



## Case study

**The Gambia: National Malaria Control Programme (NMCP) partners with communities to maintain access to and use of insecticide-treated nets (ITNs) during COVID-19**

### Key enabling factors for maintaining ITN access and use during COVID-19

- **Strong coordinated support from The Gambia Ministry of Health (MOH)** to mitigate the risks of COVID-19, maintain access to ITNs and avoid disruptions to the continuity of care. A national task force was established, chaired by the MOH and comprising representation from programmes and directorates within the MOH as well as representatives from national and international partners. The main work of the task force was to ensure that essential health services were maintained.
- **Extended hours of health facilities** provided flexibility and increased opportunities for pregnant women and caregivers of children to seek antenatal care (ANC) and other reproductive and child health (RCH) services, including receipt of an ITN.
- **Re-organization of health clinics and established mechanisms to allow users to practise physical distancing** to mitigate the risks of COVID-19 transmission, and reassure patients and those needing regular check-ups, including pregnant women and mothers.
- **New systems to get ITNs to recipients** who were fearful of going in person in clinics.
- **Building on existing community partnerships and community initiatives** to reach vulnerable populations.



*ITN distribution during COVID-19*

### Achievements

- The Gambia's NMCP worked closely with the Global Fund and implementing partners, particularly Catholic Relief Services (CRS), to build on community partnerships and reinforce the work of community health actors so as to reach vulnerable populations and provide them with ITNs in line with the national malaria policy.

- In spite of a 26 per cent reduction in outpatient department visits, The Gambia has distributed 48,398 ITNs from April to October 2020, since the start of action by the government to reduce COVID-19 transmission. By comparison, The Gambia distributed 76,322 ITNs from April to October 2019.
- CRS worked closely with their network of three Global Fund sub-recipient partners – local non-governmental organizations (NGOs) that implement malaria programmes across the country – to move forward quickly with adapted approaches for service continuity.
- Through these approaches, the NMCP has maintained health service provision as well as ITN distribution to pregnant women and new mothers across the country, even for those who were unable or fearful to seek ANC and well-child services in health clinics during COVID-19.

### Lessons learned and recommendations

- **The population appreciates and uses health services provided during extended opening hours of health facilities.** This has been a successful approach during COVID-19 to maintain continuity of services as well as ITN distribution. The MOH worked with available health staff to implement this plan, and was able to maintain manageable costs.
- **Strong MOH-led coordination combined with making good use of existing community networks** allowed the NMCP to move quickly and overcome false rumours and fear and to reinforce ITN distribution during the COVID-19 pandemic.
- **Building on national MOH communication initiatives,** the NMCP took advantage of social media, community radio and local advocacy through local clan leaders (*Kabilos*) and other well-known leaders to encourage continued trust in health services as well as disseminate information about new health facility extended hours and key malaria messages.
- **Community health actors in The Gambia sustained post-distribution social and behaviour change communication (SBCC)** as part of their overall routine activities, and supported existing community networks to further augment the SBCC taking place nationally to address COVID-19.

### Country context

After decades when malaria was the leading cause of illness and death for the approximately 2.3 million people in The Gambia, malaria prevalence declined from 4.0 per cent in 2010 to 0.1 per cent in 2017, effectively moving the country closer to malaria elimination<sup>1</sup>. The number of confirmed malaria cases has decreased 68 per cent from 166,232 in 2014 to 53,136 in 2019<sup>2</sup>. As a result, The Gambia is now in line to be among the first countries in sub-Saharan Africa to eliminate malaria<sup>3</sup>.

To achieve national elimination goals of zero malaria deaths and zero indigenous cases in all regions, the NMCP has set an ambitious objective to achieve at least 90 per cent coverage of

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<sup>1</sup> Malaria elimination is characterized by “Interruption of local transmission (reduction to zero incidence of indigenous cases) of a specified malaria parasite species in a defined geographical area as a result of deliberate activities,” according to WHO (2017) *A Framework for malaria elimination*.

<sup>2</sup> Republic of Gambia, National Malaria Policy 2021—2025, “Malaria Free Gambia”.

<sup>3</sup> Guilbert, K. “Gambia on funding drive to become first sub-Saharan African countries to eliminate malaria.” Reuters. July 12, 2017. Retrieved October 24, 2020, from <https://www.reuters.com/article/us-gambia-malaria-funding/gambia-on-funding-drive-to-become-first-sub-saharan-nation-free-of-malaria-idUSKBN19X1YP>

appropriate preventive interventions for all populations at risk of malaria in all transmission strata by 2025<sup>4</sup>. These include ITNs, Indoor Residual Spraying (IRS), and Seasonal Malaria Chemoprevention (SMC).

### ITN distribution in The Gambia

More than 5.6 million ITNs have been delivered in The Gambia since 2005<sup>5</sup> through mass campaigns. ITNs are also distributed free of charge to pregnant women at first ANC, and to mothers of newborns at birth, through continuous distribution via reproductive and child health services. The NMCP strategy is to provide one ITN for every two persons in The Gambia<sup>6</sup>.

In 2019, The Gambia launched a successful synchronized ITN campaign with Senegal to deliver more than one million ITNs nationwide in The Gambia and 10 million in Senegal. With CRS as a campaign implementing partner, The Gambia NMCP jointly planned distribution with the Senegal NMCP to more than 1,450 cross border communities over nearly 750 kilometres of shared border. In several hard-to-reach areas in both Senegal and The Gambia, geographic barriers prevent access from within the country, which increases the importance of cross-border opportunities for detailed mapping, identification of more effective alternative access routes, shared logistics and improved tracking. Due to travel restrictions in both countries since the onset of COVID-19, cross-border collaboration for ITN distribution via routine health systems has not yet been explored.



Figure 1. Source: Momodou Kalleh, *The Gambia NMCP. Presentation to the 2020 AMP meeting, Geneva, Switzerland.*

**ITN possession.** The NMCP in The Gambia has made significant progress in increasing the percentage of households with ITNs. The 2019–2020 Demographic and Health Survey (DHS) shows that 77 per cent of households in The Gambia possess at least one ITN, with on average 2.8 ITNs per household. More than one-third (36 per cent) of households have at least one ITN for every two persons who stayed in the household the night before the survey<sup>7</sup>. The average household in The Gambia has 8.2 people<sup>8</sup>.

As shown in Figure 2, in 2017 the percentage of households owning at least one ITN was 79 per cent. In prior years, the percentage of households with at least one ITN had increased from 51 per cent to a high of 86 per cent in 2014<sup>9,10</sup>.

<sup>4</sup> Ministry of Health, Republic of Gambia, National Malaria Strategic Plan for Elimination 2020–2025.

<sup>5</sup> Net Mapping Project, Alliance for Malaria Prevention, Second Quarter 2020 Report.

<sup>6</sup> Republic of Gambia, National Malaria Policy 2021–2025, “Malaria Free Gambia”.

<sup>7</sup> The Gambia Bureau of Statistics (GBOS), Ministry of Health (MoH) [The Gambia], and ICF. 2020. The Gambia Demographic and Health Survey 2019-20: Key Indicators Report. Banjul, The Gambia and Rockville, Maryland, USA: The Gambia Bureau of Statistics, Ministry of Health, and ICF.

<sup>8</sup> Gambia Malaria Indicator Survey, 2014.

<sup>9</sup> Ibid.

<sup>10</sup> The Gambia Multiple Indicator Cluster Survey (GMICS) 2010.

**ITN access.** As presented in the 2019—2020 DHS for The Gambia, “Access to an ITN is measured by the proportion of the population that could sleep under an ITN if each ITN in the household were used by up to two people”. Results of the DHS show that 61 per cent of the population has access to an ITN, an increase from 45 per cent in the 2013 Gambia DHS, but a slight decrease since the 2017 Gambia Malaria Indicator Survey (MIS) where 65 per cent of the household population in The Gambia had access to an ITN.

Percentage of households owning at least one insecticide treated net (ITN)

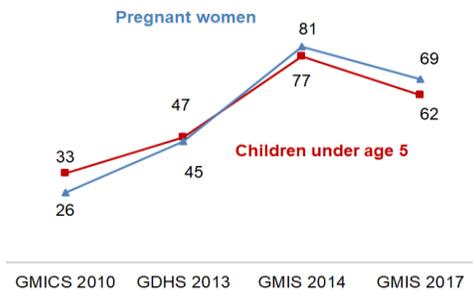


GMICS 2010 GDHS 2013 GMIS 2014 GMIS 2017

Figure 2. Source: 2017 Gambia MIS

**ITN use.** The most recent DHS shows low ITN use, with only 44 per cent of pregnant women and 44 per cent of children under the age of five having slept under an ITN the night before the survey. Among households with at least one ITN, nearly half of children and pregnant women (49 per cent for both) slept under an ITN the night before the survey.

Percentage of children and pregnant women using an ITN the night before the survey



GMICS 2010 GDHS 2013 GMIS 2014 GMIS 2017

Figure 3. Source: 2017 Gambia MIS

While this is significantly higher than the 26 per cent of pregnant women and 33 per cent of children under five reported to have used an ITN the night before the survey reported in the Multiple Indicator Cluster Survey (MICS) in 2010, it is much lower than ITN use reported in the MIS 2014 (81 per cent of pregnant women and 77 per cent of children under five) and the MIS 2017 (69 per cent of pregnant women and 62 per cent of children under five).

In The Gambia, ITN access and use is higher in rural than urban areas and tends to increase

as wealth quintiles decrease. The mixed results for ITN use in The Gambia point to a need to reinforce SBCC efforts, particularly in certain regions, as well as a need to maintain high levels of ITN access<sup>11</sup>.

## Health service delivery

According to the most recent DHS, nearly 98 per cent of pregnant women in The Gambia receive ANC from a skilled provider, which includes doctors, nurses and midwives. Nearly 84 per cent delivered their baby in a health facility, a significant increase from the 63 per cent found in the 2013 Gambia DHS<sup>12</sup>.

Health services are delivered through Primary Health Care (PHC) village posts staffed by Village Health Workers (VHWs), Traditional Birth Companions (TBCs) and other community volunteers

<sup>11</sup> ITN Access and Use Report, The Gambia, [Accessed October 24, 2020]

<https://breakthroughactionandresearch.org/resources/itn-use-and-access-report/gambia/>

<sup>12</sup> GBOS (2020), 2019—2020 Gambia DHS.

in villages with a population of 400 or more and occasionally smaller villages located in relatively isolated areas. In addition, there are Minor and Major Health Centres, which provide basic health services (BHS), including static base and mobile outreach RCH services, which include outpatient clinics, infant welfare clinics and antenatal services<sup>13</sup>.

### COVID-19 and malaria threats

The COVID-19 pandemic threatens to diminish or reverse these results for both public health and malaria. MOH data show that outpatient department (OPD) visits have reduced by nearly 26

*“When COVID-19 started, it had a very serious effect on clinic attendance, including ANC, infant clinic and other services”*

- Balla Kandeh, NMCP Programme Manager, The Gambia

per cent, and rates of ANC visits, intermittent preventive treatment in pregnancy (IPTp) uptake and ITN distribution are also decreasing. Attendance at OPD and ANC is lower because of the following factors, all of which affect outreach to recipients:

- Government advice for people to remain at home and not travel
- Population fears of contracting COVID-19 within the clinics
- Community volunteers’ fear of conducting home visits, and/or respect of physical distancing guidance to reduce face-to-face visits

At the same time that OPD and ANC attendance is declining during COVID-19, patients who test positive for COVID-19 are not necessarily tested for malaria, which may reduce identification of any malaria co-morbidity with COVID-19<sup>14</sup>.

### Mitigating effects of COVID-19 to maintain ITN access

In the face of these challenges, the NMCP reviewed available options to sustain ITN distribution via routine health services within the context of the COVID-19 pandemic.

**Coordination.** As a first step, the NMCP spoke with partners who distribute ITNs in The Gambia to assess ITN distribution approaches which could be shifted, adapted or expanded. This included discussion with national NGO partners working on health projects to assess and identify operational shifts to ensure the health of staff and partners while reinforcing access to ITNs alongside other health services.

**Health system adaptations.** To ensure the continuity of care, The Gambia established a national task force, chaired by the MOH Director of Health Services and including members from programmes and directorates within the MOH as well as international partners, United Nations Children’s Fund (UNICEF) and World Health Organization (WHO) to oversee and ensure that essential health services would continue as planned without interruption. The task force took steps early in the pandemic to extend MOH health clinic opening hours, to provide health services later in the day, beyond the previous standard 14:00H closing time, and during part of the weekend. This flexibility has increased opportunities for pregnant women and caregivers of children to seek ANC and other RCH services after work in the fields, market visits and daily home chores. The NMCP also revised the organization of the established malaria technical

<sup>13</sup> Ministry of Health, Republic of Gambia, National Malaria Strategic Plan for Elimination 2020—2025.

<sup>14</sup> NMCP, The Gambia, Notes from phone meeting, October 20, 2020.

working group meetings from quarterly in-person meetings to monthly virtual meetings during COVID-19 to discuss strategy and address challenges as required.

To mitigate the risks of COVID-19 transmission in health clinics, and reassure patients and those needing regular check-ups, including pregnant women and mothers, The Gambia MOH has re-organized health clinics and established mechanisms to allow users to practise physical distancing. Cloth face masks were provided to health workers and designated spacing was added to waiting areas to promote physical distancing.



*Mother and child with ITN*

***New approaches to maintain ITN delivery.*** As per standard practice prior to the COVID-19 pandemic, ITNs continued to be distributed to pregnant women and mothers still attending ANC and well-child visits in clinic settings at the first ANC visit and at birth or first well-child visit after birth.

However, given the challenges noted above, the NMCP quickly identified decreasing numbers of ITNs being distributed and an urgent need to find alternative options to maintain

protection for pregnant women and coverage for new sleeping spaces for new mothers. Specifically, the NMCP moved away from ITN delivery focused only on the “pull” system of people arriving in person at clinics toward **new systems to “push” ITNs to recipients** who were fearful or unable to seek health services in person.

To achieve this, the NMCP worked closely with CRS and the Global Fund to build on community partnerships and initiatives to reach vulnerable populations and ensure they received ITNs in line with the national malaria policy. With this new mandate, CRS quickly worked with **three Global-Fund sub-recipient partners – local health NGOs**, including the Agency for the Development of Women and Children (ADWAC), Caritas Gambia and Health Promotion and Development Organisation (HePDO) to expand community networks to reach out and ensure continued care to pregnant women and new mothers across the country who were unable or fearful to seek ANC and well-child services in person in health clinics. These local health NGOs now provide ITN bales to Global Fund-financed CRS field coordinator staff to be distributed through community volunteers. Field coordinators supervise community volunteers and promote early care seeking. Every community in The Gambia is part of a health clinic catchment area and receives a visit from a CRS field coordinator at least once every month.

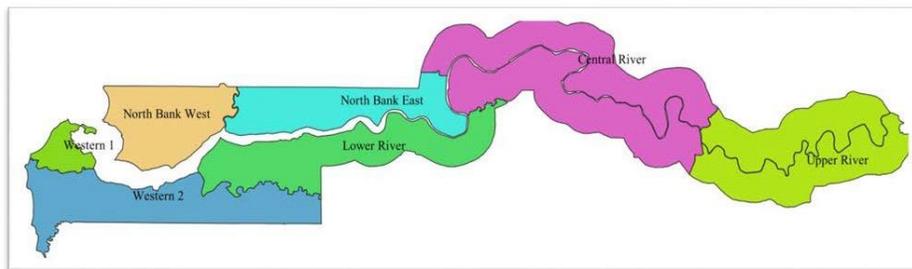
Eligible ITN recipients include pregnant women and mothers of children under one with a torn ITN in need of replacement. Community volunteers are trained to inspect ITNs and report ITNs with multiple holes or tears to the field coordinator for replacement.

Community health workers involved in ITN distribution include *Kabilos*, Traditional Birth Companions, Village Health Workers as well as community health champions – those who lead by example in their communities. Community health workers and community champions are

selected by their communities based on their behaviours, including consistent ITN use, and are encouraged to conduct at least eight to ten home visits per month. While both men and women may be selected as community volunteers, many communities have opted to include women in this leadership role given their more consistent presence in the community and ability to connect with pregnant women and new mothers.

The three local health NGOs worked closely with the community volunteers and provided training and sensitization on ITNs, SMC, IRS and case management to reinforce their informed support for malaria services available to protect communities. Community health actors distributing ITNs often accompany health clinic staff conducting ANC and child health outreach services in remote communities. This provides additional support for health centre staff to distribute the ITNs and record the data while the health provider conducts the ANC and immunisation services. Volunteers support health clinic staff in organizing these outreach service visits and lead in distributing ITNs to eligible recipients.

Prior to COVID-19, some villages had more than one community volunteer and others had none. To extend availability of ITNs to every village in The Gambia, the NMCP worked with CRS and their implementing partners to encourage existing volunteers to visit other villages, which are usually within one kilometre. Particular focus was placed on high risk areas in the Upper River Region (URR), Central River Region (CRR) and West Coast Region (WCR).



*Map of The Gambia*

***Social and behaviour change communication.*** As the COVID-19 pandemic was emerging, The Gambia MOH undertook massive early community sensitization to counteract fear of contracting COVID-19 in the health facility setting and eroding trust in health workers due to false rumours spreading on social media. The Gambia MOH provided information on what COVID-19 is, how it is transmitted and how communities and individuals can protect themselves.

Building on these national MOH communication initiatives, the NMCP used social media, community radio and local advocacy through *Kabilos* and other well-known leaders to intensify communication through all channels. This helped to encourage continued trust in health services, spread information about new extended hours to access health services, and inform about national health campaigns such as community-based delivery of the four rounds of SMC as well as distribution of ITNs. Widespread MOH communication counteracted rumours started via some social media sources, which had tried to cast doubt on the amodiaquine + SP used in SMC.

Community health workers in The Gambia also sustained post-distribution SBCC as part of their overall routine activities and supported existing community networks to further augment the

SBCC taking place nationally to address COVID-19. Messaging included the importance of ITN use to prevent malaria, information regarding where and how to obtain free ITNs, the expanded hours for health facility services and the importance of continued care-seeking, as well as key messages to prevent the spread of COVID-19 and how to seek testing and treatment for suspected cases.

***ITN tracking, quantification and procurement.*** Community ITN distributors track ITN distribution on antenatal and child cards for recipients at health facility level and community outreach sites and include in health registers. CRS compiles ITN tracking data from NGO implementing partners and provides monthly reports to the NMCP for inclusion in the MOH DHIS2. This system has allowed close tracking of the ITN distribution and led to the alert that uptake of ITNs during the COVID-19 pandemic had reduced rather significantly in line with lower OPD and ANC attendance.

Moving forward, the NMCP plans to develop an electronic tracking system which will allow real-time collection for ITN distribution on smart phones, facilitating rapid follow-up with any targeted recipients who may have been missed during community outreach. This system will be useful in case of continued COVID-19 transmission or other events that limit population access to health facilities to allow for rapid identification of areas at-risk and targeted follow up. This system will make response to outbreaks, such as COVID-19, more effective as it will be easier to target where ITNs are needed.