COUNTDOWN Calling time on Neglected Tropical Diseases





Dispelling rumor to improve acceptability and accessibility of health interventions: Impact of the COUNTDOWN participatory action research in school- based deworming programme in Ogun, Nigeria

Background: Among the factors that threaten acceptability and accessibility of health interventions in most parts of Nigeria are rumour of fatality or mortality associated with such interventions. In Ogun State Nigeria, there are seven endemic neglected tropical diseases (NTDs) which have debilitating effects on the physical, psychosocial and economic wellbeing of those affected. Among these are soil transmitted helminthiasis (STH) otherwise known as intestinal worms and schistosomiasis which are endemic in a number of LGAs in the state. The World Health Organization (2020), recommends periodic medical treatment (deworming) without previous individual diagnosis to all at risk people living in endemic areas. This reduces morbidity associated with the disease by reducing the worm burden. The strategy for its control focuses on reducing the morbidity through periodic, targeted treatment with praziguantel of all who are at-risk.

In 2017 the State Ministry of Health in collaboration with Evidence Action Deworm the World Initiative instigated an annual school- based deworming (SBD) programme, distributing praziquantel and mebendazole to school aged children (SAC) between the ages of 5 and 14 in primary and junior secondary schools in the state with focus on both enrolled and nonenrolled children. This was to control the effects of these NTDs which include stunted growth, anaemia, poor absorption of nutrients resulting to slow cognitive development. In 2017, out of a target of 1,129, 489 school aged children eligible for treatment for schistosomiasis, only 259,539) 23.5% were treated while out of the 902, 679) that were eligible for treatment for STH, only 404, 064, 44% % could be treated .

The roll out was marred by rumour of death of children allegedly after being administered the drugs. When the exercise was first rolled out due to the rumour, parents and guardians panicked and ran to the different schools to stop teachers trained on eligibility and dosage from administering the drugs to their children. In some instances, the teachers were violently assaulted thereby stalling the ongoing process. Essentially, an exercise that is only sustainable by acceptability and accessibility of the community was faced with apprehension and rejection instead.

By 2018 and 2019 the programme was reinforced with increased sensitization and advocacy activities. Implementers at the state collaborated with the Federal Ministry of Health (FMOH) and Evidence Action to improve its acceptability and accessibility amongst the people. In 2019, there was a target of 1,186, 671 children for schistosomiasis treatment and 687,071 for STH out of which 837, 177 and 514,290) representing 71% and 75% therapeutic coverage respectively (Ogun State NTD report, 2019). Despite the improvement in coverage, it remains below the potential of the programme.



COVID 19 and the 2020 SBD

With the outbreak of the COVID 19 pandemic in the first quarter of 2020, there was a heightened level of shocks and apprehension around public health care intervention programs generally. In most parts of Nigeria for instance, there was a knowledge gap on the SARS-CoV-2 virus (corona virus). This gap was filled with fake news and conspiracy theories. Prominent is that it was airborne, and no one survives once infected. Others alleged deliberate spread of the disease to infect the population of middle- and low-income countries, especially African countries. These and many more falsities increased apprehensions in the communities. Conversely, other rumours caused disbelief about its morbidity or existence.

It was amid these that the 2020 week- long SBD was launched on November 17th, 2020 by the Honourable Commissioner of Health Dr Tomi Coker, representing the Executive Governor of the State. Sadly, the next day, two pupils of a Primary School in Abeokuta South LGA were reported to have died in the evening after taking the deworming drugs earlier in school. They were an eight-year-old boy and a nine year old girl. They died in their separate homes.

The deaths were generating similar backlashes to the events in 2017. The Honourable Commissioner of Health immediately led a team of health experts along with officials from the State Universal Education Board (SUBEB) an agency supervising primary schools in the state to investigate the cause of the deaths. The director of Public Health in the Ministry Dr Festus Soyinka and the State Coordinator of NTD control programme Dr Soneye Islamiat were all part of the emergency team which comprised of epidemiologists, environmental scientists and public health experts. After series of investigations, it was discovered that the two girls had died from exposure to *vibro cholerea* parasite causing cholera. They had complained about similar symptoms of loose stools, body weakness and dehydration before going to school on the fateful day they were administered the deworming drug. However, this report could not dispel the fast-spreading rumour that is linking the deaths to the deworming drugs.

The COUNTDOWN PAR approach to the 2020 SBD sensitization



Above: Iterative cycle of action/reflection (Levin 1945)

COUNTDOWN as a multidisciplinary and multi-country implementation research into NTDs has adopted a participatory action research (PAR) model in the two states of Kaduna and Ogun in Nigeria. Sampled communities in the two states are engaged in problem identification and solution finding activities. Health care policy makers and programme implementers across the three tiers of government in the country i.e. Federal, State and LGA, with non-governmental or civil societies are all part of the process of finding solutions to issues that hinder availability, accessibility and acceptability of NTD intervention. The research has built capacity of all involved for different critical aspects of community engagement and context- specific solutions. It has continued to provide a co-learning opportunity through iterative cycles of problem identification, action and reflection for further inquiry and action for change as depicted in the diagram to the left.

The iterative engagement has produced evidence which have been synthesized into material outputs such as a document called participatory guide for planning mass administration of drugs otherwise referred to as the PGP; an inclusive action planning template, learning packs for community and school- based deworming program and a training video guide. All these provide the NTD programme with resources to support planning and implementation and joint problem solving.

These tools and the participatory approach are being scaled up for use in both states starting from the 2019 MAM.



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From left: The PGP, SBD learning pack, action planning template and the video guide

Strategy to increase community support through engagement and improved planning

In the build up to the 2020 SBD in Ogun, a participatory workshop was sponsored. This was to support the programme implementers to apply the use of these tools and the participatory approach for mapping of relevant stakeholders to engage for planning and generating solutions for of the 2020 SBD in the face of the numerous shocks from the COVID-19 pandemic.

Methods of the participatory workshop for SBD

As part of the COUNTDOWN's process of scaling up its evidence to improve NTD programme delivery, a Working Group comprised of implementers from the state and the LGA with a representation from the FMoH was put in place. This is the group that facilitated the 2020 SBD participatory workshop.

Action planning by the Working Group

This meeting mapped out action points and assign roles to individuals and groups. Specific messages were developed on safety of the deworming drugs. It also identified community structures such as groups and associations, personalities and institutions that currently or can potentially get the specific messages to the larger communities to sensitize and cover knowledge gap on COVID-19 and the SBD. Groups identified included Community Development Committees, traditional institutions, religious groups, Community Development Associations, artisan groups e.g. blacksmiths, welders etc and the media. All these structures were assigned roles and responsibilities to discharge towards effective SBD implementation in the year. A key focus was for community leaders to mobilise and engage the community with specific SBD message ahead of the exercise.

PGP refresher meeting

A refresher meeting on the recommendations of the PGP for programme planning and implementation was held with implementers from the state and LGAs in attendance. State, Local Government NTD program coordinators (LNTDs) and health educators from the 14 endemic LGAs identified context- specific recommendations for community engagement in their LGAs.

For the SBD learning pack which is an outcome of engagement with teachers and pupils of public primary schools in the state during the 2018 community engagement phase of the COUNTDOWN research, there is specific recommendation that for SBD, parent teacher associations and the Ministry of Education should be involved in planning. A further recommendation was that parents' consent should be sought at least two weeks before the deworming exercise. These recommendations were emphasised at the refresher meeting.

State- level stakeholders' engagement meeting

This was another method of the participatory workshop for the 2020 SBD in the state.. An overview of the NTD programme with specific attention on the SBD and community treatment from 2017 till date was presented. Role plays about the effects of rumours and its impact on acceptability of the SBD was made. This provided participants with a clear message on the enormous challenges facing the deworming programme. Capacity strengthening on soft skills to promote effective training using participatory approaches such as role plays was a central focus of the COUNTDOWN process and PGP scale up, these skills were evidenced in this session.

LGA- level town hall meetings

Representatives of 20 groups and associations in each of the 14 LGAs participated in a two day engagement meeting at their LGAs. They each recognized the need to deworm the children and importance of promoting its acceptability in the community, especially that the WHO has certified it as safe and healthy for use.









Impact of the participatory workshop on dispelling the 2020 SBD rumour

There was rebuttal by different groups and individuals within the different communities that the deworming drugs were the cause of the death of the two girls. Religious leaders, community leaders, trade and professional organizations whose representatives were participants at the participatory workshop swung into action; mobilizing members with counter messages stating the safety of the drugs for children. Reference was made of how the Commissioner of Health alongside other staff of the NTD unit swallowed the praziquantel on the day of the SBD launch, 17th November 2020 and have not been harmed neither have the 236 pupils of the same school who were also treated with the deworming drugs. The native Yoruba and other indigenous languages were used to intensify campaigns on environmental sanitation as a control measure of cholera which is about to break out in the state. They stated how medical examination has revealed the cause of the deaths to be cholera and not the deworming drugs. Announcements were made in churches and mosques and parents were advised to collect the tablets from the schools and administer them to their children based on their height and other approved parameters. Before long, there was general calm in the communities and parents allowed the exercise to continue particularly because voices of leaders, community and group representatives were heard speaking about the scientifically proven cause of death and the safety of the drugs being administered to deworm the children. The use of posters, leaflets, audio and video animations put together by the programme funders and circulated during the various participatory workshop activities reversed a trend of rejection considerably for the just concluded SBD exercise.

Key Recommendations

To improve acceptability of public health interventions like School based deworming campaigns (SBD), rumours must be curbed through robust information dissemination approach.

To effectively disseminate information, relevant structures need to be identified e.g. those currently being used and those that can potentially be used for specific purposes. Among the potential structures are religious bodies which can pass across specific messages to their members. Others can be WhatsApp platforms of different groups and unions e.g. association of Traditional Birth Attendants (TBA) and PTA.



Stakeholders' mapping is a crucial step towards identifying stakeholders to engage for sensitisation, mobilisation, distribution, monitoring and reporting for programme like SBD. Hence, it is important to have an action plan that ensures it is conducted.



Resources like the COUNTDOWN PGP, learning packs, video guides and action planning templates are available online to provide programme implementers with the needed information on how to engage and maximise existing groups and structures for various activities.

References and Further Reading

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