



Case study: Using Seasonal Calendars as a Step towards identifying context complexities in Mass Drug Administration (MDA) in Lymphatic Filariasis “hotspot” areas in Ghana

In Ghana, after 10 years of annual mass drug administration, there is still persistent prevalence of lymphatic filariasis. The Ghana Lymphatic Filariasis Programme has made significant progress towards the 2020 elimination goal, however, the next 5 years will be crucial if the target is to be achieved (Biritwum et al., 2017). As of 2017, there are 15 districts defined as “hotspots” that have had at least ten years of mass drug administration, but still having a lymphatic filariasis prevalence above the recommended 1% level (Biritwum et al., 2017).

This study used seasonal calendars, a participatory tool to understand the broader community context and lived experiences to engage with communities in developing more responsive and context appropriate mass drug administration strategies and to identify the barriers and opportunities for implementing mass drug administration to eliminate lymphatic filariasis in districts with persistent transmission.

Seasonal calendars allow for the visualization of patterns and can help to show transformation over periods of time; they are often used to find out community perceptions on time-related variations in indicators such as weather patterns, time spent on labour and community other activities including migration. In Ghana, the timing of mass drug administration is an important factor for uptake relating to **mobility** and **migration** for **livelihood activities**, **socio-cultural activities** and **festivals**, **weather/seasonality** and **challenges** with reaching whole population with the current distribution strategy.

Study Design and Findings

- 4 districts within Western and Northern regions of Ghana – Ellembele, Nzema East, West Gonja, Bole Bamboi
- Primary occupations of farming (Northern) and fishing (Western)
- 16 communities purposively selected for focus group discussions, 351 participants



Mobility and Migration for Livelihood Activities

House-to-house mass drug administration distribution happens once a year and requires the community drug distributors to distribute the drugs to all eligible members of households. The timing for the drug distribution is often fixed at the national level and linked to external donors requirements. In communities where there are high-levels of mobility and migration due to livelihood strategies large numbers of community members were missing during the time of the distribution. Men’s positions in fishing, coca farming and small scale mining required long periods of absence. The seasonal calendars highlighted that when drugs were distributed between April and August these timings coincided with high levels of travel. There is no formal policy to ensure these groups of men are not missed.

“Yes we are galamsey practitioners; we travel to Tarkwa, Nsuayam. When we look for what we want and get the money, we just return home, we do not stay for long. We go on Tuesdays because it is breaking day”

Male participant

"In July, it rains a lot into the sea so people don't go fishing... July they travel all the time."

Female participant

Social-Cultural Activities and Festivals

Religious festivals were discussed by participants' as having a detrimental impact on the uptake of drugs. When drugs were distributed during the Eidl Fitr Islamic religious festival, participants discussed being unable to take the tablets on empty stomachs due to fasting. Other festivals such as Kundum, idol worship and yam festivals often meant high levels of community mobility prior to and during these festivals meaning people miss mass drug administration as they are travelling. Participants discussed how they did not feel that the drug administration was adapted to their lived experiences, as noted below:

"Whether you are around or not, they give the drugs"

Male participant

Weather/seasonality

The seasonal calendars highlighted that there are distinct periods when heavy rain can make travelling between houses more difficult. If drug distributors have to deliver the drugs during the wet season it can be logistically challenging and time consuming. Some participants also highlighted that waiting for the drug distributors to come had opportunity costs for them.

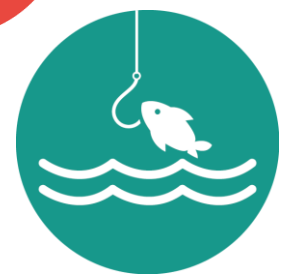
"We sometimes wait for them to reach our houses to give us the medicine but they may not come but meanwhile we may have other things doing on our farms and work places"

Male participant

Gender and Equity

Men and women's involvement in different livelihood activities shaped their mobility and migration into and out of the communities. Men were often absent for longer periods of time. This meant that they were often missed from the drug distribution programmes. Mass drug administration programmes need to be gender aware in their planning of distribution to ensure they meet the needs of men, women, girls and boys.

Communities which were geographically harder to reach were often poorer and more marginalised. During the distributions they were often missed during the distribution because drug distributors found accessing the villages very challenging. Participatory processes have the potential to engage different communities and understand their realities and different perspectives. This is vital for gender equitable programmes.



Impact

Globally, as the lymphatic filariasis programme moves to the final stages of elimination of hotspots, where there is persistent transmission, will gain further importance. In this study COUNTDOWN used participatory methods to explore the key barriers that prevent communities from accessing treatment in hotspot communities. The study showed that for highly migrant populations mass drug administration can be challenging. There is an urgent need to for programmes to be adaptable to reflect realities of men and women involved in livelihood activities which take them out of their villages for periods of time.

This study highlights the barriers and opportunities for implementing mass drug administration in communities with lymphatic filariasis persistent prevalence. These insights are important for the 2020 Roadmap Sustainable Development Goal 3.3 which sets at the target of eliminating neglected tropical diseases.

Lymphatic filariasis is a debilitating disease that can cause lifelong disabilities. Interrupting transmission is important to prevent women, men and girls and boys becoming infected. By using participatory methods with communities COUNTDOWN were able to demonstrate how challenging reaching all communities members can be. The combination of travel for livelihoods, religious festivals and the rainy season meant participants, particularly men were missed during the distribution. Ensuring that the lymphatic filariasis programme adapts to the realities of the communities and individuals they are targeting is important.

Developing control programmes for lymphatic filariasis that are flexible and adaptable is important. The timing of the distribution of drugs is often based on international funding agencies and national and district policy makers. All these groups are key audiences for this research as they are often distant and removed from the communities.

Key Recommendations

- ✓ Planning is key for mass drug administration implementation and timing should be decided based on community engagement using seasonal calendars
- ✓ Pro-active planning for subsequent mass drug administration to make it flexible in order promote effective coverage and adherence in lymphatic filariasis hotspot populations to mitigate migration challenges
- ✓ In addition, develop strategies and approaches to ensure some drugs are also available within health centres, so if people are missed through mass drug administration, they can still access them.

References and Further Reading



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