venue, (b) Screening body temperature of participants (c) Use of hand sanitizers	
Communication	Use of public address systems	No public address systems was used	N/A

Table 3: Participants' satisfaction regarding invitation, admission and overall coordination during the review meeting

Attendee's level of satisfaction	Frequency	Percentage
Are you satisfied with how you were invited to this meeting		
Yes	39	97.5
No	1	2.5
Is there a difference between the mode of invitation compare to that of previous years		
Yes	26	65.0
No	11	27.5
Don't know	3	7.5
Are you satisfied with how you were admitted into the meeting venue		
Yes	37	92.5
No	2	5.0
Don't know	1	2.5
Is there a difference between the mode of admission compared to that of previous years		
Yes	20	50.0
No	13	32.5
Don't know	7	17.5
Are you satisfied with how you were coordinated in the meeting		
Yes	39	97.5
No	1	2.5
Is there a difference between the mode of coordination compared to that of previous years		
Yes	29	72.5
No	2	5.0
Don't know	9	22.5

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [FigureS1.tiff](#)
- [TableS1.docx](#)
- [TableS2.docx](#)