Integrating a gender, equity and human rights focus into national programming on preventive chemotherapy and transmission control for NTDs: A focus on Kwara State, Nigeria

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Key messages

The burden of NTDs is unequally distributed within Nigeria; increased vulnerability and exposure often mean that the poorest individuals are the most affected, particularly in rural settings.[1] Although the distribution of preventive medicines through mass distribution mechanisms is free, social, cultural and economic factors interact to impact the effectiveness and equity of medicine coverage. Using mixed methods with state and district health providers, community drug distributors (CDDs) and community members, we explored perceptions of the barriers and facilitators to effective treatment coverage and analysed these in terms of accessibility, availability, acceptability and contact coverage. Data was synthesised to support programme decision makers in improving equity in access to mass administration of medicines.

Fig.1 Focus group discussion with women

Availability

Shortages in medicines were reported in Patigi while a surplus was reported in Irepodun. However, clear channels of communication and record keeping facilitated redistribution of medicines at the State and LGA level. Many CDDs incur financial and opportunity costs in their role, this can lead to staff attrition and poorly motivated CDDs. Renumeration, assistance with transport, rain gear and training opportunities were highlighted as ways to support and motivate CDDs to ensure effective distribution.

Accessibility

The timing of MAM meant that some men and women were missed due to their occupation as they were absent from communities during distribution periods. Geographical barriers such as rainy seasons, difficult terrains, and long distances also meant that some populations were missed. House to house distribution methods also resulted in homeless groups not being accessed.

Acceptability

Acceptability is shaped by generation and health belief systems. Youths who perceived themselves as healthy did not see a need to accept medicines. Beliefs such as witchcraft as the cause of illness, and misconceptions of medicines leading to impotency, resulted in rejection of MAM by some religious and nomadic groups. Fear of side effects were a main barrier to acceptability. Adequate counselling, antidotes for side effects, access to food and liquid formulations of medicines promote acceptability. CDDs who are well known and selected by community members strengthens both the acceptance and trust of the NTD program.

Contact Coverage

Gender shapes access and the level of coverage through interactions at the household; some women require the consent of their husbands to accept MAM, particularly when the CDD is male. This affects equity as many women may be left untreated if CDDs cannot access them.

Effective Coverage

People living with disability are not addressed by the program and therefore are often further marginalised and excluded from MAM. Distribution strategies mean that women who are frequently pregnant or lactating also miss out of MAM. Children who are not enrolled in schools are also missed where school-based deworming is the only distribution method.

Programmatic Application

Many of qualitative findings were supported by quantitative analysis of routinely collected programmatic data. Inequities that were revealed at a community level were masked when data was presented in a summarised form. In the context of improved understanding of drivers of inequity the programme data provides a viable opportunity to gain insight into localised inequities such as CDD gender imbalance or high absenteeism. These issues can then be addressed and targeted with tailored programme adaptations.

Background and methodology

Over the last 12 months, the Kwara State Ministry of Health, in partnership with the World Health Organization (WHO), Sightsavers and Liverpool School of Tropical Medicine (through the COUNTDOWN programme), has been supporting the piloting of WHO's new guidance document entitled: *Towards universal coverage for preventive chemotherapy for Neglected Tropical Diseases: guidance for assessing "who is being left behind and why".*[2] The guidance focuses on strengthening in-country capacity to support programme managers within the Ministry of Health to identify equity challenges in access to and impact of MAM according to a person's gender, age, disability and other socio-economic factors. This policy brief presents findings to support programme implementers at the state, LGA and community levels to be able to integrate consideration of equity, gender and human rights issues into NTD programming and make recommendations to improve equitable coverage of MAM.

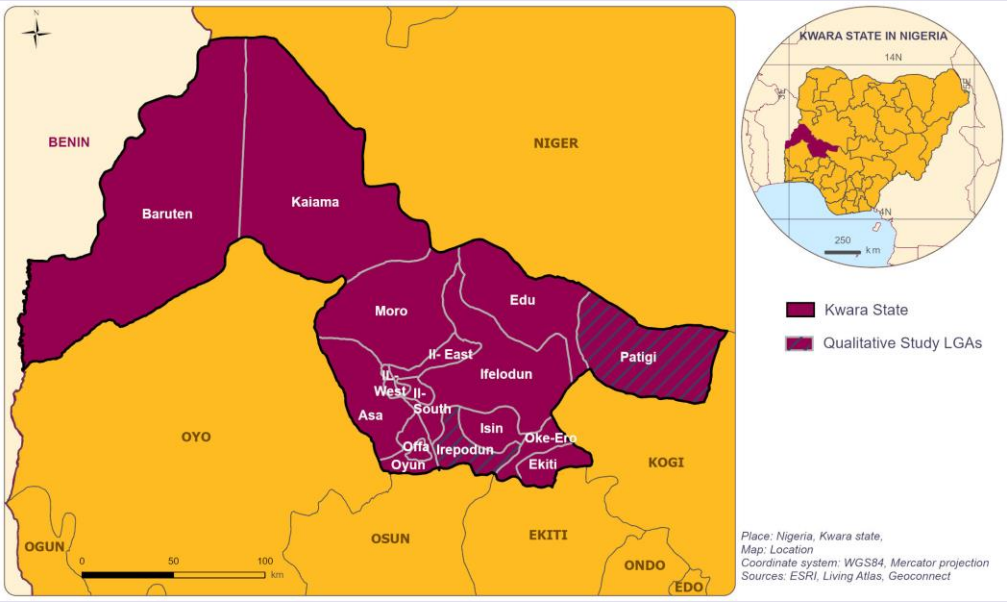

Figure 2: Map of Irepodun and Patigi, located within Kwara state[4]

LGAs that reported relatively low therapeutic coverage were identified through analysis of existing programmatic data in collaboration with the state Ministry of Health. The selected LGAs for the study were Irepodun and Patigi.

Qualitative methods

A total of 52 interviews consisting of 23 Focus Group Discussions (FGD) with CDDs, teachers and community members (disaggregated by age and gender), and 29 Key Informant Interviews (KII) at state and LGA levels were conducted. Interviews were recorded, labelled and transcribed. Data was thematically analysed using a framework approach.[5] The five dimensions of the Tanahashi framework for effective coverage - availability, accessibility, acceptability, contact and effective coverage - informed the analysis.[6]

Findings From Programmatic Data Analysis

Routine programmatic data was analysed, looking at 1450 communities, 355 frontline health facilities (FLHFs) and 16 LGAs. This included comparisons of coverage in different groups, inequities in CDD selection and the construction of equity indicators. The findings from the quantitative data analysis support the overarching trends and complex intersectional nature of the qualitative data:

- Localised gender inequities existed at community level but were not visible within state or LGA level summaries emphasising a need to consider data at the lowest level of disaggregation to understand where inequities exist.
- High absenteeism resulting in missed coverage was revealed - 83 communities had absenteeism above 5% many of these were in Patigi, Oyun, Offa, Il-West and Baruten
- There is a shortage of female CDDs: CDDs across the state were 60% male and 40% female and gender imbalances were in favour of men 80% of the time.
- There were enormous inequities for CDDs whose targeted treatment populations ranged from less than 50 to over 10,000 people. According to Ministry guidelines only 2.5% of communities have sufficient CDDs.
- Coverage of people with visual impairment, hearing impairment, lymphedema, hydrocele, stunted growth and people who are classified as sick was very low and may reflect programmes missing those with disabilities.

Qualitative Findings

Availability

The ratio between availability of resources – such as medicine supply, human resources and facilities – and the size of the target population gives the measurement of availability coverage.[6]

Effective redistribution of medicines ensures availability when there are shortages in supply. Although there can be surplus and underestimates in drug supplies, clear channels of communication facilitate distribution when more medicine is required. CDDs, Local Government NTD coordinators (LNTDs) and storekeepers communicate to obtain the required amount of medication. Clear records document the total amounts of medication collected and returned to the store. When more medication is requested, this is taken from the supplies that have been returned and is then distributed to areas where there are shortages. The records are also used to review estimates for the following year, to improve estimations. LGA staff and CDDs reported that this process is working well in both Patigi and Irepodun and should continue to ensure availability of medicines in these areas.

> 'There are usually no remnants. It is just enough because we work towards achieving target population…I have all the records with me; should we run short of medicines in any community I know who to call to get more medicines'
>
> ***LGA Health Staff, Male, KII, Irepodun***

Financial and opportunity costs of CDDs lead to staff attrition which can mean medicines are not available in some areas due to a lack of or poorly motivated CDDs.

> 'Some complain that the stress was too much because they were tired of trekking long distances and they complain of leg and body pain after distribution… Some left because there is no money involved and they spend their own money for transportation to go far distances.'
>
> ***CDD, female, FGD, Irepodun***

The financial and opportunity costs of being a CDD are a key factor that shapes programme equity. Dissatisfaction among CDDs can lead to attrition and some communities, particularly those that are geographically isolated, not being reached

Accessibility

Even if services are available, they must be located within reasonable reach of the people who should benefit from them. The capacity of the service is limited by the number of people who can access it. [6]

'…during farming season, you will hardly meet people at home so if you go in the morning and don't meet them you need to revisit in the evening.'
LGA Health Worker, Imale, KII, repodun

Timings of distribution, livelihoods and geographic isolation affect how people access medicines. Some women and men are missed during MAM due to livelihood activities, such as working in the market and on farms, as they are absent from communities when distribution takes place. It is recommended that days for distribution are extended, including evenings, so community members can be reached. Distribution at the market is also suggested in order to reach women who may have been missed. Difficult geographical terrains were described by CDDs and community leaders as negatively influencing access to medicines for communities across Patigi and Irepodun. Poor road networks, long distances and rainy seasons result in CDDs beingunable to access people living in hard to reach areas.

Nomadic groups, such as the Fulani, are less likely to have access to medicines during MAM due to language barriers and past conflicts resulting in negative perceptions of them by CDDs. However, state NTD staff and CDDs mentioned that by sensitising and recruiting CDDs from their own communities language barriers and mistrust in the health system will be addressed and nomadic groups are more likely to be accessed and to accept medicines.

'We are scared of them because there are claims they usually kill people. But we can pick CDDs from among them that can help us bridge the gap and so allay our fears.'
LGA Health Staff, male, KII Irepodun

Acceptability

Even if services are available and accessible, it still needs to be acceptable to the population. Acceptability coverage is influenced by people's perceptions, expectations for health services, and personal beliefs. [6]

Acceptability is affected by cultural and religious beliefs, and also shaped by generation.
Health belief systems, including fear and misconceptions of possible side effects, such as impotency, result in rejection of MAM by religious groups (Apostolic and Deeper Life churches and some Muslims) and some nomadic groups, e.g. Fulani. Community members who believed witchcraft to be the cause of NTDs were less likely to accept the medicines as they perceived the illness to be a condition that cannot be treated by conventional medicine, and instead sought care from traditional healers. Religious beliefs were also expressed as a barrier to some groups, as they expressed that prayer is all that is needed to heal the illness, not medicine. However, religious institutions can also positively influence groups to accept MAM, with religious leaders often playing a key part in announcing health messages and distributing medicines in places of worship.

'If you could recall, there was this news that immunization that was given in the northern part affected children, others became impotent and some became HIV positive, so all these makes people afraid of taking medicines given to them.'
LGA Health Staff, female, KII, Irepodun

'There are people that do not believe in taking medicines. They believe all they require is prayers and that will be enough.'
LGA WASH Staff, KII, Patigi

Many youths perceive themselves as healthy and do not see a need to accept medicines. Older people, on the other hand, were more likely to accept medication due to positive previous experiences and having seen the long-term benefit in communities. Age-appropriate services and sensitisation may encourage young people to accept medicines.

Homeless people are excluded during MAM as they are missed during house-to-house distribution due to having no fixed address. Therefore, it is suggested that fixed point distribution, as well as house-to house distribution of medicines, may be a strategy for improving community access to medicines, especially for homeless and nomadic groups.

Community leaders are often gatekeepers, not only in permitting CDDs to enter communities but also in encouraging acceptability and uptake of MAM. When community members are found to be unwilling to accept the medicines, community leaders are often involved to encourage and inform groups on the benefits of the medicine. In some cases, community leaders warn members that they will be expelled from the community if they refuse the medication. While this raises ethical concerns, it highlights the strong influence of community leaders in shaping medicine acceptance. Engaging community and religious leaders in sensitisation activities could assist in educating communities about MAM.

> 'We normally report them to the village heads or the head of clans that is close to them. I once witnessed a case where the head of the clan warned that those who refused the medicine will be expelled from the community so they don't become a problem to those who have taken the medicine.'
>
> ***LGA NTD Staff, male, FGD, Patigi***

Community selection of CDDs promotes trust within the community and was a facilitator to acceptability. CDDs, who are well-known and respected members of the community are trusted and therefore people are more willing to accept medication from them. Health staff, community leaders and youth groups in Patigi and Irepodun mentioned that they will be more responsive topeople they are familiar with. Medicine is most likely to be rejected if they are delivered by CDDs who are unknown to the community.

Lack of trust and fear of 'fake doctors' was mentioned as a barrier to acceptability by community leaders in Patigi and Irepodun. Therefore, CDDs who are well known and selected by the community can foster trust in the health system. Uniforms are also suggested so that CDDs can be identified and recognised.

> 'You know the challenge is that several different groups come around here to give different explanations on health issues and this is the reason for apathy towards this medicine among the people.'
>
> ***Community leaders, male, FGD, Patigi***

Fear of side effects is a main barrier to acceptability. Many community members refuse to take the medicine, citing adverse reactions such as rashes and dizziness for Meticzan and Albendazole, and vomiting and weakness for school-aged children after taking Praziquantel. However, adequate counselling and the provision of side effects antidotes, such as glucose, vitamin C and Piriton, are facilitators for medicine acceptance, although shortages of these supplies were reported in schools. Access to food is also described as an enabler as children are encouraged to take Praziquantel on full stomachs. Liquid formulations are preferred, as elderly people and children struggle with swallowing the tablets, therefore syrups or injections could increase the acceptance of medicines.

> 'Each school, but is not enough. It is underestimated. There should be enough glucose, paracetamol, vitamin C, although we have the de-worming medicine more than enough.'
>
> ***Teacher, female, KII, Irepodun***

Fig.3. Focus group discussion with male youth

Contact coverage

This includes the people who use the service; the actual contact between the service provider and the user. [6]

Gender shapes access and the level of coverage through interactions at the household, although this varies between Patigi and Irepodun. State NTD staff and CDDs mentioned cases where some women amongst the Hausa, Islamic and nomadic communities have refused medicines because their husbands or male relatives were not present. The gender of CDDs also impacts on coverage as male CDDs described requiring the permission of husbands before they can enter households or talk to females; male CDDs often have to re-visit when their husbands are present. This affects equity as many women may be left untreated if CDDs cannot access them. Therefore, considering a balance in gender when selecting CDDs can promote equity and increase effective coverage.

'…if you come here now, and just enter straight to meet the women, the women will not swallow the drugs in the absence of their husbands…But if it is with the man's permission, they will know how to settle it.'

Adult male, FGD, Patigi

However, there were some cases in Irepodun where women are said to not need the permission of their husbands after attending awareness campaigns. A female LGA NTD staff explained that it is often women who collect the medicines on behalf of their husbands. She explained that perceived gender roles of women as nurturers often mean women do not take the medication themselves, as they distribute it to others.

CDD selection processes are linked to gender norms.

There are more male than female CDDs in Patigi due to perceptions of women as the weaker sex, and unable to walk long distances. Some women mentioned requiring consent from male household heads to participate as a CDD. This highlights a need for the inclusion of women by community leaders and the program to increase female participation and selection.

'The CDDs should be encouraged and more females should be accepted though they are seen as the weaker sex…but with encouragement they can do the work.'

LGA NTD Staff, KII, Patigi

Conversely, it was reported that there are more female CDDs than male in Irepodun. This was attributed to a larger female population in the community and perceptions that women complain less than men about poor pay. Gendered roles are also a factor as men are perceived to be providers for the family and seek more profitable opportunities, while women's perceived role as nurturers enables them to fulfil roles as CDDs. Therefore, selection strategies on gender and CDDs may need to be context specific.

'They work even better than their male counterpart…the male usually look down on the stipend…it is easier to persuade the women than men. Moreover the men bear the brunt of providing for their family so it is easier for them to look for more profitable opportunities.'

LNTD, KII, Irepodun

Effective coverage

A stage when service provision appraised as satisfactory by specific criteria is achieved. The number of people who have received satisfactory service is another measurement of service output. [6]

Pregnant women, breastfeeding women, children under 5 years old and those who are sick are exempt from MAM. However, this can result in inequities in coverage for women, who are frequently pregnant and are therefore vulnerable to protracted NTD infection as they miss multiple NTD rounds during their reproductive years. The importance of establishing registers and a clear process for follow-ups of people who were previously excluded but are now eligible for MAM was highlighted by state health workers. Children who are not enrolled in school also miss out on MAM when school distribution activities do not actively prioritise their engagement.

People living with disabilities are not specifically addressed in training, therefore many are missed out during MAM. Many CDDs mistakenly regard people living with disabilities as 'sick' and therefore ineligible for treatment. The poles used for determining treatment dosage by height also do not make provision for measuring individuals with physical disabilities, nor is there clear guidance to CDDs on how to address this. It is suggested that for MAM to be disability inclusive, community links should be strengthened to direct CDDs to people with disabilities. Clear training should also be implemented to differentiate between people who are excluded due to sickness and those living with a disability but are eligible for MAM, including guidelines for people who do not measure up to the dosage poles.

'The blind and deaf are treated, the only ones they don't treat are the 'dwarfs' and disabled.'

CDDs, FGD, Patigi

Other development priorities

Some women, particularly in the rural communities of Patigi and Irepodun, did not consider NTDs as a priority and instead expressed the need for access to clean water. This raises equity issues as it is usually women who bear the burden of fetching water from wells and other water sources, increasing their exposure to many waterborne NTDs.

Collaboration with WASH was recommended by NTD staff and community members, including integration of messages in their health promotion activities.

It's not only chemotherapy alone…WASH can never be over emphasised on the issue of eliminating NTDs in Nigeria and in Africa.' ***State Staff, KII, Kwara***

Recommendations

- Renumeration, assistance with transport and providing raingear are highlighted as ways to support and motivate CDDs in their role for effective distribution. Training and career development opportunities are also key motivators for CDDs.

- A balance in gender should be considered when selecting CDDs to promote equity and increase patient accessibility and acceptability. Increasing the inclusion of women by the program in participation and selection can aid in accessing more female community members and increasing their uptake of MAM.

- The community should be actively involved in CDD selection and CDDs from nomadic groups should also be selected; this can address language barriers and increase acceptance of MAM.

- Training should be disability inclusive - clear guidelines to differentiate between those who are excluded due to sickness and those living with disability but eligible for MAM should be implemented; this should also include guidelines for people who do not measure up to the dosage poles.

- Extending days for distribution, including during the evenings can increase coverage, especially for community members who work away on farms and market days. Fixed point distribution as well as house to house distribution of medicines may be a strategy of improving community access to medicines, especially for homeless and nomadic groups.

- Various modes of sensitisation and community engagement are recommended, including; radio, health talks at festivals, town gatherings and IEC materials. Messages should be communicated in local languages. Community and religious leaders should be actively involved in sensitisation activities, through a people centred approach, by counselling community members and addressing any concerns regarding MAM. Sensitisation should be age-appropriate to encourage young people on the uptake of MAM.

Recommendations

- Establish clear process for follow ups on people who were excluded (pregnant and breastfeeding women and children under 5) but are now eligible for MAM, through the use of registers. The program should also address reaching children, who not enrolled in school, and miss MAM activities.
- The provision of medication to counteract side effects, such glucose, vitamin C and Piriton can increase acceptability and coverage. Medication in liquid forms for children and elderly people are recommended.
- Intersectoral collaboration: integration and collaboration with WASH is recommended. Provision of clean water and sanitation is key, as well as integrating health messages.
- Quantitative routine programmatic data should be better used to provide localised insights into inequities which can then be addressed and targeted with tailored programme adaptations.

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KWARA STATE GOVERNMENT
FEDERAL MINISTRY OF HEALTH
Sightsavers
LSTM LIVERPOOL SCHOOL OF TROPICAL MEDICINE
COUNTDOWN Calling time on Neglected Tropical Diseases
UKaid from the British people