Evaluation of WHO normative function and country level

Annexes

World Health Organization

WHO/DGO/EVL/2025.20

Cover page photo credit: WHO/Esther Ruth Mbabazi; March 2023, health worker Kaim K. tests 6-month-old Muhammad for malaria in Naseerabad

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Acknowledgements

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Evaluation Reference Group
Network of Quality Norms and Standards Department of WHO; technical focal points and senior managers from six normative instruments from the global and regional levels; and focal points from seven country offices selected for this evaluation acted as the Evaluation Reference Group.

Annex 1:
Terms of Reference

Background

WHO was established as a specialised agency with the authority to adopt and approve normative instruments. The Twelfth Programme of Work of WHO (2014) specified that in its normative and standard-setting work, WHO is a science- and evidence-based organization with a focus on public health. WHO's legitimacy and technical authority lie in its rigorous adherence to the systematic use of evidence as the basis for all policies.

However, the term normative is not used in the WHO Constitution. The lack of a clear defining framework has posed problems in explaining WHO´s normative role and to evaluate its normative work. Hence, the WHO Evaluation Office conducted an evaluation in two phases in 2017. The first phase set out: *"to review and develop a clear framework for defining aspects of normative work"*. It suggested to define WHO´s normative role as a combination of (a) Core normative products – international public goods including the normative conventions, regulations, recommendations, Secretariat guidelines and health trend assessments and (b) supportive normative functions – normative elements in all core WHO functions.

The second phase analysed a sample of ten global normative products. The objective was not to assess the technical content of individual normative products, but to analyse and explore if, how and why they have played a role and contributed to a normative process and towards fulfilling WHO's normative function.

The final report recommended a follow up to the global evaluation – then, assessing WHO´s normative roles and functions from a country perspective – making a 180-degree shift from the global perspective. It was argued that normative work is not only a global activity, it is intertwined with technical cooperation in countries. WHO at regional and country level plays a role in informing the policy process and in the validation of their relevance. WHO has also normative country functions to perform. Last, but not least, it is at country level where the normative products are expected to make a difference. Hence, there is a need to understand better how and to what extent WHO´s normative work is relevant and creates results in countries. What is required is to understand better the processes from policy to practice *(1)*. [1]

Following this, a scoping of the evaluation of normative functions at country level was conducted in 2019, and a proposal was presented in December 2019. Due to COVID-19 travel restrictions and changes to the priorities of the Evaluation Office, the evaluation was postponed.

Purpose and objectives for the evaluation

The overall purpose of the evaluation is to understand and strengthen WHO´s normative role and function at country level through an assessment of specific normative processes and products. The main interest is to analyse and explore if, how and why WHO has played a role in countries and contributed to a normative process, and towards fulfilling WHO's normative function. The evaluation aims to provide feedback and learning opportunities for the Secretariat and member states.

[1] The report contains results from both phases of the evaluation.

Specifically, the proposed evaluation will cover the dissemination, use, incorporation, relevance, and effects of a sample of normative products. A more holistic assessment of WHO´s normative profile and work at country level – focusing on the role, programmes, profile, etc., of selected country offices based on the selected tools and instruments, which may also be included in this evaluation.

Understanding normative functions

WHO´s primary function is defined as acting as the *"directing and co-ordinating authority on international health work".* Article 2 in the Constitution presents a list of 22 functions to assist WHO in fulfilling its objective (Article 1). It specifies three types of legal instrument which can contribute to the achievement of the objective: conventions and agreements; regulations; and recommendations.

The Eleventh General Programme of Work (GPW; 2006 – 2015) refers to WHO´s Core Functions (reaffirmed in the current Twelfth General Programme of Work (2014 – 2019):

(a) Providing leadership on matters critical to health and engaging in partnerships where joint action is needed.
(b) Shaping the research agenda and stimulating the generation, translation, and dissemination of valuable knowledge.
(c) Setting norms and standards and promoting and monitoring their implementation.
(d) Articulating ethical and evidence-based policy options.
(e) Providing technical support, catalysing change, and building sustainable institutional capacity.
(f) Monitoring the health situation and assessing health trends.

There are normative elements in each of the functions.

- **Providing leadership on matters critical to health:** Providing leadership, per se, is not normative, but becomes normative when linked to promotion and advocacy for global norms and standards. WHO leadership also plays a role in defining the need and agenda for new normative instruments. Again, it is a matter of choice whether to call substantive leadership on such issues normative or not.

- **Shaping the research agenda:** Research is not normative or prescriptive – rather the opposite – because of its inherent and continuous search for new and alternative answers and hypotheses. However, there are normative elements in the research process: (a) Shaping and defining the research agenda – setting priorities for what to study; (b) Setting standard definitions and procedures for research; (c) Recommending research designs and methods.

- **Setting norms and standards and promoting and monitoring their implementation:** This is the simple function – clearly normative while the latter: promoting and monitoring their implementation is more questionable. Promoting and advocating for specific norms and guidelines – is different from developing them, but still an important part of a normative process – in which WHO is prescriptive and seeks to convince countries about the value and merit of certain solutions. Monitoring the actual implementation is a technical data collection and reporting process, but the formulation of standards and methods for monitoring have normative elements.

- **Articulating ethical and evidence-based policy options:** This entails leading the formulation of public health policies, strategies and plans and establishing principles and rules for global public goods for health. This is from one perspective, a subset of "Setting norms and standards", but the focus is on providing options to countries and the global community. The normative element is to present what the viable alternatives are in a process-oriented manner. On the other hand, if this

were happening in a dialogue between WHO and a Minister of Health in country X, it would most often be called technical cooperation.

- **Providing technical support, catalysing change, and building sustainable institutional capacity:** This function seeks to summarise what is called technical cooperation at country level – often defined as the antidote to normative work. However, when opening the "black box" of technical cooperation – there are several normative elements, such as:

    - Adapting international commitments and normative instruments.
    - Setting priorities for a country cooperation strategy.
    - Promoting implementation of best practices.
    - Influencing regional and global policies and programmes.
    - Providing evidence and feedback in the preparation of norms and standards.

  Financing and supporting the implementation of country programmes and projects are the clearest examples of the opposite of normative. However, some could argue that all norms and standards originate from and are informed by experience and insights from processes of implementation. They do not exist or are formulated in a global vacuum. Such an argument could justify involvement in innovative experimental implementation as part of a broader policy process, while replication and up-scaling fall outside with no or marginal normative relevance.

- **Monitoring the health situation and assessing health trends:** The collection, aggregation, validation, analysis, dissemination and use of data and information are not normative. However, the development of guidelines and methodologies for surveillance, health information systems and evaluations, have normative elements.

Further, the 13th GPW envisages to have an impact at country level, for which effective fulfilment of WHO's normative function (along with other functions) at country level is crucial.

Evaluation questions

Possible questions to include in an evaluation of normative work at country level are (depending on the focus/delimitation) of the evaluation:

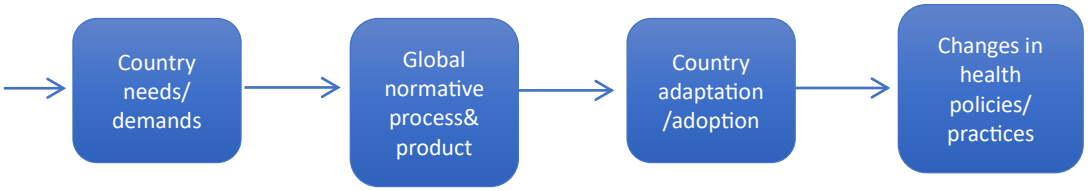
- How does WHO define its normative role and work in the particular country?
- To what extent is the normative role clearly defined and operationalised within the country programme and in individual programmes/projects?
- How and to what extent is the normative role and work prioritised in allocation of time and financial resources?
- What normative roles and functions are performed and their relative importance to other non-normative roles and functions? For example:
    - How and to what extent are countries involved in the identification, preparation, formulation, and validation of global normative instruments?
    - Has WHO at country level taken active part in adapting international commitments and normative products?
    - Has WHO in countries provided evidence and feedback in the formulation and validation of norms and standards?
    - To what extent has WHO played a role in shaping and defining national research agendas?
    - To what extent does WHO play a role in presenting evidence-based policy options (based on normative products) and promoted/advocated best practices?

- What systems and processes are in place for supporting normative work, e.g., to ensure effective dissemination, use and effects?
- Are clear and realistic outcomes for normative work established?
- To what extent is the normative work found relevant to country needs and line with WHO´s priorities?
- What results have been achieved at country level?
    - How and to what extent were the normative products disseminated?
    - Have the normative products reached intended users?
    - To what extent has the government adopted WHO norms and standards and have they influenced health policies, practices, and outcomes?
    - To what extent has the normative work short- and long-term effects at outcome and possibly impact level, e.g., influenced health policies and practices, organizational capacities, and health outcomes.

Theory of change for normative products

There is no explicit theory of change (ToC)[2] in and for WHO´s normative products. However, based on a review of the normative products and other WHO documents, it is possible to identify the main elements and construct ex-post an implicit theory of change (or rather theories of change). It could help to clarify what is expected to happen in order to reach expected results and to discuss the underlying assumptions.

There is a *limited/narrow "theory of change"* which basically implies that normative products are prepared by WHO headquarters with support from technical experts and in consultation with WHO regional/country offices. The major outcome is a high-quality document with strong recommendations based on solid evidence. Such a document is made available electronically and circulated in hard copies to countries and global partners. The use and impact of the normative product is expected to follow from the high-quality of the document, leadership, and authority of WHO and country needs for guidance. The role of regions is capturing country needs, adaptation, and capacity strengthening. Change and results happens through "diffusion" (guidance and recommendations are supplied) – without a clear and explicit plan for implementation, dissemination and follow up.



Such an approach for obvious reasons is not satisfactory or sufficient. Hence, *a more advanced "theory of change"* needs to be developed for a country-focused evaluation. Such a ToC can help to assess a broader range of success factors – what contributes to active utilisation of the normative processes and products, and ultimately incorporation of their recommendations in country health policies and practices. The multiple and changing external contexts should be part of such a theory of change. The major

[2] A Theory of Change (ToC) is a description and illustration of how and why a desired change is expected to happen in a particular context. It is focused on mapping out or "filling in" what has been described as the "missing middle" between what a programme or change initiative does (its activities or interventions) and how these lead to desired goals being achieved.

challenge is to get a handle on and a tool to understand/analyse the causal linkages between a normative process/product and the expected outcomes and impact – or changes in health policies and practices.

It is naive to expect that changes in health outcomes can be explained and attributed to WHO guidelines and implementation plans alone. The relevant and interesting questions are *how* and to what extent normative guidance (processes and products) contribute to *change* and *improvements* in health policies and practices. Such normative processes and products are certainly not unimportant or unnecessary, but they are always part of a broader "causal package".

Methodology

The evaluation will use mixed methods, which will include (a) document review, including literature review, as required; (b) analysis of secondary data; (c) key informant interviews; and (d) focused discussions.

Since the first scoping of this evaluation was done in 2019, substantial changes have taken place in the context of WHO's work at country level, specifically due to the COVID-19 pandemic. Hence, this section needs realignment on a few issues, which will be done during the revision of the inception report:

1. **Criteria for selection and identification of case countries**. Further discussion and defining of the methods will be done depending upon the approach taken. The evaluation will focus on five to six individual normative products sample, and its use and results/impact at country level by selecting up to five country case studies.
2. **Selection of methods**. A case study approach is proposed. However, the approach will be clearly defined during the revision of the inception report.
3. **Taxonomy**. Based on the understanding of normative roles/functions in section 3 above, a taxonomy of roles/functions will be prepared. This taxonomy could be used in different ways:
    a. To guide and structure the evaluation.
    b. Each programme/major activity in the country plan could be reviewed and assessed (with a normative profile/score).
    c. CO office staff could rate time/resources invested in each role/function.
    d. Country partners/stakeholders could provide external assessment.

Methodological challenges/ limitations

Evaluation of normative work is challenging for a number of well-known reasons:

- Outcomes are not clearly defined, often intangible, non-linear, and difficult to measure.
- There are no specific data and information to evaluate normative work, especially when the normative work is not the main focus of the intervention.
- There are multiple determinants of success, e.g., when a national government adopts a particular health policy or a new treatment practice, e.g., no direct causal link between WHO normative action and intended outcomes.
- Normative work involves both products and processes in which the end result follows from successful processes, e.g., when building consensus for a global standard or strengthening political will for the implementation of an international norm.

- Normative work takes a long time to have an impact. It is rarely visible within the timeframe of an organization´s programme cycle.

Evaluation team

As this evaluation involves visits to country offices and key informant interviews with senior officials at the WHO headquarters, regional offices and country level, the evaluation team will include two senior level evaluators with expertise in evaluating normative function in UN agencies. At least one of them needs to have an understanding of the normative function in the UN system, and within WHO. In addition, there needs to be an evaluation specialist with experience in evaluating normative function in the UN system, and experience of working at the country level.

Evaluation management

This evaluation is commissioned by the Director of Evaluation. A senior staff of the WHO Evaluation Office will act as the Evaluation Manager for this evaluation. The evaluation team will report to the Evaluation Manager.

An Evaluation Reference Group with five to six key stakeholders will provide feedback on the deliverables.

Deliverables and timeline

- **Inception report**. Based on the discussions with the key stakeholders, the evaluation team will revise the inception report prepared in 2019. The inception report will include (a) refined evaluation questions and sub-questions; (b) a clearly defined methodology adopted for this evaluation; (c) stakeholders' analysis; and (d) an evaluation matrix. The inception report is expected to be delivered by 15 November 2022.
- **Draft report:** Data collection is expected to be conducted during mid- December 2022 to mid-March 2023. The draft report based on the analysis of collected data will be presented to the WHO Evaluation Office by 30 April 2023. The draft report will be presented in an agreed format.
- **Final report:** The draft report will be finalised by taking into consideration the feedback from the WHO Evaluation Office, and fact-checking by relevant stakeholders. The report is expected to be finalized by 31 May 2023.

Annex 2: Evaluation Matrix

Evaluation questions and sub-questions	Relevance	Coherence	Effectiveness	Efficiency	Sustainability	Impact	Participation and inclusion	Gender equality and non-discrimination
1. How have different parts of WHO been involved in the identification, preparation, formulation, and validation of global normative products? 1.1 To what extent have normative products been relevant to country needs and national priorities? 1.2 To what extent and how have WCOs been involved? 1.3 What level/types of follow up have been provided to countries for the products from HQ and Regional Offices?	x	x					x	x
2 How have the normative products been used in countries? 2.1 What roles have WHO COs played in the follow up and use of the normative products? 2.2 What is the capacity in the WHO COs to follow up and implement the normative products?		x		x			x	x
3 **What results have been achieved at country level?** 3.1 To what extent is there evidence of outcomes, e.g., strengthened organizational capacities and improved health policies and practices*? 3.2 To what extent is there evidence of impact in terms of improved health outcomes? 3.3 What are intended and unintended consequences in terms of gender equality, health equity, discrimination, and disability inclusion? 3.4 What are some facilitating and hindering factors for the adoption of normative products in countries?		x	x		x	x	x	x

4	**How could WHO´s normative function be strengthened at country level?**	x	x	x	x	x	x	x	x

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Annex 4:

People Consulted

Global Level

Category	Number	Gender distribution in %
WHO	20	9 were female (39%) and 14 male (61%).
Experts	3	

Sub-total: 23

Regional Level

Region	Number	Gender distribution in %
AFRO	5	7 were female (30%) and 16 male (70%).
EMRO	4	
EURO	7	
SEARO	4	
WPRO	3	

Sub-total: 23

Ethiopia

Category	Number	Gender distribution in %
WHO	6	1 was female (13%) and 7 male (87%).
Government	2	
Civil Society	0	
Clinicians	0	
Patients	0	
Experts	0	

Sub-total: 8

Jordan

Category	Number	Gender distribution in %
WHO	7	23 were female (50%) and 23 male (50%).
Government	11	
Civil Society	1	
Health Centre Staff	20	
Patients	0	
UN/DPs	5	
Experts	2	

Sub-total: 46

Maldives

Category	Number	Gender distribution in %
WHO	8	32 were female (60%) and 21 male (40%).
Government	17	

Civil Society	5	
Clinicians	20	
Patients	0	
Experts	3	

Sub-total: 53

Pakistan

Category	Number	Gender distribution in %
WHO	13	9 were female (27%) and 25 male (73%).
Government	12	
Civil Society	1	
Health Centre Staff	6	
Patients	0	
UN/DPs	2	
Experts	0	

Sub-total: 34

The Philippines

Category	Number	Gender distribution in %
WHO	1	12 were female (80%) and 3 male (20%).
Government	8	
Civil Society	0	
Clinicians	2	
Patients	0	
Experts	4	

Sub-total: 15

Rwanda

Category	Number	Gender distribution in %
WHO	8	22 were female (21%) and 28 male (79%).
Government	6	
Civil Society	5	
Clinicians	2	
Patients	4	
Experts	3	

Sub-total: 28

Uganda

Category	Number	Gender distribution in %
WHO	6	24 were female (53%) and 21 male (47%).
Government	17	
Civil Society	3	
Clinicians	6	
Patients	13	
Experts	0	

Sub-total: 45

Annex 5:
Normative products briefs

22nd WHO Model List of Essential Medicines

Brief description of the product

WHO has produced an Essential Medicines List (EML) since 1977, with the current version dated 2021. Based on 2017 data, the WHO has a global database of essential medicines which gives the number of essential medicines on the national list and the percentage on the WHO EML. However, there is no system to update this database regularly.

How were country offices involved in the development of the tool?

Historically the EML selection has been a highly centralised process based in HQ. Regional hubs have a statutory role in disseminating the decisions. The role of country offices in the development of the Model EML is limited and not formalised. The WCO mostly supports the development of national EML. This role is dependent on the essential medicines focal point, and on the willingness of the country to engage WHO in the discussions on the national EML. Every biennium a small proportion of countries can activate a closer collaboration with WHO HQ through WCOs in relation to the evaluation of medicines.

How is it expected that countries use the tool?

Providing a model list has several purposes. Principally, it is for countries to develop their national EML, which is meant to be updated every two years in line with the WHO Model EML. All countries do not develop an EML: around 140 countries have one. However, it is difficult for WHO to keep track because countries do not send their updated list to the WHO HQ EML department. There is a guide for how national EML should be updated. The similarities between the Model EML and national EMLs are variable.

What are some expected results from implementing this tool?

The EML is closely connected to universal health coverage. The expected result is to contribute to the triple billon target, and the rational use of medicines. In some countries the use of the national EML (which might be influenced by the WHO EML) has led to the coverage of the total population with essential medicines. In other country the coverage is still limited (about 40%) or very limited (less than 10%). The uptake of the Model EML by countries suffers many limitations. Through guiding national EML, the WHO model EML is meant to influence funding availability for selected essential medicines in each country. Countries use the list very differently: the medicines may be made available at clinic level, or in larger hospitals.

Studies that have been made independently on the use of the EML on specific areas of the list, such as antibiotics. However, the capacity to track the use of the Model EML overall is very limited in WHO. There is also an issue about tracking coverage and

access through the private sector. There is often more complete data on HIV, malaria and tuberculosis essential medicines, because they are externally funded and funders support their monitoring. However, other areas may not be in focus for the donors. In addition, all areas of the EML do not have technical departments in WHO guiding them. So, while the procurement and treatment guidelines are very strong for some areas such as malaria or tuberculosis, on cancer there is no clear information. WHO has a dedicated programme on antibiotics in AMR, so the tracking of the use of those medicines at country level has improved.

Example of implementation of the EML from case studies

Maldives: According to the global WHO database, there were 535 medicines on the Maldivian EML, of which only 243 (45%) were on the WHO EML. The Maldives Food and Drug Administration (MFDA) produces a national EML based on the WHO EML. Medicines on the WHO EML can be approved for use in Maldives using a simpler and cheaper approach than full registration. This is important, given that Maldives constitutes a relatively small medicines market. The evaluation team compared national EML with the WHO EML and found that just over half of the medicines on the WHO list (254 of 479, 59%) appear in the Maldivian EML. A slightly higher proportion (254 of 427; 59%) of medicines on the Maldivian EML are on the WHO EML. There are particular antibiotic issues, with some classified differently on the AWaRe system in the WHO EML and the Maldivian EML. While there is the prospect that the WHO EML could contribute to improved health outcomes by ensuring essential medicines are procured and prescribed, this is largely not happening. A 2014 Situational Analysis of Medicines in Health Care Delivery concluded that, although a national EML exists, "it is not actively used or promoted". The main problems are:

- There is poor congruence between the WHO EML and the NEML in Maldives. Only just over half the medicines are listed on the WHO NEML and vice versa.

- There are few mechanisms to use the NEML as a basis for rational procurement and prescription of medicines in Maldives. There is an expectation that pharmacies stock essential medicines, but doctors are not required to prescribe essential medicines, or that Aasandha reimburses essential medicines only. There has been little, if any, training of doctors on the use of essential medicines, and national treatment protocols exist for few if any conditions. Attempts by MFDA to introduce generic prescribing and maximum price levels have been unsuccessful.
- There is no system in the Maldives to monitor the extent of the use of essential and non-essential medicines.

Malaria treatment guidelines

Brief description of the product

The first edition of WHO's guidelines for the treatment of malaria dates back to 2006, with updates in 2010 and 2016. While the guidelines have been updated, a strong core of recommendations from the 2016 version has been maintained in the current version. The guidelines have been compiled electronically in 2021 on Magic App, transforming them into a living document. Since 2016, six updates have been introduced: two related to vaccines, two on vector control and two on medicines.

How were country offices involved in the development of the tool?

Involvement of different levels of WHO in guidelines development happens through the Guideline Steering Group, but this mostly has regional participation. It is not very common for WHO country staff to participate. However, there are regional platforms to involve and inform them on new developments such as the AFRO inter-country support team on malaria.

How is it expected that countries use the tool?

Countries have national technical working groups on case management or treatment guidelines, with experts from the national malaria control programme, technical partners including WHO and academia. They discuss updates to malaria treatment guidelines nationally, based on data from the country and new WHO guidelines. WHO has developed evidence to decision tables that help countries adapt the guidelines to their context. A recommendation may be strong or conditional. The national treatment policies then have to be approved by the Health Minister and disseminated throughout the health system. In practice, many countries may not have the capacity to update and disseminate new treatment guidelines each time WHO issues a new recommendation.

In order to disseminate the updates, the WHO Global Malaria Programme holds regional meetings where representatives from the Ministries of Health can be informed of new recommendations and the evidence base. In the post-COVID-19 era, however, new channels are taking precedence, such as the Magic App platform and other virtual means. Those may not fulfil the needs of all audiences. Country Malaria Focal Points are not always the main channel of diffusion of updated recommendations and communication between national malaria control programmes and WHO, as in many countries, technical focal points may assume several disease portfolios or be on short-term contracts. The fact that big donors like Global Fund and USAID make it a requirement for countries to align to WHO guidelines helps promote the uptake of WHO treatment guidelines by countries.

What are some expected results from implementing this tool?

The expected result is to improve access to safe and effective malaria treatment, ultimately contributing to the goal of improving access to universal health coverage for one billion more people by 2025. Malaria treatment guidelines also aim to take into account gender and health equity issues. Pregnant women and children are affected by malaria, but adult men are also equally at risk of contracting malaria. There are human rights issues in terms of access to prevention and treatment for marginalized groups, such as migrant undocumented workers. Also, where new drugs have a higher price, this may have implications for equity in terms of treatment coverage for the poorest.

Example of implementation of the malaria treatment guidelines from case studies

Pakistan has adopted the malaria treatment guidelines. Key funders are Global Fund and WHO. The evaluation found that there are no anti-malarial drugs from pre-qualified sources in the country. Pakistan has banned monotherapy and applies the test and treat protocol outside emergencies. The issue of adherence to these regulations in the private sector has been addressed to a limited extent through public-private partnerships. The evaluation revealed that the WCO had supported a sophisticated response to malaria during emergencies to monitor cases daily and control outbreaks (for example, during floods), including mass drug administration. However, malaria control, surveillance, and resistance monitoring outside the emergency context seem insufficient. While the province of Punjab, for example, is in the malaria elimination phase, other provinces experience a diverging trend, with malaria cases on the rise.

Uganda formally adopted the malaria treatment guidelines, which partners, such as The Global Fund, use. The evaluation revealed good coordination of partners in implementing the malaria treatment guidelines, with the training of prescribers down to health centres at level two in the districts.

The country is moving to incident management for rapid response to outbreaks to try to address the rebound in malaria. The evaluation found good monitoring with technical support from WHO through the HMIS. Monitoring is undertaken weekly, monthly, and quarterly, down to the facility level, and monitoring data is used regularly to take action, for example, in the cases of clinics with very low test rates or clinics with high mortality. However, in this encouraging context, the awareness of new WHO global recommendations on malaria treatment, available online, is low. Using country-led evidence from research and innovation in policy and programmes is slow.

HEARTS CVD module

Brief description of the product

The cardiovascular diseases (CVD) module forms part of the global HEARTS initiative, which was launched in 2018. The purpose of the CVD module is to promote greater use of overall CVD risk levels to determine the intensity of treatments. The module helps to identify those who would benefit from lifestyle changes and basic medical treatment to lower blood pressure, cholesterol, and manage diabetes mellitus in an integrated manner, in particular, those with >20% risk of CVD. The audience is Ministries of Health, NCD policy makers, NCD programme managers, PHC facility managers, health workers and trainers. The HEARTS package complements the Package of Essential NCD interventions for PHC (PEN) previously issued by WHO (latest verion in 2020).

How were country offices involved in the development of the tool?

Consultations took place with experts, CSOs, partner agencies and regional offices to shape the five modules of HEARTS and the implementation guide. There was a consensus workshop to develop the guidelines. Although the extent of WCO engagement in this process is unknown, there were extensive consultations managed from the regional level with country-level experts and stakeholders. Those consultations changed the scope of modules to be more practical, so they could be used in clinics, and not only by policymakers. The guidelines went through scientific committees for endorsement.

How is it expected that countries use the tool?

It is expected that countries will adapt the CVD guidelines using implementation research on the level of the facility at which CVD risk can be assessed, the thresholds for treatment, adaptation of protocols, follow-up intervals and other logistical aspects. The module is meant to be used in conjunction with the other HEARTS modules, once the CVD risk level is established: for example, modules on the control of hypertension or on counselling for healthy lifestyle.

What are some expected results from implementing this tool?

It is expected that the HEARTS package will contribute to expanding access to hypertension care services, which is an area that is often neglected and underfunded especially at PHC level. The implementation of the CVD module is expected to contribute to unifying practices on hypertensive diagnostic and care at PHC level, through the application of a single protocol using clinical assessment. In this way, the HEARTS initiative is meant to complement and update the PEN package, which uses a cardio-vascular risk approach, requiring laboratory tests before treating hypertension. Through focusing on single diseases (hypertension, diabetes mellitus), the aim is to replicate successes of other public health programmes (HIV, tuberculosis, vaccination campaigns) to build capacity of the health system, starting from a disease-specific programme, promoting integrated standardised and decentralised care for NCDs within PHC.

Example of implementation of the HEARTS CVD module from case studies

Jordan: Following alarming results from a 2019 STEP survey in Jordan, the Ministry of Health requested WHO support to implement HEARTS as an entry point for NCD care at PHC level. At the time of the study, a total of 39 training workshops had

been conducted, with around 430 people trained. While the main focus of HEARTS has been on public health services, some training has been provided by WHO through Caritas. There are plans to expand HEARTS to Islamic Relief and UNRWA services. There are currently no plans to promote HEARTS in the private sector. One key aim of HEARTS is to change the patient flow in health centres, so that all patients have vital signs screening by a nurse before seeing a doctor. However, it is difficult to make this change because of limited staff and infrastructure. One key reason for the success of HEARTS in Jordan has been the availability of EU funds through Spanish Cooperation. This has been crucial for all aspects of implementation, including the provision of training and follow-up. It has proved difficult to collect data for key HEARTS indicators because of the shortcomings of Jordan's Health Information System. However, a 2002 pilot study showed that, among 852 hypertension patients, uncontrolled blood pressure rates fell over four months from 71.5% to 29.1%. Older patients (>50 years) were more likely to have controlled blood pressure after four months than younger patients.

Ethiopia: HEARTS is implemented in combination with the WHO PEN package. WCO and other development partners support health facilities with HEARTS-based protocols. Of the about 4000 health facilities nationally, 300 use the HEARTS-based protocols. In 87 health facilities supported by a Norad-funded project where WCO has direct insight into the HEARTS use, doctors use HEARTS-based protocols and training materials for diagnosis and treatment, including hypertension screening. There seems to be better adherence to HEARTS-based protocols and better access to hypertension medicines. In the screening, enrolment, and control continuum, high dropout levels from care seem to emerge based on supervision visits. Still, there is a lack of broader evaluative evidence, which should be filled by the mid-term evaluation of the Norad programme supporting 87 health facilities. As about 70% of care for NCDs is covered by patients out of pocket, access to NCD drugs and medicines is limited and excludes poorer populations, particularly women. Several factors affect the implementation of HEARTS-based protocols in the country. They include the limited availability of medicines, such as hypertension drugs, the geographic distance to get to health facilities, MoH budget shortfalls, which result in the need for donor procurement of drugs, shortcomings in the capacities of health workers and high staff turnover, uneven ownership of HEARTS-based protocols at federal, provincial and community level, and the suboptimal general awareness of communities on NCDs, especially outside urban areas. Finally, the armed conflict in the country and the disruption of service delivery in several health facilities affect the application of HEARTS-based protocols.

mhGAP Implementation Guide

Brief description of the product

The mhGAP Implementation guide (IG) 2.0, published in 2016, aims at improving access to pharmacological and psycho-social interventions in non-clinical settings and at PHC level for mental, neurological and substance use disorders. The target user group of mhGAP-IG is non-specialised healthcare providers working at first- and second-level health care facilities.

How were country offices involved in the development of the tool?

The guide includes a section describing the process of development of the second version of the guide. This version incorporated feedback from a range of end-users, including non-specialist health care providers and people with mental health, neurological and substance use disorders across all WHO regions. End-user feedback was collected through a questionnaire and locally facilitated focus group discussions were coordinated by WHO. Reviewer responses collected throughout this process have been incorporated int the GAP-IG 2.0. The role of the WCOs in this process specifically is not described.

How is it expected that countries use the tool?

Countries are expected to use the mhGAP IG to integrate mental health care into PHC. WHO produces a report documenting the use of the mhGAP in more than 100 countries. When using the guide, a first recommended phase is adaptation to ensure that the conditions that contribute most to disease burden in a specific country are covered, and that mhGAP-IG 2.0 is appropriate for the local conditions.

The use of the mhGAP by countries is well documented in the published literature. Studies point to concerns in terms of implementing the programme at scale. For example, countries participating in the programme for improving mental healthcare (PRIME) study*(2)* (Ethiopia, India, Nepal, South Africa and Uganda) identified barriers to integrating mental health into PHC, including limited funding, insufficient specialists to supervise non-specialist workers, inadequate health system structures to support roll-out of task-shared interventions, low community awareness of mental health and high levels of stigma.

What are some expected results from implementing this tool?

The mhGAP IG is expected to support the implementation of the mhGAP programme, contributing to improved access to mental health care services as part of the first billion goal on universal health coverage. Where it has been implemented, the mhGAP IG has contributed to improving the knowledge of health care providers on mental health. However, the evidence that this has led to improved mental health services at PHC level is less conclusive. For example, a systematic review *(3)* on MHGAP Child and adolescents interventions concludes that: "*At the provider level, whilst almost all the studies included in the review pointed to an increase in providers' knowledge, none of them adequately explored the question of whether such knowledge-gains translate into increased competence and transformed practices. Recent studies focusing on mhGAP implementation for adult mental health have shown that the link between these three dimensions is feeble at best.*"

Example of implementation of the mhGAP IG from case studies

The Philippines: WCO supported contextualising mhGAP components with small grants using partnerships with NGOs and academia. WCO used grants to develop a training strategy and training components and integrate mhGAP modules into academic curricula. The latter, for example, refers to the Undergraduates Programme at the University of the Philippines' Nursing Centre, while the training strategy included a Training of Trainer approach. The government is taking a health system approach to rolling out mhGAP. The National Centre for Mental Health offers mhGap training for health facilities, including in communities or rural settings. The incentive for primary health care providers to get trained in mhGAP is that only after training do they obtain the status of medicine access sites. This process started in 2014 and became mandatory in 2016. This approach of the Department of Health (DoH) provides incentives for national coverage for mhGap training. The training of trainers focused on resident hospitals on the three main islands, training neurologists, psychiatrists, and nurses. Training provincial hospital staff is essential to ensure the reach of remote parts of the Philippines. A hub to reach the provinces proved helpful, and a training schedule was created after consulting municipal health officers. Stakeholders reported that in 2022, the government procured medicines for mental health treatments worth US$ 10.4m for 142 000 service users nationwide. Natural disasters such as typhoons or earthquakes and armed conflicts were triggers to accelerate training rollout in the Philippines (see Box A.5 below).

Box A.5: Use in the Visayas Region, the Philippines

In the aftermath of typhoon Haiyan in 2013, every municipality, out of the 143 affected, had an opportunity to receive training on mhGAP. The training program was divided into two parts, focusing on doctors and nurses. For doctors, there was a specialised session on pharmacology. Nurses and midwives attended a session on essential care practices and psycho-social treatment. The psycho-social treatment component focused on providing emotional support and counselling to individuals affected by the typhoon. Five out of the six provinces affected were covered by the WHO training program and the remaining province was covered by the International Medical Corps.

A referral system to the Eastern Visayas Medical Centre was put in place for complex cases requiring specialised care. This facility served as a referral centre where psychiatrists and psychologists were based, indicating the availability of expert care for complex mental health cases. Establishing patient registries in all municipalities helped track patients and ensured continuity of care across different healthcare facilities, and access to drugs and medicines.

Facilitating and hindering factors for the adoption of mhGAP in the Philippines are as follows:

Facilitating factors include high-level political leadership with legislators supporting mental health services in the country, as enshrined in the 2017 mental health act. Besides, the COVID-19 pandemic caused an increasing demand for mental health interventions at a time when the mental health act was at the beginning of its implementation. The latter resulted in increasing budgets for mental health drugs. Also, a health system approach to mental health catalyzed the mhGAP rollout, for example, through the involvement of Regional Mental Health Committee Councils to reach the entire country to the extent possible. Hindering factors affecting the implementation of mhGAP include differing opinions concerning the normative product in the Psychiatrist Medical Society in the Philippines. Besides, as the mhGAP rollout advances, mental health treatment focuses more on providing medication, lacking a psycho-social component. Counselling is yet to be strengthened. This situation contrasts with the context of early mhGAP implementation, where patients were provided mainly psycho-social support in emergency settings due to a lack of medication.

COVID-19 Intra-Action Review

Brief description of the product

The COVID-19 intra-action review (IAR), published in July 2020, provides an opportunity to review the functional capacity of the public health and emergency response systems at the national and subnational levels and to identify practical areas that need immediate remediation or can be targeted for sustained improvement of the outbreak response. The scope of the COVID-19 IAR can be quite broad, and cover one or several pillars, such as country-level coordination, planning and monitoring; surveillance, case investigation and contact tracing; points of entry; the national laboratory system; case management and knowledge sharing about innovations and the latest research; operational support and logistics in the management of supply chains and the workforce; maintaining essential health services during the COVID-19 outbreak; gender, equity and human rights among others.

How were country offices involved in the development of the tool?

The guidance for developing a country COVID-19 IAR was developed early on in the pandemic and was rapidly put together at HQ level to respond to the need to guide the countries' COVID-19 response. To ensure timeliness, the COVID-19 IAR methodology was not first piloted in some countries but made available to all countries, without attempting to make it perfect first. A first version was shared with regional offices, as well as the Incident Management Support Team (IMST) pillars in HQ. The guidance was then refined and a version for publication was developed. The guidance has then undergone a few updates throughout the pandemic, this time based on experience from countries in using the tool. For example, an addendum was published to encourage countries to conduct a stand-alone review of vaccination. The role of WCOs in the development of the tools seems to have been limited, and mostly focused on the facilitation of the exercise at country level.

How is it expected that countries use the tool?

The IAR is a country-led exercise. Countries are expected to embed the methodology in their performance improvement practice, as well as to identify support needs from WHO across the three levels. The guideline was published in July 2020, and countries started using it right away. The uptake was very good. At the time of this evaluation, 147 countries had used it. Some countries have selected only one pillar while others have used it to review their COVID-19 response overall, and some countries have run the COVID-19 IAR at national as well as sub-national level. Its format and process have varied among countries according to different factors, such as the way the COVID-19 response was structured, the COVID-19 epidemic profile, the country context and resources. Countries have used the IAR to showcase their response to COVID-19, as well as to facilitate the review of their COVID-19 plan.

What are some expected results from implementing this tool?

These is no formal way of monitoring the implementation of COVID-19 IAR, but WHO WHE has conducted activities to understand how the guidance is improving the response. This was captured in particular through identifying corrective actions for course correction of the COVID-19 response, experiences shared at global conferences, a global analysis of COVID-19 intra-action reviews and some publications from countries. Some results can be less tangible and difficult to quantify. For example, COVID-19 IAR stimulated countries to review their response through a multi-stakeholder process, providing guidance where needed. It allowed sharing of learning in countries, and that process was effectively facilitated by WHO, but also by other actors. In some countries the IAR methodology may have contributed to initiating or strengthening a culture of evaluation. Countries may use a similar approach for other emergencies beyond COVID-19. Overall, evidence on whether the IAR has contributed to

improving national responses to COVID-19 is limited, especially given the absence of a baseline, which limits the possibility of drawing inferences from comparing the contribution of different IAR.

Example of implementation of the COVID-19 IAR from case studies

Maldives has conducted two pillar-specific IARs. The first was a COVID-19 vaccine post-introduction review (c-PIE), while the second focused on laboratory services. The reviews did draw from the WHO guidance but found the length and number of questions overwhelming. Their approach to conducting a SWOT analysis yielded responses to a large number of questions in an efficient manner. The c-PIE proved extremely useful, making recommendations in five main areas – human resource gap, cold chain, digital data reporting, SOPs and guidelines, and waste management. Respondents identified concrete actions to address these recommendations, for example, adding two permanent staff, including a cold chain manager, replacing all domestic fridges in health facilities, and expanding the electronic data reporting system beyond COVID-19 to cover other forms of vaccination. The review of laboratory services was used to inform a funding application for a new national laboratory. One concern is that the first review focused on an area, vaccination, where the Maldives was considered to be doing well. In contrast, the second review was conducted as a requirement for consideration of a funding application for a national laboratory. This is not to say that these reviews were not valuable but rather to question whether opportunities to review other important areas, including those where progress has perhaps been less strong, have not yet been taken. Another concern relates to the size and frequency of reviews. The 2021 addendum argues that intra-action reviews should be relatively small, frequent affairs. However, other elements of the guidance (the number of questions to choose from, the number of pillars to review, and the push to involve a diversity of stakeholders) all promote a larger, less frequent undertaking. These latter factors have shaped the reviews in the Maldives. For example, the c-PIE involved an extensive team.

Guidelines for Indoor Air Quality: Household fuel pollution

Brief description of the product

The WHO Guidelines for Indoor Air Quality: household fuel pollution were published in 2014. They focus on household energy use, and contribute to achieving the ambient air targets set in the Global Air Quality guidelines. They are accompanied by a Clean Household Energy Solutions Toolkit (CHEST) household package of 6 modules to adopt the guidelines into the national framework. The guidelines are targeted at public health policy-makers and specialists working with the energy, environment and other sectors to develop and implement policy to reduce the adverse health impacts of household fuel combustion.

How were country offices involved in the development of the tool?

There were three staff from WCO in the WHO Guidelines Steering Committee from India, Jordan and Ethiopia nominated by their RO to participate on their behalf. A Guideline Development Group was set up to shape the guidelines, with the participation of three members representing the users' interests. The guidelines were also externally reviewed by an External Peer Review Group. Dissemination activities to country stakeholders took place at regional level in SEARO and AFRO. WCOs seem to play a minor role in supporting adaptation and implementation in countries given the lack of staffing in this area. While regional offices may support by providing funding for consultancies, technical assistance to countries in this area may be directly provided from HQ because of the lack of capacity at regional and country levels.

How is it expected that countries use the tool?

The guidelines are designed to have different practical uses: to inform and influence energy planning, to promote the integration of indoor air pollution concerns into clinicians' practice and public health policies, for different actors to conduct advocacy on promoting clean cooking, and to provide guidance to stove designers and producers. WHO at country level is expected to support the diffusion and adaptation of the guidelines through conducting a stakeholders' mapping and convening a multi-stakeholder workshop.

What are some expected results from implementing this tool?

The indoor air quality guidelines is expected to contribute to reducing the number of households relying on polluting household fuels and technologies for cooking, heating and lighting. The guidance mentions over three billion people relying on polluting fuels and technologies. One key factor that promoted the implementation of the guidelines by countries is the fact that countries have committed to achieving WHO guideline values through SDG 7 indicator 7.1.2 on clean fuel technology. This was valuable in terms of raising awareness around WHO guidelines, integrating them into policies in different sectors, coordinating clean cooking efforts, as well as securing funding and cooperation from other partners working in this areas, such as the World Bank. The guidelines are also expected to influence health equity and gender equality, since household air pollution from cooking affects the poorest people, and among them women and children who are the most exposed. In addition, those groups are affected in other ways by the use of solid cooking fuels, such as spending time collecting firewood. There are also environmental issues generated by the use of polluting fuels.

Example of implementation of the Indoor Air Quality guidelines from case studies

In *Rwanda*, the energy and clean fuels agenda is a national priority. The government provides subsidies for efficient stoves and has undertaken some pilots, including cooperation with the US NIH. In the context of the WHO Guidelines for Air Quality: Household fuel combustion, WCO facilitated a multi-stakeholder workshop by a team of seven people, a consultant, and HQ and AFRO staff, resulting in the identification and dissemination of recommendations for specific sectors. WHO and the Rwanda Biomedical Bureau (RBC) undertook an awareness campaign in five districts, with community based health workers identified for training. However, adapting the guidelines to the country context has stalled due to a lack of funds, with a potential role of AFRO and HQ to provide support. Besides, the WCO currently lacks an expert on air pollution following the removal of the focal point position during the functional review of the office, and the area now depends on RO support. The evaluation found that activities have been undertaken for integrating some of the WHO Guidelines for Air Quality: Household fuel combustion indicators in the HMIS, DHS, and the latest census. The Joint programme fund for the UN on climate change provides an opportunity for the WCO and RO to collaborate in implementing the guidelines.

Annex 6:

Country case studies

Ethiopia Country Case Study

Introduction

This report presents the findings from a virtual case study conducted in Ethiopia in the frame of the Evaluation of WHO's normative role at country level. It aims to investigate how selected normative products have been used and to what effect, and to identify the role of WHO at the three levels in supporting the adaptation, use and monitoring of those products. The following normative products were included:

- 22nd WHO Model List of Essential Medicines (EML)
- HEARTS, Technical package for cardiovascular disease management in primary health care
- Guidance for conducting a country COVID-19 intra-action review (IAR)

Country context

Key figures regarding Ethiopia's health system:

- UHC coverage Index: 35.14 (GHO, 2021)
- Medical doctors per 10 000: 1.04 (GHO, 2020)
- Current Health Expenditure as % of GDP: 3.48% (GHO, 2020)

22nd WHO Model List of Essential Medicines

Adaptation /uptake Ethiopia is one of the HEARTS programme implementation countries, where the whole HEARTS package is implemented, including drug and dose specific protocol, making medicines accessible, using a team-based approach, providing WHO with numbers on treatment and controlled from the implementation sites. The 2014 national EML was revised in Ethiopia in 2020 based on WHO's 2019 EML. WCO actively supported the revision through a multi-sector and multi-stakeholder Technical Working Group. AFRO supported the process by developing the ToR and providing process support step by step. The revision was undertaken in close coordination with the Ethiopian Food and Drug Authority, NGOs, and hospitals, under the guidance of WHO technical experts.

Use/Implementation Each of about 4000 health facilities in the country is supposed to develop its own EML, based on the national EML, due to different local conditions. This process seems highly resource-intensive and lengthy in the context of general MoH budget shortfalls. The Ethiopian Food and Drug Authority and WCO supported the development of a list of medicines for community pharmacy and retail outlet. Currently, there is a deficit in medicines available due to the political situation in the country. AFRO and HQ support access to essential medicines in Ethiopia based on the EML. The Sixth Edition

2020 EML serves as a basis for standard treatment guidelines, the health insurance medicines list and the pharmaceutical procurement list of Ethiopian Pharmaceutical Supply Services. Regarding antibiotics, considerable similarities show between the WHO 2019 EML and the Ethiopian EML. In 2023/24, the MoH plans to revise the national EML again to achieve a biennial revision cycle, which was missed in previous years. A Technical Working Group approach with WCO is again foreseen, building on the good practice in 2020. WCO supported the EML process with two pharmacists and one expert on antimicrobial resistance. The Technical Working Group for revising the national EML benefitted from WHO capacity building. However, WCO faced financial shortcomings to support MoH for EML awareness raising and dissemination.

Impact/monitoring The main aim of the national EML is access to and affordability of essential medicines. Accessibility is currently challenging. The EML's focus is on primary health needs for communities to avoid public expenditure on medicines that are not essential. Once medicines are registered based on the EML, they can be imported and locally manufactured if funds are available. WCO and MoH check the availability of essential medicines in the health facilities. A national supply agency is tasked to ensure essential medicines are available in health facilities. For Ethiopia, using the WHO's EML accelerates the development of a national EML and frees up resources for primary health care units' needs. At the same time, it guides for the rational use of medicines, including indications on use and aims to address critical issues of patients' safety. Facilitating factors include the fact that standards are available at the national level, which helps to cascade down the EML to the health facility level. Besides, the EML is politically endorsed. While the WCO has human resources available to support the country on EML matters, budget issues affect its ability to support access to all medicines listed on the EML. Limitations in the national budget and security issues also affect the availability of medicines listed on the EML in community health facilities. As the MoH's national procurement agent, the Pharmaceutical Procurement Supply Service has its own procurement list, which is not identical to the national EML. Internal inconsistencies in MoH concerning EML use are emerging.

Gender/health equity 80% of the country’s communities are in rural areas, where access limitations are more acute than in urban settings.

HEARTS: Technical package for cardiovascular disease management in primary health care

Adaptation /uptake In Ethiopia, HEARTS is implemented in combination with the WHO package of essential noncommunicable (PEN) disease interventions. PEN was adapted to the country context in 2014/2015, followed by the HEARTS in 2015 and 2016. WCO supported adapting HEARTS protocols as well as WHO PEN with an MoH technical working group. WHO HQ and AFRO undertook missions, launched joint planning and coordination meetings, and supported the country with technical assistance on how to implement and scale up the use of HEARTS.

Use/Implementation WCO and other development partners support health facilities with HEARTS-based protocols. Of about 4000 health facilities nationally, 300 use them. In 87 health facilities supported by a Norad-funded project, doctors use HEARTS-based protocols and training materials for diagnosis and treatment, including hypertension screening. For example, WCO undertakes routine programme follow-up for WHO PEN/HEARTS in all health facilities supported by the Norad-funded project. The Norad initiative also includes involvement of health facility pharmacy professionals in NCD care. To support this component, the WCO led the development of pharmacy professional training materials focused on health conditions and pharmaceutical supply chain. This served to engage pharmacy professionals in patient counselling, adherence, follow-up and synchronised health information between clinicians and pharmacy professionals. The WCO support also helped ensure prioritisation of protocol recommended NCDs medicines and sustainable quantification, requisition, procurement, and availability of essential

medicines. WCO plans to partake in a mid-term review on the sites of the Norad project. Other partners support other health facilities. However, a review of the national state of HEARTS implementation is missing.

Impact/monitoring Based on supervision visits by WCO, there seems to be improvement in adherence to HEARTS-based protocols and better access to hypertension medicines. However, there are still high dropout levels from care in the screening, enrolment, and control continuum. Still, there is a lack of broader evaluative evidence, which should be filled by the mid-term evaluation of the Norad programme. Several factors affect the implementation of HEARTS-based protocols in the country. Those include the limited availability of medicines such as hypertension drugs, the geographic distance to get to health facilities, MoH budget shortfalls, which result in the need for donor procurement of drugs, shortcomings in the capacities of health workers and high staff turnover, uneven ownership of HEARTS-based protocols at federal, provincial and community level and the suboptimal general awareness of communities and slow behaviour change, as HEARTS is perceived as an urban agenda. Finally, the armed conflict in the country and the disruption of service delivery in several health facilities affect the application of HEARTS-based protocols.

Gender/health equity: About 70% of care for NCDs is covered by patients out of pocket, access to HEARTS-related drugs and medicines is limited and excludes poorer populations, particularly women.

Guidance for conducting a country COVID-19 intra-action review (IAR)

Adaptation /uptake The global COVID-19 IAR guidelines in Ethiopia were adopted to meet the country's needs, focusing on the vaccination pillar. Six months after introducing the vaccination to the country, the WCO supported MoH with the IAR. Based on the technical documentation from AFRO, WCO provided technical support during training in the capital city, Addis Ababa, with about 12 facilitators from WCO and partners such as CHAI and UNICEF. WCO spent two days training participants and three days undertaking the IAR.

Use/Implementation The IAR identified key challenges and best practices after its rollout at the national and sub-national levels. WCO discussed results with Health Immunization Officers in MoH. The IAR showed regional variation in the vaccine distribution as MoH officers used digital tools for tracking and analysing vaccination results. WCO and MoH initially held daily review meetings for this purpose. The COVID-19 IAR was conducted twice between June 2020 and June 2022.

Impact/monitoring Following the implementation of recommendations of the IAR, the vaccine uptake is reported to have improved.

Gender/ health equity All immunization officers were invited to the IAR and the number of IAR participants was, in general, equally distributed between by gender.

Conclusions

On the EML: Stakeholders identified the following actions for the WCO to strengthen the EML in Ethiopia

- Support of a Technical Working Group for the 2023/2024 revision of the EML, including capacity building.
- Experience sharing good practice examples in other countries in Africa.
- Financial support for the adoption of the national essential medicines list, standard treatment guidelines, health insurance medicines list and the subsequent implementation: advocacy with different stakeholders and at the facility level with health care providers.
- WCO to advocate for the EML revision takes place at least every two years.

On HEARTS: WCO should support a multidisciplinary approach and engage management in training for awareness rising at regional and federal levels concerning the utility of HEARTS-based protocols, and further facilitate their application. The medical supply chain procurement process also needs additional technical assistance, and WCO could lobby the government for health taxes for unhealthy diets, such as sugary soft drinks, to collect funding for NCDs medicines.

On COVID-19 IAR: The following challenges should be addressed in similar exercises looking forward:

- Taking into account high turn-over in health workers.
- Improving communication from the sub-national to the national level.
- Having a standardised reporting template.

Jordan Country Case Study

Introduction

This is a summary report of a case study in Jordan conducted for the evaluation of WHO normative guidance at country level. Evidence presented here was generated through desk review, interviews with key stakeholders in Jordan and visits to health facilities. The case study focused on five of six normative products identified for the evaluation, namely:

- 22nd WHO Model List of Essential Medicines 2021
- Guidance for conducting a country COVID-19 intra-action review (IAR)
- HEARTS, Technical package for cardiovascular disease management in primary health care
- Mental Health Gap Action Plan (mhGAP) Intervention Guide
- WHO Guidelines for Air Quality: Household fuel combustion (2014)

Country Context

The WHO Country Cooperation Strategy noted that the Jordanian health system delivers comprehensive public healthcare services to the majority of its citizens at a comparatively moderate cost. While details are beyond the scope of the case study, the system is complex with many public and private providers. Having a comprehensive health information system has been identified as key for monitoring the use and impact of normative products. While Jordan has some parts of such a system, it does not yet have a fully comprehensive and interconnected health information system. Key figures:

- UHC coverage Index: 64.91 (GHO, 2021)
- Medical doctors per 10 000: 25.13 (GHO, 2019)
- Current Health Expenditure as % of GDP: 7.47 (GHO, 2020)

Normative Guidance in General

In general, WHO standards and normative guidance are highly respected in Jordan, particularly within the Ministry of Health (MOH) which has a strong and longstanding relationship with WHO. However, guidance issued by WHO is primarily relevant to the public sector, in general, and MOH, in particular, with limited recognition of the pluralistic nature of the health system. While the technical quality and global perspective of the guidance are valued, there are concerns that, in many cases, it may be too theoretical and not effectively lead to change in Jordan, if there is no clear programme for implementation, resources to promote change, and a monitoring system to assess the use and impact of the guidance.

22nd WHO Model List of Essential Medicines

WHO has produced an Essential Medicines List (EML) since 1977 with the current version produced in 2021. Based on 2017 data, WHO has a global database of essential medicines, which gives the number of essential medicines on the national list and the percentage that are on the WHO EML. However, there is no system to regularly update this database. According to this database, there were 590 medicines on the Jordanian EML of which only 287 (49%) were on the WHO EML.

The Jordan Food and Drug Administration (JFDA) produces a national EML based on the WHO EML. JFDA also produces a rational drug list (RDL). While the public sector and public procurement agency, the Government Procurement Department (GPD), are reported to follow these lists, there is no requirement for the private sector to do so. The evaluation team compared national EML and RML with the WHO EML and found that almost all medicines on the WHO list (511 of 562, 91%) appear in the Jordanian EML. However, almost one quarter (141 of 652; 22%) of medicines on the Jordanian EML are not on the WHO EML.

Only just over half of medicines (273 of 471; 58%) on the WHO EML appear on the Jordanian RDL. Almost two thirds (504 of 777; 65%) of medicines on the Jordanian RDL are not on the WHO EML.
While there is the prospect that the WHO EML could contribute to improved health outcomes by promoting more rational and cost-effective prescribing there is little evidence that this is happening in Jordan. There are three main reasons.

- The WHO EML is considerably diluted in translation to national EML and, in particular, in translation to the rational drug list. In addition, it is unclear the extent to which the rational drug list is used to drive rational procurement and prescribing, although it is reported to be used as the basis for public procurement. There have been no studies in Jordan to assess the extent of rational drug use in either the public or private sector.

- MOH is largely focused on health care provided by the public sector, in general, and by its own clinics, in particular. Even if medicines were procured and prescribed rationally in MOH clinics and the public sector more broadly, this would not necessarily mean very rational drug use in the country because of the large private sector and the widespread availability of medicines without prescription. There is a law in place which prohibits the sale of medicines without prescription, but this is not enforced.

- There is no system in Jordan to monitor the extent of use of essential and non-essential medicines.

Guidance for conducting a country COVID-19 intra-action review (IAR)

In July 2020, WHO published guidance on conducting a COVID-19 IAR, which included ten tools. A supplement to the guidance was issued in April 2021. Jordan has conducted a number of IARs. One was led by WHO, while, for the others, WHO contributed to initiatives led by other actors. The first was conducted in March 2021 as a collaboration between WHO and MOH. It focused almost entirely on MOH. The second was led by the Civilian Research and Development Foundation (CRDF) and was conducted about one year later. It had more of a multisectoral focus and reported to the National Centre for Security and Crises Management (NCSCM). This review confirmed many of the findings of the earlier WHO-facilitated review and showed that relatively little action had been taken. In addition, the World Bank supported a Pandemic Preparedness Review. While this had many of the features of an IAR, its focus was broader than COVID-19.

IARs have been implemented in Jordan and they have sought to follow the WHO guidance. However, while staff of different agencies have worked effectively together, those agencies (WHO, CRDF/CDC and the World Bank) have found it necessary to support their own reviews. A more coordinated approach would have been more cost-efficient. Key limitations of the WHO-facilitated review were that it focused on MOH only and the team was drawn entirely from MOH and WHO, in contrast to the approach advocated by the guidelines which call for the participation of a wide range of stakeholders. The CRDF-facilitated review was better in this regard. Use of these reviews has been limited. MOH respondents reported that they lacked resources to respond to the recommendations. There were also concerns that MOH, and particularly its Crisis Management Directorate, had been largely marginalized with the national response to COVID-19 coordinated by NCSCM.

The recommendations of the WHO-facilitated IAR were not monitored in the way recommended in the guidelines. No specific follow-up group, as mandated by the guidelines, was established. There has been some follow up of earlier reviews in later ones. In addition, WHO country office staff have endeavoured to monitor progress in implementing recommendations.

The 2021 addendum argues that intra-action reviews should be relatively small, frequent affairs. However, other elements of the guidance (the number of questions to choose from, the number of pillars to review and the push to involve a diversity of stakeholders) all promote a larger, less frequent undertaking. These latter factors have shaped the reviews in Jordan. For example, the WHO-facilitated review had a team of 57 from two stakeholders only.

HEARTS: Technical package for cardiovascular disease management in primary health care

HEARTS is a WHO technical package providing a strategic approach to improve cardiovascular health. The package originally consisted of six modules with a seventh, on diabetes, added in 2020. Following alarming results from a 2019 stepwise survey, MOH requested support to implement HEARTS to strengthen the response to cardiovascular disease risk factors, primarily hypertension and diabetes, at primary health care level. At the time of this case study, a total of 39 training workshops had been conducted nationwide with around 700 health professionals trained. While the main focus of HEARTS has been on MOH services, some training has been provided through Caritas. There are plans to expand HEARTS to Islamic Relief, Jordan and UNRWA services by the end of 2023. Although WHO shared the guidelines and training package with the private sector and there have been some preliminary discussions, there are currently no plans to promote HEARTS in the private sector. One key aim of HEARTS is to change the "*patient pathway*" in health care centres so that all patients have vital signs screening and cardiovascular risk scoring by a nurse before seeing a doctor. However, it is difficult to make this change because of limited staff and infrastructure. Other key steps include granting more prescribing authority to GPs for antihypertensive and antidiabetic medication, ensuring availability of essential medicines and equipment and fostering team-based approach to health care.

One key reason for the success of HEARTS in Jordan has been the availability of EU funds through Spanish Cooperation to support the national rollout of training. This has been crucial for all aspects of implementation including the provision of training and follow-up. Other success factors identified by the WHO country office include political will, WHO technical support and adaptation of the package to the local context.

It has proved difficult to collect data for key HEARTS indicators because of the shortcomings of Jordan's Health Information System. However, a 2022 pilot study published in the National Library of Medicine showed that, among 852 patients with hypertension, rates of uncontrolled blood pressure fell over four months from 71.5% to 29.1%. Older patients (>50 years) were more likely to have controlled blood pressure after four months than younger patients. However, WHO country office staff expressed some reservations over this study because they considered there were not clear monitoring indicators as communicated by WHO and the length of follow-up (four months) was considered short. Nevertheless, these figures have been included here in the absence of other figures.

mhGAP Intervention Guide

The WHO Mental Health Gap Action Programme (mhGAP) aims to scale up services for mental, neurological and substance use disorders, particularly in low- and middle-income countries. A WHO report documented its use in more than 100 countries. mhGAP has been implemented in Jordan since 2010. The main focus has been on integrating mental health into PHC with an estimated 30% of MOH primary health centres now providing mental health services. mhGAP has also been applied in UNRWA and IMC health facilities. However, while the mhGAP implementation guide is strong in terms of technical content related to mental health disorders, there are concerns that material on how to implement the programme is relatively general and brief, although it is reported that there were improvements in this area between the production of version 1 and version 2. Nevertheless, although version 2 of the manual does cover the mhGAP-IG implementation process, including the mhGAP-IG implementation team, situation analysis, implementation plan, adaptation, training and supervision, and monitoring and evaluation, these are all covered in eight pages as compared to 132 pages for specific mental health conditions.

Reported benefits of mhGAP include people being seen faster and closer to home, more people being reached and more appropriate use of secondary and tertiary services. Stigma is reportedly reduced although some respondents reported that stigma in local communities may mean some people are reluctant to seek help for mental health issues in primary care centres. Assessments of benefit are largely ad hoc and qualitative. mhGAP-IG lacks a clear monitoring and evaluation framework. Guidance on monitoring in mhGAP materials appears to assume a comprehensive and interconnected national health information system, which is not the case in Jordan.

WHO has provided some resources to support implementation of mhGAP, including through supporting training and supervision. However, human resources have been supplied by MOH and other health care providers.

WHO Guidelines for Air Quality

In 2014, WHO issued health-based guidelines on clean fuels and technologies for household cooking, heating, and lighting. There are concerns that this guidance is quite dated and the evidence for the effects of household air pollution is weak compared to the effects of ambient air pollution. At the global level, WHO does not consider this a priority area for Jordan. Respondents considered that this may be because focus on polluting fuels for cooking is not a major issue in Jordan. However, polluting fuels are used for heating, particularly in rural areas and there are concerns about the effects of smoking on household air quality.

These guidelines have not yet been applied in Jordan. Issues are that there is no government department with responsibility for this area and evidence concerning household air quality in Jordan is limited. However, a study of air quality in eight households in Jordan found very high levels of air pollution. The main sources of air pollution were heating, cooking, and smoking.

Conclusions

Four of the guidelines identified for this evaluation have been used in Jordan. The WHO EML has been used for many years as the basis of the Jordanian EML and rational drug list. Both HEARTS and mhGAP have been implemented as programmes in Jordan. While these programmes have largely focused on MOH services, mhGAP has also been implemented in IMC and UNRWA facilities. WHO guidance on COVID-19 IARs has been used as the basis for a number of relevant reviews in Jordan. However, coordination and use has been sub-optimal. The WHO-supported review focused almost entirely on MOH. All reviews have been relatively large and slow events in contrast to some of the expectations of the guidelines of small, frequent reviews. Overall, it is difficult to see the tangible benefits of applying these guidelines because of the absence of relevant monitoring systems and the lack of a comprehensive and interconnected national health information system.

In terms of specific normative products, it is difficult to conceive that the WHO EML has had much concrete benefit as there does not seem to be any system to translate lists into more rational prescribing and procurement. In addition, large parts of the Jordanian health system do not follow either the national EML or the rational drug list.

Similarly, it is unclear what benefits the COVID-19 IAR guidelines have had. Yes, such reviews have been conducted, but it is much less clear what concrete actions have resulted from these reviews, although there have been some, for example, using the IARs as the basis for a recent Pandemic Fund proposal. In addition, the large, set-piece reviews that have been conducted are not the sort of small, frequent, action-oriented reviews envisaged in the guidance.

Anecdotally, both mhGAP and HEARTS, which have been relatively well-implemented in Jordan, are reported in stakeholder interviews to have had positive benefits resulting in greater access to services, faster and more effective treatment, and more appropriate use of secondary and tertiary services. Stigma may also be reduced in relation to mental health although some respondents questioned the extent to which stigma has been reduced because people may be reluctant to seek mental health care in their own community. The level of evidence through systematic monitoring is low, with the possible exception of a pilot study of HEARTS, which showed a dramatic reduction in levels of uncontrolled hypertension.

Maldives Country Case Study

Introduction

This is a summary report of a case study in Maldives conducted for the evaluation of WHO normative guidance at country level. The case study focused on four of six normative products identified for the evaluation, namely:

- 22nd WHO Model List of Essential Medicines 2021
- Guidance for conducting a country COVID-19 intra-action review (IAR)
- HEARTS, Technical package for cardiovascular disease management in primary health care
- mhGAP Intervention Guide

Country context

Development of the health system in Maldives has not kept pace with economic development. While overall health spending is high, spending efficiency is low, with little spent on prevention and primary health care. According to Maldives Health Statistics 2020, almost two thirds of medical professionals were expatriates (724 of 1135, 64%) and 41% of nurses (1223 of 2987). Rates of staff turnover are high. Most health services are provided through government facilities. However, the referral system is not well developed, with many patients accessing secondary and tertiary facilities directly. The private sector is well developed, particularly in Male. There is a national health insurance scheme, Aasandha. There is, however, no comprehensive national health information system. There are separate fragmented systems in Aasandha, secondary and tertiary hospitals and in national programmes. Some of these systems use proprietary software. All required medicines in the Maldives have to be imported. MOH does not procure medicines directly but through an MOU with the State Trading Organisation. Key figures are:

- UHC coverage Index: 61.42 (GHO, 2021)
- Medical doctors per 10 000: 21.61 (GHO, 2019)
- Current Health Expenditure as % of GDP: 11.35 (GHO, 2020)

Normative Guidance in General

In general, WHO standards and normative guidance are highly respected in Maldives, particularly within the Ministry of Health (MOH) which has a strong and longstanding relationship with WHO. The WHO country office and MOH are co-located. Guidance issued by WHO is primarily relevant to the public sector with less relevance to the private sector. The technical quality and global perspective of the guidance are valued. However, there are concerns that the guidance may be too theoretical and may not lead effectively to change in Maldives without a clear programme for implementation, resources to promote change and a monitoring system to assess the use and impact of the guidance.

22nd WHO Model List of Essential Medicines 2021

WHO has produced an Essential Medicines List (EML) since 1977 with the current version produced in 2023. Based on 2017 data, WHO has a global database of essential medicines which gives the number of essential medicines on the national list and the percentage that are on the WHO EML. However, there is no system to regularly update this database. According to this database, there were 535 medicines on the Maldivian EML of which only 243 (45%) were on the WHO EML.

The Maldives Food and Drug Administration (MFDA) produces a national EML based on the WHO EML. Medicines which are on the WHO EML can be approved for use in Maldives using an approach that is simpler and cheaper than full registration. This is important given that Maldives constitutes a relatively small medicines market. The evaluation team compared national EML with the WHO EML and found that just over half of the medicines on the WHO list (254 of 479, 59%) appear in the Maldivian EML. A slightly higher proportion (254 of 427; 59%) of medicines on the Maldivian EML are on the WHO EML. There are particular issues with antibiotics with some classified differently on the AWaRe system in the WHO EML and in the Maldivian EML.

While there is the prospect that the WHO EML could contribute to improved health outcomes by ensuring essential medicines are procured and prescribed, this is largely not happening. A 2014 Situational Analysis of Medicines in Health Care Delivery concluded that, although there is a national EML, "*it is not actively used or promoted*". The main problems are:

- There is poor congruence between the WHO EML and the NEML in Maldives. Only just over half the medicines are on the WHO NEML and vice versa.
- There are few, if any, mechanisms to use the NEML as a basis for rational procurement and prescription of medicines in Maldives. There is an expectation that pharmacies stock essential medicines but there is no requirement that doctors prescribe essential medicines or that Aasandha reimburses essential medicines only. There has been little, if any, training of doctors on the use of essential medicines and national treatment protocols exists for few, if any, conditions. Attempts by MFDA to introduce generic prescribing and maximum price levels have been unsuccessful.
- There is no system in Maldives to monitor the extent of use of essential and non-essential medicines.

Guidance for conducting a country COVID-19 intra-action review (IAR)

In July 2020, WHO published guidance on conducting a COVID-19 IAR which included ten tools. A supplement to the guidance was issued in April 2021. Maldives has conducted two pillar specific IARs. The first took the form of a COVID-19 vaccine post-introduction review (c-PIE) while the second focused on laboratory services. The reviews did draw from the WHO guidance but found the length and number of questions overwhelming. The approach they took of conducting a SWOT analysis yielded responses to a large number of questions in an efficient manner.

The c-PIE proved extremely useful making recommendations in five main areas – human resource gap, cold chain, digital data reporting, SOPs and guidelines, and waste management. Respondents identified concrete actions taken to address each of these recommendations, for example adding two permanent staff including a cold chain manager, replacement of all domestic fridges in health facilities and expanding the electronic data reporting system beyond COVID-19 to cover other forms of vaccination. The review of laboratory services was used to inform a funding application to EIB for a new national laboratory.

One concern is that the first review focused on an area, vaccination, where Maldives was considered to be doing well, while the second review was conducted as a requirement for consideration of a funding application for a national laboratory. This is not to say that these reviews were not valuable but rather to question whether opportunities to review other important areas, including those where progress has perhaps been less strong, have not yet been taken. Another concern relates to the size and frequency of reviews. The 2021 addendum argues that intra-action reviews should be relatively small, frequent affairs. However, other elements of the guidance (the number of questions to choose from, the number of pillars to review and the push to involve a diversity of stakeholders) all promote a larger, less frequent undertaking. These latter factors have shaped the reviews in Maldives. For example, the c-PIE involved a very large team.

HEARTS: Technical package for cardiovascular disease management in primary health care

HEARTS is a technical package providing a strategic approach to improve cardiovascular health. The original manual consisted of six modules with a seventh, on diabetes, added in 2020. HEARTS is being promoted in WHO's South-East Asia Region as part of SEAHEARTS, which also includes initiatives on tobacco control and elimination of industrially produced trans fats. A 2021 stepwise survey identified NCDs as major causes of mortality in Maldives.

The major challenge facing Maldives in relation to the prevention, diagnosis, and management of NCDs is that the primary health care (PHC) system is not organized in the country. As a result, levels of community trust in PHC services are low with many people going directly to secondary and tertiary services, particularly in Male. In addition, there is currently no comprehensive HMIS in Maldives. Although elements of such a system do exist, they are fragmented, and they link poorly with each other.

Therefore, WHO is supporting MOH to reorientate the health system towards primary health care. This approach is being piloted in Faafu atoll and includes elements of HEARTS and mhGAP. One challenge is that Maldives does not have a well-developed, interconnected health information system. So, part of the pilot is to introduce a PHC registry. However, given the early stage of implementation of this programme, it is not possible to assess definitively how well this will work out in practice at this stage.

mhGAP Intervention Guide

The WHO Mental Health Gap Action Programme (mhGAP) aims to scale up services for mental, neurological and substance use disorders, particularly in low- and middle-income countries. A WHO report documented its use in more than 100 countries. mhGAP-related training started in Maldives in 2014 as an initiative by the NGO, the Mental Health Awareness Foundation (MHAF) Maldives. Although this initiative was not sustained, the training was reintroduced by MOH from 2019. This initiative was strongly supported by the Centre for Mental Health at Indira Gandhi Memorial Hospital as part of an overall aim to extend mental health services across Maldives.

However, progress has been relatively slow. The mhGAP material is reported to be very content heavy, with limited focus on key issues, such as how to deliver training and how to integrate mental health into PHC in practice. In addition, elements of the material were not considered very relevant to the Maldives. Considerable time and effort have been needed to try to contextualise the material. While technical assistance from WHO has been useful overall, some has been less useful than it might have been, e.g., the provision of "*master training*", using consultants from the South-East Asia Region. Attempts to build a cadre of mhGAP trainers have had relatively limited success. Factors include time gaps between training initiatives, a limited pool of people with any training experience and a high turnover of people trained.

The greatest concern regarding mhGAP in Maldives is that it will simply be a training programme with few, if any, tangible benefits in practice. It is difficult to know if this is or is not the case as there is no clear system planned or in place for monitoring mhGAP beyond the number of people trained. Measures to address this concern might include adjusting the training provided to focus more on the practicalities of how mental health might be introduced into PHC by the people being trained in the places that they work. It would be essential to have some form of follow-up to the training including visits for supportive supervision. Currently, these elements are not part of the programme.

Conclusions

Four of the guidelines identified for this evaluation have been used in Maldives. The WHO EML has been used for many years as the basis of the Maldives National EML. Both HEARTS and mhGAP have been implemented as programmes in Maldives.

However, HEARTS is currently being piloted in one atoll only as a way of reorientating PHC. mhGAP is also part of that pilot but otherwise has largely been limited to provision of training. WHO guidance on COVID-19 IARs has been used as the basis for two pillar-specific reviews in Maldives. Reviews occurred in pillars where Maldives was performing well (immunization) or as a requirement of a particular funding application (laboratory services). Both reviews were relatively large and slow events in contrast to some of the expectations of the guidelines of small, frequent reviews.

It is difficult to see the tangible benefits of applying these guidelines because of the absence of relevant monitoring systems and the lack of a national health information system. It is difficult to conceive that the WHO EML has had much concrete benefit, as there does not seem to be any system to translate lists into more rational prescribing and procurement. There has been little education of policy makers, prescribers or the public, and Aasandha does not only reimburse essential medicines. Initiatives by MFDA to promote generic prescribing and maximum prices were opposed and shelved. Two pillar-specific COVID-19 reviews were conducted and there are clear benefits of these. For example, as a result of the c-PIE, two permanent staff were added, including a cold chain manager, all domestic fridges in health facilities were replaced and the electronic data reporting system was expanded beyond COVID-19 to cover other forms of vaccination. At this stage, it is not clear what tangible benefits, if any, have accrued from the HEARTS and mhGAP programmes. Both are part of the PHC pilot in Faafu atoll and training in mhGAP has been provided. It is hoped that the PHC Registry will provide data on the success or otherwise of the PHC pilot, but other monitoring systems are largely absent. There are concerns about mhGAP, in particular, that it risks becoming a training programme with little, if any, tangible practical benefit.

Pakistan Country Case Study

Introduction

This report presents the findings from a case study conducted in Pakistan in the frame of the evaluation of WHO's normative guidance at country level. It aims to investigate how selected normative products have been used and to what effect, and to identify the role of WHO at the three levels in supporting the adaptation, use and monitoring of those products. The following normative products were included:

- 22nd WHO Model List of Essential Medicines (EML)
- Malaria treatment guidelines
- Mental Health Global Action Programme (mhGAP) Intervention Guide
- Guidance for conducting a country COVID-19 intra-action review (IAR)
- WHO Guidelines for Air Quality: Household fuel combustion

The HEARTS package was not included as it was not adopted in Pakistan.

Country Context

Health care delivery in Pakistan is devolved at provincial level, and the Ministry of Health holds a policy, standards setting, coordination and technical support role. Private and non-for-profit health care providers account for 70% of health care provision, although the proportion delivered by public health care is higher for in-patient services and are overseen by Provincial Health Care Commissions. Pakistan is categorised as receiving the highest level of technical assistance by WHO in the "full technical support with filed operations" category. Key figures:

- UHC coverage Index: 45 (GHO, 2021), 52 according to MOH in 2022
- Medical doctors: 10.84 per 10 000 (GHO, 2019)
- Current Health Expenditure as % of GDP: 2.95 (2020)

Model Essential Medicines List (EML)

Adaptation/uptake The WHO Model List was used as a basis to update the national EML in 2022, whose previous version dated back to 2018. The 2018 EML of Pakistan was one of the most similar to the WHO Model list at the time, with a 93% match to the WHO list. This indicates that little tailoring was done to the context and needs of the country. In contrast, for the development of the 2022 national EML, a consultative process took place, involving private sector providers through technical working groups. This process focused on ensuring that the EML took into account criteria of affordability and fit to the epidemiological context. For antibiotics, the country adopted in 2023 the WHO AWaRE classification to guide the choice of antibiotics for common infections, taking into account anti-microbial sensitivity and resistance patterns. Some treatment guidelines were aligned to the national EML. The role of WHO as a convener in the process of developing and disseminating the national EML has been highly valued by the Ministry of Health (MOH). One respondent commented: *"Generally speaking, WHO's support has been phenomenal, we have been transforming ourselves with the support of WHO. The list of essential medicines was supported by WHO, and the DRAP (*Drug Regulatory Authority of Pakistan) *has used the list for the pricing mechanism in the country."*

Use/implementation There are important implementation challenges for the national EML to guide availability and use of drugs in practice. Essential medicines are not widely available in the country. A 2021 study showed that 26% of essential

medicines did not have registration status. Various declinations of the national EML have been developed to prioritise access to essential drugs. The ACCESS list of most essential drugs comprises of 250 items, and there is a shorter list of key essential medicines that are mandatory for facilities to procure. There are other lists used by different partners, such as the UN lifesaving medicines list of around 23 drugs, or USAID's very essential medicines list for maternal, neo-natal and child health. For the ACCESS list, market surveys indicate that 38% of drugs are not available in the public or private health facilities. The use of the EML to guide availability, prescription and use of drugs is further complicated by the multi-layered health system of Pakistan. Procurement and monitoring mechanisms for drugs vary between provinces. In Punjab, a province that comprises around 60% of the country's population, a Standard Medicines List of 178 items specifies which medicines must be available at primary, secondary and tertiary care levels. There is also a multiplicity of players from the private and non-for-profit sectors that may not be well integrated in the national and provincial drugs management systems. Efforts are made by provincial authorities to control private facilities' prescription practices, and private-public partnerships (PPPs) have been developed to increase access to some of the essential medicines in private facilities. Studies, however, show that antibiotics are widely available without prescriptions. In general, consumption and prescription behaviours are guided mostly by availability of drugs rather than treatment guidelines and the national EML.

Since 2018, Pakistan is a signatory to the UHC2030 Global Compact to advance UHC. WHO coordinated with the Drug Regulatory Authority of Pakistan (DRAP) and SDG3 partners to include essential medicines in the UHC essential service package. As part of its coordination role on UHC, WHO has piloted the PHC-Oriented Model of Care in two districts with funding from Canada. After documentation, the pilot may be scaled up in other districts and WHO is actively involved in resources mobilisation for this. Other partners, such as CHEMONICS/USAID support the supply chain management in Provinces, and there are disease specific funds by other partners. WHO is also part of the procurement for emergencies and vaccines campaigns. Some partners consider that WHO may be straying too far into direct funding of drugs in the country. Other partners may be best placed to contribute such as GAVI, GFTAM, UNDP or UNFPA, while WHO may focus on its comparative advantage on policy and technical advice and mobilising resources to fund and implement policies.

Impact/monitoring, Access issues to essential medicines are prominent in Pakistan, with 60% of drugs bought out of pocket. Public investment in health is low, around 1% of the country's GDP. There is a lack of demand side interventions addressing gender and social determinants of health and community engagement. In terms of monitoring, there are indicators to monitor shortages and stockouts of essential medicines. These are tracked through District Health Offices (DHO) quarterly monitoring reports and monitoring of stockouts at different levels. However, electronic records keeping are not in place at lower levels of the health system. Figure 1 shows an example extracted from the Islamabad Capital Territory DHO quarterly report.

Figure 1 Islamabad Capital Territory DHO quarterly report January -March 2023

Key Essential Medicines / Supplies

Below is the list of essential medicines / supplies whose availability in Third Party Quarterly Monitoring Services during the quarter January - March, 2022 was checked at different levels of supply chain. The same list is used in internal Quarterly Monitoring for Jan-Mar 2023 quarter with a change of Benzyl benzoate lotion instead of Syp. Cotrimoxazole for LHWs essential Medicine which was excluded from LHWs medicine list by the Ministry.

Table 1:- Lists of Key Essential Medicines / Supplies for mandatory Availability at three Levels of Public Health Supply Chain

S.NO	District Warehouses		Health Facilities (RHC + BHU)	Health House
	DHO	LHW		
1	Paracetamol Tablet 500mg	Amoxicillin Syrup 250mg	Paracetamol Tablet 500mg	Amoxicillin Syrup 250mg
2	Oral rehydration salt (ORS)	Oral Rehydration Salts (ORS) low osm. Sachet	Oral rehydration salt (ORS)	Oral Rehydration Salts (ORS) low osm. Sachet
3	Amoxicillin (trihydrate) Syrup 125 mg, 250 mg/ 5ml	Benzy benzoate lotion	Amoxicillin (trihydrate) Syrup 125 mg, 250 mg/ 5ml	Benzy benzoate lotion
4	Ciprofloxacin 500mg capsule	Albendazole 400mg Tablets Pack of 100	Ciprofloxacin 500mg capsule	Albendazole 400mg Tablets Pack of 100
5	Metformin (hydrochloride) Tablet 500mg	Zinc 20mg tablets/PAC-100	Metformin (hydrochloride) Tablet 500mg	Zinc 20mg tablets/PAC-100
6	Atenolol 50 mg	Paracetamol 500mg Tablets/PAC-1000	Atenolol 50 mg	Paracetamol 500mg Tablets/PAC-1000
7	Ferrous sulphate + Folic acid Tablet equivalent to 60mg iron + 400mcg folic acid	Fe (as fumarate) +folic 60+0.4mg tab/PAC-1000	Ferrous sulphate + Folic acid Tablet equivalent to 60mg iron + 400mcg folic acid	Fe (as fumarate) +folic 60+0.4mg tab/PAC-1000
8	Misoprostol Tablet 200mcg	Condom	Misoprostol Tablet 200mcg	Condom
9	Condoms	Oral contraceptive Pills	Condoms	Oral contraceptive Pills
10	Ethynyl estradiol + Norethiestradiol CO pills 35mcg +1mg	Printed Monthly report register	Ethynyl estradiol + Norethiestradiol CO pills 35mcg +1mg	Printed Monthly report register
11	Intrauterine Contraceptive Device		Intrauterine Contraceptive Device	

Partners that procure drugs such as anti-malarial or TB and HIV drugs also monitor availability and use of the drugs they fund. In general, the drug monitoring system in Pakistan appears fragmented between the different levels of the health system (provincial and national level with the DRAP) and different actors have parallel tracking systems. There is scope for WHO to engage the different partners in a process to rationalise the information and draw it together under the DRAP as a focal point.

Gender/health equity Respondents focused on access for the general population in their interventions, as the promotion of UHC and access to essential medicines was considered as an equity promoting intervention in itself. However, specific groups within

the general population that may be particularly excluded from health care or face specific barriers in accessing essential medicines were not generally addressed. The 2022 PHC Vital Signs report provides some analysis of inequities, based on reproductive, maternal, neonatal and child health (RMNCH) indicators analysed by population wealth quintiles. Those pointed to high equity concerns in terms of access to health services.

Malaria treatment guidelines

Adaptation/uptake The WHO Malaria treatment guidelines are adopted by Pakistan, and a draft National Malaria Care Management Guideline has been developed by the MOH Directorate of Malaria Control with the support from WHO. New guidance on malaria treatment has led to a ban on monotherapy, and the development of the test and treat protocol at national level. Respondents that are using the malaria treatment guidelines highlighted several issues relating to the dissemination and usefulness of the guidelines. They expressed the need for those to be translated in local languages, as well as to have access to more summarised versions that would be easier to refer to in a clinical setting. Also, the pre-service curricula for health workers are not aligned to recent malaria case management treatment guidelines, and there would be need to disseminate those guidelines to the private sector. Respondents interviewed were not aware of the new WHO Malaria Toolkit app.

Use/implementation Key funders for malaria treatment in Pakistan include the GFTAM and WHO; the Global Fund aligning its funding and procurement of anti-malarial drugs to the WHO recommended treatment protocols. The Global Fund has supported the training of clinicians from all levels of the public health system down to rural health centres through a cascade training model. A gap remains for private service providers, who may only be trained and participate in the programme if engaged in a PPP. Overall, because of the devolved health care services in Pakistan, the coordination of the malaria response appears weak at national level, with disparate situations between the provinces. While Punjab is considered to be in the elimination phase, Sindh Province stakeholders pointed out the lack of access to malaria case management at the community level. Funders such as GFTAM work through private or non-for-profit organizations as principal recipients that function outside the public health system. A provincial health manager commented: *"they implement on their own and share data once a month with me. If things get very serious, the ask the Provincial Government to support coordination with District Health authorities".* WHO has supported a sophisticated malaria outbreak response during the recent floods emergency, monitoring cases daily, and implementing strategies such as mass drug administration to control outbreaks. In Baluchistan, districts that were most affected by the floods reported positivity rate as high as 55% is some areas. In this setting, WHO has spearheaded weekly meetings with Provincial Health Directors gathering DHOs, WHO, GFTAM principal recipient and UNICEF. In addition, they organised treatment of suspected cases, setting up 500 medical camps for malaria treatment.

Impact/monitoring In 2022, there were about 300 000 people suffering from malaria in Pakistan with half of the districts of Pakistan heavily affected by seasonal increments. Only Punjab province has reached elimination phase, but cases are reported to be on the rise in other provinces. In this context, WHO has shifted to an emergency type of response to malaria, in order to rapidly identify and address outbreaks. WHO hired 57 malaria experts to support the emergency malaria response during the floods. They also worked to strengthen the health information system with daily reporting of cases from facilities and setting up an automatic incidence warning system. There are still gaps in terms of the reporting of cases, in particular from private health care providers that have no incentive to do this.

Gender/health equity There is no strategy for high-risk populations for malaria in Pakistan. In order to improve access to malaria case detection and treatment in remote areas, WHO has promoted the integrated community case management (ICCM) approach, training women health workers (LHWs) on diagnosis and case management guidelines in 17 districts.

However, because LHWs are mostly concentrated in urban areas, WHO is looking to provide malaria care in hard-to-reach areas, especially in Baluchistan through a pilot programme to train community health workers to refer suspected malaria cases to health facilities.

mhGAP Implementation guide

Adaptation/uptake In Pakistan, the mhGAP was adopted in 2014. A task force was formed with the facilitation of WHO to strengthen the policy framework on NCDs and mental health, leading to the NCDs and Mental Health National Action Framework (2021-2030). A draft National MH Action Plan was since developed, focusing on the integration of mental health in primary health care, and strengthening human resources for mental health through task sharing and task shifting. These documents are based on mhGAP, and, specifically, the mhGAP implementation guide followed an adaptation process using the WHO adaptation matrix, and the resulting Guide was translated in Urdu and translated back into simple English. Another important adaptation was to integrate the mhGAP in one university curriculum.

Use/implementation The mhGAP Implementation Guide was rolled out through a cascade training model. The first step was a master training, organised in 2017 by WHO and the Institute of Psychiatry, which then facilitated a training of trainers for 100 participants from the four provinces. Although the training programme on mhGAP is costed, it has not been fully funded. Mental health has been low on the priority agenda for partners and the government. Scale-up is supposed to be carried out by Provincial Health departments, but in the absence of external funding there is an important resource gap to carry out the training. There is also a structural gap in terms of specialist mental health staff to support the integration of MH in PHC, with 900 psychiatrist practitioners in the country for a population of 30 million. Psychotropic drugs are also not approved for use at district hospital level, which drastically limits their availability for use at PHC level. Following training, support supervision is meant to be carried out by the DHO, but the lack of trained human resources is again a bottleneck, since the same doctors at district level are responsible for many functions and cover many diseases. The Agha Khan Health Foundation has replicated the WHO programme in some remote areas of Pakistan, but in general the sustainability and scale-up of the programme face important resources issues.

As with other areas in Pakistan, WHO has attempted to leverage resources and programmes that were set up to respond to emergencies to strengthen the MH care system. Mental health has become more of a priority during the COVID-19, in line with the common experience with other countries that faced blooming health issues during the pandemic. In order to respond to increasing need for MH services, WHO has established a task force with other partners and supported an online training of health workers on mental health. A helpline was set up with four mental health practitioners on call. WHO also implemented a psychological First Aid training for health workers and paramedics. During the floods emergency more recently, the MH technical working group was reactivated, and psychologists and Primary Health care workers were trained on the mhGAP Implementation Guide. Despite those efforts, WCO resources to support MH core programme in the long term are highly stretched with a single officer in charge of NCDs, the risk factors such as tobacco and MH at the country office, with temporary support from a psychologist during emergencies.

Impact/monitoring MH accounts for around 12% of Pakistan's disease burden. At the time of the evaluation, there were also reports of a localised issue in Baluchistan, with over 300 suicides of young girls reported in six months. Practitioners trained on mhGAP reported that a lot of patients presented at PHC with mental health symptoms, but because of the lack of training the treatment provided was only symptomatic and issues of social determinants of health were not addressed or referred. Surveillance and monitoring of MH services is weak in the HMIS, and covers few indicators on substance use, depression, and psychosis. Electronic registers are only available at tertiary health care level in most provinces except Punjab.

Gender/health equity Mental health stigma is high and explains the large number of patients lost to follow-up. There are specific MH issues for women facing issues of gender-based violence, as well as postpartum depression. In general, there is a low emphasis on disaggregated data and on the analysis of vulnerability factors linked to MH issues.

COVID-19 Intra Action review (IAR)

Adaptation/uptake The Pakistan COVID-19 IAR of 2021 focused on one pillar of the response, the laboratory system. This area was selected as the government considered that they could not review the entire COVID-19 response at the time. The exercise was supported by the WHO regional office and mobilised 17 experts, including from the Pakistan National Institute of Health. The COVID-19 IAR exercise must be understood in the context of WHO support to the COVID-19 response through the coordination mechanism, the National Command and Operation Centre (NCOC) situated in the Emergency Operating Centre of the NIH, with input from WHO and US Centre for Disease Control (CDC). The results of the IAR were discussed and implemented through this coordination mechanism.

Use/implementation

Photo of the NIH laboratory facility in Islamabad

The COVID-19 IAR contributed to the lab systems in Pakistan being quickly scaled up during the COVID-19 pandemic. Different labs were set up to support the response, first in NIH, including genomic sequencing facilities, then developing a network of over 300 public and private laboratories in the provinces. WHO played an instrumental role in this process, supporting the development of SOPs for COVID-19 diagnostic procedures. WHO helped with evaluating the equipment and safety practices, and directly funded the scale-up of testing capacity through the provision of facilities renovations, equipment, and training of lab and surveillance personnel. WHO supported assessments in all provinces to identify and discuss gaps in lab and biosafety capacity. Trainings were planned together with NIH to address gaps identified. WHO also recruited staff to do tests at airport sites and provided testing kits and reagents.

With the winding down of the COVID-19 response, enhanced lab capacity is being repurposed to support other emergencies. During the flood emergency, WHO supported the material and training to use the lab facilities for cholera, and the lab network was also capacitated to detect monkey pox and influenza cases. There were, however, some issues in terms of repurposing labs to support health care delivery in non-emergency contexts. For example, it seems that the NIH laboratory facilities are mostly used for clinical studies, but not to support routine diagnostic tests for health care delivery to patients in surrounding hospitals. District hospital staff felt that after the boost in resources and focus brought about by the COVID-19 response, laboratory capacities for day-to-day hospital care were no longer adequately supported, with a lack of reagents and test kits for common illnesses (Hepatitis, HIV, other infectious diseases) to make use of the equipment purchased during the COVID-19 response.

Impact/monitoring and Gender/health equity Pakistan has a fragile health system and numerous inequities; however, the COVID-19 response was strong and WHO appears to have played an instrumental role in this. Beyond direct support in terms of human resources, equipment, and training, WHO supported daily monitoring of cases to guide the response, analysing differences in gender and geographical areas, as well as in marginalised groups such as Afghan refugees.

WHO Pakistan support to Islamabad Capital Territory (ICT) DHO during COVID-19

WHO played a "first responder" role during COVID-19 in Pakistan, as illustrated by the example of the Islamabad DHO. For the ICT DHO, WHO provided for the recruitment of 10 doctors, 24 vaccinators, 29 data entry operators and some support staff. This allowed the rapid scale-up of the COVID-19 vaccination campaign, reaching up to 80,000 vaccines delivered in a day. Outreach was conducted to ensure that the entire population had access to vaccines, including Afghan refugees and older people. This resulted in 86% of the population in Islamabad being vaccinated. WHO supported the monitoring of cases, which enabled the DHO to implement smart lockdowns in case of increases in transmission. A senior officer from the DHO commented "*Amidst the uncertainty of the pandemic, the certainty was the guidance from WHO.*" He also underlined the importance of the timeliness of the support and expressed the wish to see this collaboration continue to support the scale-up of PHC services in non-emergency contexts.

Indoor Air Quality guidelines

Adaptation/uptake WHO supported the development of air quality policy documents at national level. The 2021 Climate Change Policy was revised to include a chapter on health and the Clean Air Policy of 2023 at federal level includes recommendations on indoor and outdoor air pollution. WHO also supported consultations to develop Air Quality Plans and programmes at national level.

Use/implementation Air pollution is an important issue in Pakistan, being the third most polluted country in the world. Climate change and environment are national priorities, as Pakistan is particularly vulnerable to heat waves, floods, and smog, especially in Lahore and Peshawar cities. Despite this, the health aspects of pollution and climate change are poorly supported, and the capacity of the Ministry of Health in those areas is limited. The ministry that is responsible for health implications of environmental issues is mainly the Ministry of Climate Change. However, so far, WHO has not engaged with them to a large extent. There are few studies related to the health impacts of pollution in Pakistan, in general, and of indoor air pollution in particular. As a result, standards based on health are lacking, as is funding for their implementation at provincial level.

Impact/monitoring and gender/health equity Given the low implementation in this area, impact and results on gender equality and health equity were not documented.

Conclusions

WHO in highly respected as source of normative guidance and standards in Pakistan. It has a particularly prominent role as a first responder in emergency situations. WHO's normative role illustrates that WCO's role in country is not limited to the dissemination and adaptation of global normative products at country level but can be actively involved in supporting their implementation. The WCO is particularly active on leading the Essential Services Package, engaging different partners to resource its scale-up. When supporting the implementation of normative products, where products had plans for implementation and monitoring, such as the mhGAP, the products appear to have made the most difference. By contrast, the Model EML served the purpose of strengthening the scientific-based process for developing a National Essential drugs list, but little impact from this was noted in terms of improving access to essential medicines.

The resources of the WCO seem to be highly skewed towards emergencies, while other key areas of focus for WHO such as NCDs and mental health appear under-resourced. However, the Pakistan country office seems to have made the most of emergency resources through a nexus approach to support the implementation of normative products such as the Malaria Treatment Guidelines or the mhGAP. The results of the COVID-19 IAR that contributed to developing the country's lab capacity

also illustrate the role of emergency interventions in supporting long-term resilience and preparedness. At times, WHO Pakistan may have been too involved in direct implementation to support the use of normative products, such as direct procurement of drugs and equipment beyond emergency situations. While this responds to a clear need in a country where the health sector is largely under resourced, it may be that other partners may be better leveraged to cover these functions.

WHO may decide to focus more on its strategic role as a convener and technical partner to the government, while supporting the government and other actors to plan for and resource the implementation of the prioritised technical products. Important learning from implementation of technical products in Pakistan, in particular, on the essential service package, should be fed back to inform global guidance and recommendations. WCO may consider expanding the scope of its partnerships, which are currently largely focussed on the Ministry of Health at central level, key institutional partners such as DRAP and NIH and public health care managers and providers. Other constituencies, such as civil society, private health services providers and other sectoral ministries (e.g., Ministry of Climate Change) are less engaged with WHO. Gender equality and health equity issues that determine access to health care are not addressed to a large extent by WHO, beyond the assumption that expanding PHC and UHC will address access barriers for the majority of the population.

The Philippines Country Case Study

Introduction

This report presents the findings from a case study conducted in the Philippines in the frame of the Evaluation of WHO's normative role at country level. It aims to investigate how selected normative products have been used and to what effect, and to identify the role of WHO at the three levels in supporting the adaptation, use and monitoring of those products. The following normative products were included:

- 22nd WHO Model List of Essential Medicines (EML)
- Mental Health Global Action Programme (mhGAP) Intervention Guide
- HEARTS Technical package for CVD management in primary health care

Country context

In terms of the country context, key figures are:

- UHC coverage Index: 58.21 (GHO, 2021)
- Medical doctors per 10 000: 7.86 (GHO, 2021)
- Current Health Expenditure as % of GDP: 5.11 (2020)

WHO Model List of Essential Medicines

Adaptation/uptake WCO supported the implementation of the Essential Medicines List (EML). When using the EML to inform the Philippines National Formulary, the national EML, the WCO was responsive to any questions by the Department of Health (DoH). WCO supports the regulatory aspects of DoH, based on strong collaboration, for example, through capacity building and sponsoring certain activities. WCO contributed to capacity building activities for the set-up of the Health Technology Assessment Council. Overall, national implementation capacities are high.

Use/implementation The universal healthcare law and other prior laws support the implementation of the EML through the Philippines National Formulary. The EML is one of the references for updating the Philippines National Formulary. During Health Technology Assessments for including new drugs and medicines in the Philippines National Formulary, specialists compare background research information and references to those medicines in the EML as a first point of reference. Other reference points include other regulatory agencies from countries such as the UK, Ireland, Singapore, and Canada to check for discrepancies. While stakeholders appreciate the clinical focus of the EML, an economic evaluation analysis is missing, being one of the vetting criteria for the Philippines National Formulary. Stakeholders experienced an increased efficacy and acceleration of updating the Philippines National Formulary thanks to the availability of the EML. Given the heavy workload on the Health Technology Assessment for all drugs, the WHO EML data provides evidence, guides national experts, and shortens the process subsequently.

Impact/monitoring As a result of the EML, some stakeholders noted that a faster updating of the Philippines National Formulary resulted in accelerated access to a number of medicines covered by the Philippines Insurance Corporation. As the EML reviewed clinical aspects, a Health Technology Assessment took place that focused on social and ethical impact issues in the country. However, in practice, accessibility of drugs and medicines is sometimes affected by a disconnect between the Philippines National Formulary and the items de facto covered by the Philippines Health Insurance. While drugs and medicines listed on the

Philippines National Formulary are fiscally available, affordability can become a problem for patients if not covered under the Philippines Health Insurance. DoH is in contact with the Philippines Health Insurance to discuss this issue. In the Philippines, organizational capacities were strengthened with the set-up of the Health Technology Assessment Council in 2019, the guardian of the Philippines National Formulary. The WCO supported this process. The frequency of WHO issuing its EML coincides with updating the Philippines National Formulary. The availability and accessibility of the EML facilitate this process. As the WCO office is located in DoH premises, contact and communication with the WHO are facilitated, for example, during the weekly flag ceremony. Hindering factors include challenges in accessing the WHO Burden of Diseases database at one point. Besides, stakeholders noted that having the clinical reviews of medicines on one website would be helpful. The National Technology Assessment (HTA) Council is short-staffed, which affects its operational capacity.

Gender equality and health equity Access to medicines must be assured for women and men in the Philippines. No differentiation between men and women shows, according to interviewees. Access to medicines related to reproductive health seems given. Concerning health equity, the Health Technology Assessment showed, for example, during COVID-19, that deployment of mNRA vaccines were unsuitable for some geographic locations in the Philippines, as equal access to the vaccine requiring cooling at -80-degree Celsius was unsuitable to many parts of the country with over 7000 islands. Hence, based on health equity considerations, the Health Technology Assessment recommended another type of vaccine for remote areas with limited ultra-cold storage capacity.[3]

mhGAP Intervention Guide

Adaptation/uptake Following Typhoon Haiyan hitting the Philippines in November 2013, killing over 6,000 people, the lack of implementation of a national mental health program became evident. The number of mental health cases tripled after the typhoon. This national emergency, coupled with the lack of implementation of the current mental health programme, resulted in the prompt introduction of mhGAP, including in the Visayas region in Central Philippines. As part of the reconstruction of the health care system, many primary healthcare providers are now trained to address mental health issues.

Contextualization and adaptation to the Philippines context was required for adopting mhGAP and this is still ongoing. The Department of Health (DoH) used strong national expertise in academia and NGOs to contextualize mhGAP with guidance by the WCO. This was funded in the frame of WHO technical assistance to DoH, through the WHO Special Initiative for Mental Health *(4*). One example is the assessment of medication available with the support of the Philippines Association of Epilepsy. To date, mhGAP modules on depression, suicide, and epilepsy have been contextualised. Work on other modules is required, for example, on how to apply mhGAP to indigenous populations.

Use/implementation Interviews indicated that with the engagement of members of the Philippines Psychiatric Association and other specialist societies, 40 trainers were trained, a number still increasing, now covering about 10% of the 500 psychiatrists in the country. Given DoH's ambitious training plan, challenges emerged to roll out training of trainer sessions simultaneously.

Capacity building: The main entry point for mhGAP implementation was capacity building using contextualized mhGAP modules. WCO used Agreements for Performance of Work under the WHO Special Initiative for Mental Health to develop a training strategy and components and integrate mhGAP modules into academic curricula. The in-service training strategy included a training of trainer approach.

[3] Due to temperature requirements and other reasons.

Health systems approach: The National Centre for Mental Health offers mhGAP training for health facilities, including in communities and rural settings. The incentive for primary health care providers to get trained in mhGAP is that only after training do they obtain the status of medicine access sites. This process started in 2014, and the Implementing Guidelines on Medicine Access Program for Mental Health (MAP-MH) DOH Administrative Order was officially signed on 14 January 2021. This approach provides incentives for national coverage for mhGAP training[4]. mhGAP training also targeted specialised nurses for in-depth capacity building. mhGAP training reached 15 out of 333 nursing schools nationwide. Targeting centres of excellence allows them to run the course easily as they have the necessary resources. Natural disasters such as typhoons or earthquakes and armed conflicts were triggers to accelerate training rollout. Training focused on resident hospitals on the three main islands, training neurologists, psychiatrists, and nurses. Training provincial hospital staff is essential to reach remote parts of the Philippines. A hub to reach the provinces proved helpful, and a training schedule was created after consulting municipal health officers. Stakeholders reported that in 2022, the government procured medicines for mental health treatments worth US$ 10.4m to 142,000 service users nationwide.

Box 1: mhGAP in the Visayas Region

Use of mhGAP

In the aftermath of typhoon Haiyan in 2013, every municipality out of the 143 affected had an opportunity to receive training on mhGAP. The training program was divided into two parts, focusing on doctors and nurses.

For doctors, there was a specialised session on pharmacology. Nurses and midwives attended a session on essential care practices and psychosocial treatment. The psychosocial treatment component focused on providing emotional support and counselling to individuals affected by the typhoon.

It is worth noting that while five out of the six provinces affected were covered by the WHO training programme, the remaining province was covered by the International Medical Corps.

Impact on access to mental health services

DoH has established hotlines and outpatient services for referrals through tertiary hospitals. These services can be crucial in providing medical support and guidance to municipal doctors in the affected areas. This helps ensure that patients receive appropriate care and are directed to suitable facilities or specialists for further treatment.

Furthermore, the presence of mental health coordinators in the DoH, with one coordinator assigned to each region, shows a proactive approach to addressing mental health issues.

Mental health services have been extended to primary healthcare facilities, enabling greater reach and accessibility for the population. By bringing mental health services closer to the community through primary healthcare facilities, individuals can access support and treatment more conveniently without the need to travel to specialised facilities.

Programme implementation reviews indicate that these mental health services are being heavily utilised. Regular reviews allow for assessing programme effectiveness, identifying any challenges or gaps, and making improvements based on healthcare provider and patient feedback.

In addition to primary healthcare facilities, the involvement of family medicine in mental health further strengthens the integration of mental healthcare into primary care settings.

The accreditation requirement in mhGAP by primary service providers, including primary care facilities and specialised facilities like hospitals with outpatient clinics, underscores the importance of ensuring quality mental health services.

[4] The Medicine Access Program for Mental Health (MAP-Mh), started in 2012 by the DOH Pharmaceutical Division (PD) and operationalized by the National Centre for Mental Health (NCMH), was designed to ensure availability of mental health drugs in the community. Since then, 207 access sites have been opened with around 39,000 service user beneficiaries. With the transfer of MAP-MH to the National Mental Health Program (NMHP) under the DOH Disease Prevention and Control Bureau (DPCB) and the goal of expanding coverage of beneficiaries and medicines being provided, there is a need to establish standards and guidelines to aid in the proper implementation of MAP-MH nationwide.

A referral system to the Eastern Visayas Medical Centre is in place for complex cases requiring specialised care. This facility serves as a referral centre where psychiatrists and psychologists are based, indicating the availability of expert care for complex mental health cases. Establishing patient registries in all municipalities helps track patients and ensure continuity of care across different healthcare facilities.

Health equity

Specifically, for the Visayas regions, interviews with frontline health workers indicated that mental health service access and delivery have vastly improved since Typhoon Haiyan in 2013 and the introduction of mhGAP. Rather than having to travel to a hospital, access is now facilitated through rural health units serving as primary care facilities. At least one staff member is available for each of the 143 municipalities for primary mental health care, thanks to mhGAP. As a result of mhGAP training, doctors, nurses, and some midwives were reached in the region, enhancing, and in many cases, creating their capacity and confidence to deliver basic mental health services. For the engagement of community health workers, who are non-health professionals, DoH provided a simplified version of mhGAP.[5]

Before introducing mhGAP, the Eastern Visayas Medical Centre registered about 1000 patients. This number increased to 7717 patients under the mhGAP program. Due to grassroots engagement and better awareness raising in primary health care facilities, case findings increased. Also, patients with conditions show more openness to access services, knowing that services are available.

Impact/monitoring Interviewees suggested that by using mhGAP, differences in the public mental health system become visible. Access to services improved as capacity in the country increased. However, given the geography of the Philippines, with over 7000 islands, there are still underserved regions in the country with no psychiatrists, neurologists, or relevant specialists available.

To facilitate lasting change, DoH organizes supervision sessions, returning to trainees after two to three months to see how materials were used. Issues identified for using new skills relate to the availability of medication and, at times, lack of human resources. Particularly, municipal doctors as primary healthcare providers have diverse responsibilities well beyond mental health.

Facilitating factors for the adoption of mhGAP in the Philippines include the high-level political leadership with legislators supporting mental health services in the country, as enshrined in the Mental Health Act was signed into law on 21 June 2018 *(5)*. Besides, the COVID-19 pandemic caused an increased demand for mental health interventions at a time when the Mental Health Act was at the beginning of its implementation. The latter resulted in increasing budgets for mental health drugs. Also, a health system approach to mental health catalysed the mhGAP rollout, for example, through the involvement of Regional Mental Health Committee Councils[6] to reach the entire country to the extent possible.

Another positive factor was the strong support of international NGOs and academia in the mhGAP implementation in the disaster response context. Spillover to national and local NGOs further drove the mhGAP rollout, facilitated by WCO contractual engagements, as part of the overall technical assistance to DOH. Beyond the supply side, the demand side facilitated the mhGAP implementation. Communities showed readiness to accept mental health support, and patients were encouraged to seek treatment. The traumatic aftermath of natural disasters and armed conflict, as well as the COVID-19 pandemic, reduced the stigmatisation of patients.

[5] Based on a DOH-led, WHO supported, Community Based Mental Health Framework

[6] The Philippine Council for Mental Health is at the national level – as mandated by the law. Some regions may have councils, as shown in the evaluation interviews, but not yet systematically present.

Hindering factors affecting the implementation of mhGAP include differing opinions concerning the normative product in the Philippines Psychiatric Association. Besides, as the mhGAP rollout advances, mental health treatment focuses more on providing medication, lacking psychosocial interventions. This contrasts with a situation of early mhGAP implementation where patients were provided mainly psychosocial support in emergency settings due to a lack of medication. Some community leaders are still struggling to understand the concept of mental health. As a mitigation measure, DoH is lobbying them through awareness raising and dialogue with community leaders to show the costs of mental health problems in society.

HEARTS, Technical package for cardiovascular disease management in primary health care

Adaptation/uptake The Philippines is one of the HEARTS programme implementation countries, where the whole HEARTS package is implemented. In the Philippines, the contextualisation of HEARTS was undertaken by the Department of Health in partnership with the Philippines Society of Hypertension and WHO. HEARTS is the basis of the Philippines Healthy Hearts Programme. The partnership helped build the capacity of local health workers from screening, detection, and management, while policy and governance interventions were also targeted for local leaders and decision-makers. The WCO provided a technical package to DoH, including, for example, job aids/hypertensive management, blood pressure checklist, and hypertension protocols. They facilitated the application of protocols and provided an e-registry. The latter was adopted and harmonised with the existing one. HEARTS was rolled out at the national level and piloted in the regions. The national Healthy Hearts programme identified demonstration sites for HEARTS, for example, in the Western Visayas region. The implementation of HEARTS benefitted from a multisectoral and multi-disciplinary approach, with the participation of NGOs, universities, municipalities, the media, international organizations, and even national legislators. This coalition supports the Department of Health in promoting awareness about hypertension and driving behaviour change among the population, one of the objectives of the Healthy Hearts Programme. Stakeholders know no single actor could have embarked on this behaviour change process independently. DoH strengthened implementation capacities through its DoH Academy. In April 2022, the DoH Academy launched an online course as part of the Healthy Hearts Programme, reaching health workers at the height of the pandemic. The self-paced course, which is still open to attend, was targeted at one district of the city of Iloilo and subsequently to the entire Western Visayas region. Through the DoH Academy, 193 people were trained in District 1 in Iloilo, including doctors, nurses, midwives, and programme staff.

WHO, DoH, and the Philippines Society of Hypertension used a primary healthcare approach when designing the training content together. Stakeholders underscored the strong commitment of WCO to HEARTS, with four staff in WCO dedicated to the topic.

Use/implementation WCO, in partnership with DoH, built the capacity of local health workers for enhanced and improved screening, detection, and management of CVDs and hypertension to implement HEARTS. In the Western Visayas region, interviewees recalled WCO's visits to project sites and the valuable training of municipal health officers and Barangay health workers (*6*).[7] Concerning training, DoH targeted all 143 local government units in the Western Visayas region, including 200 "Training of Trainers" for Barangay health workers to catalyse capacity building at the community level.

Impact/monitoring One stakeholder observed that health outcomes are improving on a small scale. During a site visit, the interviewee observed that hypertension medicines are arriving at pharmacies and being distributed. In the Iloilo province, seven municipalities with 246,000 inhabitants were targeted with HEARTS as part two of the programme implementation. The analysis

[7] people who have undergone training under any accredited government or non-government organization, and voluntarily render primary health care services, referrals and follow-up in the community. The training was complementary to the training offered by the DoH Academy.

of morbidity and mortality data analysed by consulting regional statisticians showed that changes in health outcomes related to the Healthy Hearts Programme could not be confidently assessed due to the effects of COVID-19 on people's behaviour, which overshadowed NCDs. However, in 2022, cases of hypertension patients consulting health facilities were increasing. Of the 246,000 persons whose blood pressure was taken in the Iloilo district, 21,000 were identified with hypertension. 86% of hypertension patients return to health facilities after high blood pressure detection. This rate compares to a 30-40% control rate on a national average.

Facilitating factors to the use of the HEARTS package in the Philippines include the well-defined roles in the partnership between WCO, DoH, NGOs, and the Philippines Society of Hypertension, among others, with technical staff engaged in following clear objectives. Besides, there are focal points in DHO supporting the engagement of provinces and local government units in HEARTS for the past two years. DoH stakeholders underscored the critical advantage of WHO in understanding the Philippines' health system at the grassroots level, including the essential knowledge of local languages to engage at the community level. Also, WCO and DoH shared costs for the rollout of the Healthy Hearts programme in the Western Visayas region. At the local level, the active role of the Department of Local Government is a driving factor for the implementation of the Healthy Hearts Programme. Local chief executives proved open-minded to accept the programme by understanding that health costs can be reduced if, for example, blood pressure is controlled. Data availability was instrumental in mayors' behaviour change, given the high number of diagnosed hypertension patients in the Iloilo district and other parts of the Western Visayas region. Even mayors outside the pilot sites of Iloilo volunteered to implement the programme, earmarking human, and financial resources for the programme. WCO's presence in the target sites helped convince them. While the e-Registry system showed some weaknesses, it allowed tracking of patients' blood pressure control, mostly in real-time. Local Government Units showed responsibility for encoding data using tablets from WCO as part of an earlier project/study on e-registry.

Hindering factors relate to COVID-19, as the pandemic was the top health priority in the country for nearly two years, affecting the rollout of HEARTS and other health programmes. Besides, the regional DoH offices initially depended on medication from Manila, a situation mitigated by the Philippines Health Insurance Cooperation, which supported a package to ensure the continuous provision of medication. Also, the involvement of Barangay health workers, who are not health professionals, resulted in a mixed quality of services. DoH tried to mitigate this by reproducing WCO posters providing systematic health advice to Barangay health workers and communities for healthy lifestyle behaviour. The use of the posters increased the confidence of Barangay health workers and increased their service delivery.

Gender equality/health equity According to stakeholders, the prevalence and burden of the disease show no gender differences, and both genders are treated equally under HEARTS in the Philippines.

Conclusions

Conclusions on the EML: The uptake of the EML seems strong in the Philippines. The recommendatory nature of the list is appreciated, and less prescriptiveness is valued. Having the EML as a living document with real-time updates would add value to its users in the Philippines. Otherwise, the timing of EML updates would need to be communicated well in advance. Also, stakeholders would appreciate for WHO to communicate which topics WHO will focus on in the upcoming EML revision.

Conclusions on mhGAP: Overall, integrating mental health services into primary healthcare, accreditation requirements, referral systems, and patient registries all contribute to a comprehensive and coordinated approach to mental healthcare, ensuring that individuals receive the support and treatment they need at various healthcare system levels.
The presence of hotlines, outpatient services, mental health coordinators, and the acknowledgment of broader psychosocial issues by the DoH reflects a concerted effort to provide holistic healthcare services to the affected municipalities, ensuring that both physical and mental health aspects are addressed.
Stakeholders identified the following actions for the WCO to strengthen the mhGAP rollout:

- More training on psychosocial interventions is required, compared to pharmacological interventions (which are better covered in the national system than psychosocial interventions)
- Monitoring and evaluation of mhGAP training would be required to identify training results and how training could be further improved. Also, impact assessments should be considered.
- Stakeholders are willing to learn from other experiences the WHO can share concerning mhGAP implementation.

Conclusions on HEARTS: Following the rollout of the HEARTS technical package, monitoring its application seems timely. Questions like the sufficiency and sustainability of medicine supply at primary care, realistic forecasting, and drug utilisation and their correct distribution should be tracked. Besides, the potential for learning and knowledge exchange could be better exploited. Sharing good practices in part of the Philippines for replication through municipal exchanges could be helpful, as well as exchanges with municipalities and cities at the mayor level in other countries. Also, other WCOs could learn from the HEARTS experience in the Philippines.

Rwanda Country Case Study

Introduction

This report presents the findings from a case study conducted in Rwanda in the frame of the evaluation of WHO's normative role at country level. It aims to investigate how selected normative products have been used and to what effect, and specifically to identify the role of WHO at the three levels in supporting the adaptation, use and monitoring of those products. The following products were included:

- 22nd WHO Model List of Essential Medicines (EML)
- Malaria treatment guidelines
- Mental Health Global Action Programme (mhGAP) Intervention Guide
- HEARTS Technical package for CVD management in primary health care
- Guidance for conducting a country COVID-19 intra-action review (IAR)
- WHO Guidelines for Air Quality: Household fuel combustion

Country Context

Rwanda's health system is based on a universal health care model. The whole population is entitled to receiving health services through three insurance schemes: health insurance for civil servants; private health insurances; and "mutuelles de santé" or community-based insurance schemes that cover around 90% of the population. The population is stratified according to their purchasing power which determine their insurance premium. Mutual health insurance is subsidised by the government for those who do not have the means to pay. In addition, private and faith-based organizations are integrated in collaborative frameworks with the government to provide health services. Rwanda is categorized as receiving full technical support from WHO, without field operations. Key figures are:

- UHC coverage Index: 49 (GHO, 2021)
- Medical doctors: 1.6/10 000 (GHO, 2019)
- Current Health Expenditure as % of GDP: 7.32 (GHO, 2020)

Model Essential Medicines List

Adaptation/uptake Rwanda has recently reviewed its national LEM in 2022 based on the WHO Model list, the previous version dating back to 2015. The WCO has been instrumental is supporting this process. It initiated and led the revision process through advocacy in the ministry for EML for the revision and mobilisation of financial and technical support, through the provision of information and development of a related concept note which described the objectives, the processes, methodology and stakeholders, including their terms of reference. It contracted consultants, who, in collaboration with the national EML steering committee, put in place the consultation process, organized stakeholder meetings for data collection, drafting, review and validation of the documents, by all levels of health facilities, academics, health professional associations and councils, and clinicians in the different areas of healthcare delivery. Being a member of the EML National steering committee nominated by the Ministry of Health, WHO also supervised the process. Considerations such as the national epidemiological context and the cost of the proposed new medicines were taken into account to adapt the WHO Model list to the Rwandan context. WHO also supported another parallel consultancy to ensure alignment with clinical guidelines on several key areas. This process resulted

in the development of two EML for Rwanda, one for adults and one for children. Since 2018, Rwanda also provides evidence to WHO at global level from its pharmaco-vigilance efforts through the African Monitoring Centre network.

Use/implementation The national EMLs underpin the procurement of drug supplies nationally by Rwanda's central purchasing office. The list of drugs that can be reimbursed by insurers is also largely based on the national EML. In terms of availing those drugs in the health care system, the revised national EMLs were disseminated at all levels. WHO contributed to the dissemination to referral hospitals, providing two copies per facility and launching the document with facility directors and staff, sharing information on the updated standards of treatment. This was then cascaded throughout the public health system by the Ministry. While dissemination of the EMLs and updated treatment guidelines has been well implemented in the public health system, there remain challenges in terms of disseminating information and developing the capacity of other actors. In particular, pharmacies may not always provide drugs on the basis of prescriptions or follow rational drug administration. Community health workers may also lack capacity development support on essential medicines, and there is no framework in place for them to coordinate effectively with pharmacies to ensure that patients have access to essential drugs.

Impact/monitoring The monitoring of the availability of essential medicines is done through a computerised inventory tracking system at facility level. However, it is unclear whether stockout data is available beyond tracer drugs (e.g., anti-malarial drugs, antibiotics). Anecdotal evidence from respondents indicates that access to essential medicines at health centres and district hospitals is satisfactory for the majority of the population through the system of "mutuelles de santé".

Gender/health equity Respondents tend to consider that health equity issues are largely addressed in Rwanda through the community-based insurance health scheme that covers 92% of the population, and that there is a good geographical coverage of health services. In terms of those not covered by the scheme, respondents consider that this is down to individual choice. For example, a civil society respondent commented *"Those who do not want to be insured cannot be forced"* and another considered that "*The way Rwanda is organised, there is no reason for people to be left behind."* Respondents also indicate that government has put in place special programmes to address the needs of specific groups, such as women, children, refugees, or people living with disabilities. One health worker mentioned for example that specific medicines were made available to cater for the needs of people with albinism. However, he noted that insurance schemes would not cover expensive drugs such as cancer treatments. HIV patients that participated in the discussion group identified specific issues in relation to accessing health care. As health workers in nearby facilities may not respect confidentiality, they had to travel long distances to clinics with friendly healthcare services such as AVEGA. A woman living with HIV explained that she incurred catastrophic health spending that undermined her economic security: *"As woman, I am a head of household, I have job as a cleaner in a company. My salary is USD 80 a month and I spent RWF 100,000 on drugs a month (about USD 86). Try to think how I will survive. This is a significant issue because the majority of us do not have permanent jobs and instead work on a contract basis. As a result, it's quite difficult for us, because we occasionally incur debt in order to obtain these treatments."*

Malaria treatment guidelines

Adaptation/uptake The National guidelines for malaria prevention and treatment are updated regularly and disseminated across the country. They are based on current WHO guidelines. Although they are aware of the existence of the WHO Malaria App, the Malaria Programme staff consulted do not use it. However, they are familiar with recent updates to the WHO guidelines, for example on the treatment of pregnant women. WHO provides support to the Ministry in terms of sharing information on new recommendations, supporting the review of guidelines and participating in the national technical working group on malaria. National stakeholders consider that WHO guidelines are sometimes too rigid and would like to be able to use evidence generated at the country level to inform their national policy, without waiting for WHO to update guidelines. For example, they consider drug Artemether/lumefantrine can be given in first trimester of pregnancy with less side effects, but

WHO recommends only quinine. Although this is not yet approved by WHO, some doctors prescribe this treatment regimen, but national guidelines will not be modified on this until WHO has approved it.

Use/implementation The malaria treatment guidelines are well implemented at the different levels of the public health care system. WHO supports implementation in terms of capacity building at both the Ministry and training of health centres and district hospitals, as well as participating in support supervision visits to evaluate clinical practices in hospitals. They target those visits to hospitals where monitoring data indicates there may be issues in terms of adherence to treatment recommendations. They consider that while the public sector facilities are well supported to implement the guidelines, there may be a gap in private health facilities, and private health care providers need to be systematically invited to training and refresher courses on treatment guidelines.

Impact/monitoring Monitoring of adherence to malaria treatment guidelines is done through routine data collected at the facility level, and indicators are regularly reviewed by technical working groups with the involvement of WHO. The Rwanda Malaria Programme mid-term review of 2023 confirmed the availability of diagnostic and treatment guidelines, job aids and laboratory technical Standard Operating Procedures (SOPs) at all levels of the health care system and noted strong adherence to malaria diagnosis and treatment guidelines. Anecdotal evidence from observations conducted at two clinic sites, one public and one private one, confirm these findings. Both clinics could show a copy of the treatment guidelines, patients were tested before receiving treatment and results were given to them within 20 to 30 minutes. Artemisin combination therapy was available, and clinicians did not report stockouts. Referral systems for severe malaria were in place, and the facilities disposed of treatment for pregnant and lactating women, as well as a paediatric formula.

Gender/health equity As mentioned above, respondents consider that the Rwandan health care system is well structured and effective in providing access to basic health services for the population. For malaria, in particular, services have been introduced to the health post level, which can generally be found within a five-kilometre distance throughout the country. An analysis was conducted with Global Fund support in 2021, the Roll Back Malaria Matchbox report, which identified hard-to-reach groups such as fishermen, miners, workers in plantations, female sex workers, motorcyclists, security personnel, truck drivers and people living with disabilities. The assessment recognised the efforts made to identify and address the needs of groups that are more vulnerable to malaria. It also identified a series of gaps to address remaining equity barriers, including insufficient involvement of vulnerable populations, limited commitment to addressing the use of self-medication and traditional treatment of malaria, limited material resources, and insufficient number of health personnel.

HEARTS Technical package for cardiovascular (CVD) disease management

Adaptation/uptake The Ministry of Health adopted PEN package at national level, and HEARTS is currently undergoing the validation process but has not yet been adapted into national guidelines. The last update of NCD treatment guidelines dates back to 2016 and is currently under review with the support of a consultant hired by WCO.

Use/implementation The national NCD treatment guidelines are disseminated throughout the public health system. Rwanda is among the countries in the Africa region that have implemented the PEN Plus package on NCD specialised care. The INGO Partners In Health supports the implementation of the package at referral and district hospital levels. In terms of availability of NCD at primary health care level, District Hospitals have NCD clinics to manage hypertension, heart failure, diabetes, with specific days for each NCD. Once chronic patients are stabilised, they try to refer them to lower-level facilities to follow-up ongoing treatment through trained nurses.

Because of the lack of resources for NCDs, the implementation of the PEN package is partial. Civil society organizations such as the Rwanda Health Alliance and organizations under this umbrella play an important role in promoting access to NCD care, through linking patients to care, raising awareness and sharing information on NCDs. Private non-for-profit clinics also contribute to the provision of NCD services. For example, the AVEGA clinic implements the national guidelines on CVD and

diabetes treatment with support from CDC and the Global Fund. They have five specialised staff, including a nephrologist and nurses trained on CVD management. The clinic disposes of basic equipment such as blood pressure measuring device, stadiometer, scale, and glucometer, as well as key testing material and CVD and diabetes drugs. In order to address the lack of resources for NCD, partners have been promoting the integration of NCD care in HIV clinics as a way to take advantage of existing resources to increase the coverage of NCD services.

Impact/monitoring Access to specialised NCD services is still limited. Chronic care treatment is costly and not well covered by insurance schemes. Insulin treatment is only free for patients under 25 years old. In addition, specialised services are available at district hospital level, which means that patients incur higher transport costs to access these services. Specialised care for NCDs such as kidney transplants, dialysis and cancer treatments can be particularly costly, and the Ministry is seeking innovative solutions to fund such services. In terms of monitoring, some data is available from HMIS/DHIS-2 on hypertension cases, screenings for NCDs, however access to this data is restricted. Data on medicines stockouts was also not possible to access as part of the case study. The STEPS report of 2022 indicates a 15% proportion of raised blood pressure which is largely underdiagnosed, with limited compliance to treatment for the few patients on treatment. At PHC level, a clinician considered that most people do not go for regular health check-ups, one major challenge being the cost of service.

Gender/health equity As mentioned above, institutional respondents considered that there are no health equity issues in relation to accessing basic NCD services at primary health care level. However, specialised treatment for NCDs is costly and generally not covered by the community insurance schemes.

mhGAP Implementation guide

Adaptation/uptake The mhGAP Implementation Guide is in process of being adapted into the national guidelines, and the National MH Strategy was under review at the time of the evaluation. Stakeholders access the guidelines from the WHO website, but there has not been much involvement so far from the WCO to support dissemination and adaptation. A Ministry of Health respondent thus mentioned that they had not been trained on the guidelines, and hence were informing themselves from the online version on WHO website. A civil society respondent involved in mental health services provision also mentioned that there was need for contextualising the guidelines before those could be used: *"WHO guidelines are like theories, we don't use them. We don't understand how to apply them. The guidelines are established at WHO Geneva, and those who drafted them did not help us to understand them, and to liaise them with the country situation. We need those guidelines in Kinyarwanda so that everyone will understand and know how to apply them. The available guidelines are not based on evidence or country reality, that is why there is a need for more studies and research on MH for the Rwandan context."* This illustrates the need for WHO to support the dissemination and adaptation of the mhGAP intervention guide in Rwanda, to support the use of research and locally generated evidence to ensure that the national guidelines are relevant and well aligned to the country situation, and to develop accompanying tools tailored to the needs of different users that may use the implementation guide.

Use/implementation There were some efforts undertaken to extend mental health services at primary health care level in Rwanda, in particular, through the deployment of mental health nurse in some health centres with the support of partner programmes. However, the implementation of mental health services nationally is hampered by the lack of dedicated resources. Respondents highlighted the lack of infrastructure and trained staff, such as psychiatric nurses to deliver mental health services at district hospital level. There is also a shortage of mental health specialists in the country, at around 0.06 psychiatrists per 100,000, which is significantly lower than the recommended ratio of one psychiatrist per 100,000.

At WCO level there is no dedicated staff to support this area of work, and support has focused on the policy level, rather than on supporting government to scale up and identify resources integrating mental health services in primary health care. WHO has also not engaged with CSOs that provide mental health services. One respondent noted "*We don't see WHO's role in terms of training on the use of guidelines and providing technical support to ensure that they are adapted to the local context. The*

WHO Country office has limited resources and that hinders their ability to support the implementation of mental health guidelines effectively. This can lead to a gap between the development and implementation of normative products, which can compromise their impact on health outcomes. WHO emphasises the importance of building partnerships with government, civil society organizations, and other stakeholders to strengthen the mental health response".

Impact/monitoring WHO provided technical assistance in the development of the Mental Health Information System in Rwanda. This system is used to collect and analyse mental health data in the country, which is used to monitor the implementation of mental health policies and programmes, but the evaluation was not able to consult the data.

Gender/health equity People with mental health disorders face high levels of stigma and discrimination, which hamper their access to services. A health worker commented *"some of the mental health disorders survivors are not going for that service because they prefer using a private service, which is quick and more confidential. It is unfortunate that this requires having private insurance".* The government has also taken steps to address discrimination in particularly with regard to HIV/AIDS and gender-based violence, and the inclusion of people with disabilities. However, the mental health component is not fully integrated in those efforts. Specific mental health guidelines are being developed for specific groups, such as pregnant women, genocide survivors, people living with HIV, and they are developing a mental health guide for children with or without disabilities.

COVID-19 Intra Action review (IAR)

Adaptation/uptake The COVID-19 IAR process in Rwanda was conducted at national and sub-national levels, involving 311 participants over one month and a half. As part of this, a cascade training was supported by AFRO on the methodology. Participants appreciated the role of WHO as a convener, the inclusive process and regular sharing of information. The process was led by WHO and involved the Ministry of Health, Rwanda Biomedical Centre, the office of the Prime Minister, local governments, the immigration department, NGOs as well as UN and multi-lateral partners. The objective was to share experiences, analyse the ongoing response and identify best practices.

Use/implementation Partners involved in the process highlighted the leadership and coordination role of WHO in the IAR process, and the COVID-19 response in general. A Scientific Advisory Group chaired by the government and co-chaired by CDC/WHO was set up at the beginning of the COVID-19 pandemic. The Advisory group met weekly, provided monitoring of the response, and issued recommendations and guidance to the government. The Development Partners group created a standing agenda item for WHO on epidemiology and new recommendations. A government official described the role played by WHO in the COVID-19 response: *"When COVID-19 started, WHO approached the Ministry and helped to set a new policy, strategy, and emergency plan. I can say that we got full support of WHO country office. We drafted together new emergency guidelines for COVID-19, WCO provided us day-to-day technical support. It set up an advisory group which was providing counselling on the interventions. We received financial support, helping to pay a whole team from health workers to specialists to work on the COVID-19 case. WHO supported us to set up a health facility stand at an airport and other public places. We received material support such as rapid tests. WHO also supported us to develop and apply existing case management guidelines that were in place for EVD."* The IAR process formed part of this support and, although the implementation of its recommendations was not specifically tracked, it resulted in improving aspects of the COVID-19 response, for example, on the confinement policy and in relation to ensuring continuity of care for chronic patients.

Impact/monitoring and Gender/health equity Rwanda's COVID-19 response has been considered a success in the Africa region in terms of controlling the epidemic. The total number of COVID-19 deaths in the country remained under 2000, and nine million Rwandans received two vaccination doses. Vulnerable groups such as persons with chronic diseases and above 60-year-olds were prioritised for vaccination. The programme included community outreach to maximise vaccination access.

Indoor Air Quality guidelines

Adaptation/uptake WHO had initiated a process to adapt the indoor air quality guidelines in Rwanda and support national policy development and evidence generation to support this area of work. A multi-stakeholder workshop was organised by a seven-person team, including a WHO-recruited consultant and participants from WHO HQ and AFRO. They disseminated the CHEST toolkit and identified different sectors such as the Ministries of Health, Environment, Energy, Emergencies, Infrastructure, Trade, the National Police, and the private sector. A consultant from the University of Rwanda produced the BAR-HAP report on co-benefits of addressing indoor air pollution for other diseases. A training was planned to take place for community health workers and the participants were identified. However, support from WHO stopped and the training did not happen. The process of adapting WHO guidelines to the national context also came to a halt due to lack of funds. This resulted in the fact that there are currently no national air quality standards and regulations on air pollution consistent with global guidelines in Rwanda. This situation has affected the partnership with government partners involved in the process so far: *"WHO had a project, but it was never completed. WHO was supposed to assist us with capacity building, focusing on the environment, and the people who would receive training would go to raise awareness among all environmental actors, and integrate indoor air quality in all their programmes. But there is no one to ask when we tried to follow up, and there is currently no environmental focal person in WHO we are working with. We have WHO rules on air pollution, but no one to help us to understand them, we just try to handle it by ourselves."*

Use/implementation Energy and clean fuels has become a national priority in Rwanda within the climate change agenda and the transition from charcoal to cleaner energy. A key agency has been set up, the Rwanda Environmental Management Authority (REMA), which is in charge of organising and managing the country's environmental initiatives. REMA was instrumental in formulating the National Ambient Air Quality Standards and the National Air Quality Monitoring Network. Many initiatives have been implemented in Rwanda in this area, such as a programme to provide clean cookstoves to households across the country, and commissioning studies on improved cook stoves to reduce pollution from charcoal. However, health aspects of this agenda which fall under the Ministry of Health, Environmental Health Desk are currently not well integrated, and there is a lack of national policy and guidelines framework. There are also opportunities for WHO to partner with other international organizations to promote the agenda of indoor air pollution. For example, health aspects have not been prioritised in the Joint UN climate change programme, and WHO is not engaged in the initiative. There is also need for WHO to engage at a higher level with government beyond technical aspects to promote country engagement on the health impacts of air pollution. However, the WCO does not currently have the capacity to support this area of work, since the position of Environmental Health Officer was closed in the last year as part of the functional review process. This area is currently supported at HQ and RO levels. The WCO is trying to mobilise funds from HQ to hire a consultant to lead the work in this area. This gap at country level has however impacted on both the progress of the air pollution agenda in Rwanda and on the perception of partners of WHO. Several government partners and stakeholders involved in the initial WHO initiatives of air quality have commented on this: *"We wish WCO have an environment staff who works with us."* Another stakeholder noted, *"WCO has a significant HR gap for environmental staff, as a health organization, it should be assisting us with air quality but its seems that CO office doesn't operate here in Rwanda".*

Impact/monitoring and gender/health equity Rwanda has collected data on air quality. The REMA website presents a live dashboard on outdoor air pollution[3]. Some data on fuel use at household level are available through the DHIS on "energy in the household unit". At the national level, the main sources of energy for cooking used by the private households are firewood (76%) and charcoal (17%), and gas (5%). Up to now, there is no survey on indoor air pollution, which is thought to be a silent killer, especially among children under five years old. WCO has identified this as an area that they could support, but so far this has not been resourced.

Conclusions

WHO is well respected as a source of normative guidance in Rwanda and benefits from a close relationship with the Ministry of Health and the Rwanda Biomedical Centre. WHO standards form the basis of national health policies related to the selected normative products. There is, however, less involvement of WHO with other key actors of the health system, in particular private and non-for-profit health care providers, as well as civil society organizations that lack a direct avenue to collaborate with WHO and access technical support on the implementation of normative products. WCO focuses on supporting policy adoption and dissemination of normative products, as the Rwanda health system is well structured to take on the guidance and disseminate it across the different levels of the health system. This contrasts with the functions taken up by WHO in emergencies, as illustrated by its leadership and coordination role in the COVID-19 response. Gender and health equity issues are not prioritised by most stakeholders interviewed. They consider that the health care system provides equitable access to care through community insurance schemes and good geographical coverage, and that where people do not access health care it is a matter of individual behaviour. However, other important barriers to health care may be overlooked by the institutional perspective, and patients and clinicians report economic and other barriers for specific groups to access care.

Uganda Country Case Study

Introduction

This report presents the findings from a case study conducted in Uganda in the frame of the evaluation of WHO's normative role at country level. It aims to investigate how selected normative products have been used and to what effect, and specifically to identify the role of WHO at the three levels in supporting the adaptation, use and monitoring of those products. The following products were included:

- 22nd WHO Model List of Essential Medicines (EML)
- Malaria treatment guidelines
- Mental Health Global Action Programme (mhGAP) Intervention Guide
- HEARTS Technical package for CVD management in primary health care
- Guidance for conducting a country COVID-19 intra-action review (IAR)
- WHO Guidelines for Air Quality: Household fuel combustion

Country Context

Uganda's health system is decentralised, with national and district levels (Village Health Teams and Health Centres II to IV). Public health care is officially free and there is no national health insurance system. In practice, drugs procured by the public health system are insufficient, thus patients must generally purchase their treatment out of pocket, except for specific externally funded medicines such as ARVs. Public health financing is highly dependent on donor funding. The share of health within the national government expenditures is low, under the 15% target and it is decreasing. This trend is expected to continue given the projected reduction in external financing. Uganda has faced health emergencies in recent years such as floods, EVD outbreaks and the COVID-19 pandemic. WHO Country Office has a national office and nine hubs at decentralised level. Uganda is categorised as receiving full technical support from WHO, without field operations. Key figures are:

- UHC coverage Index: 49 (GHO, 2021)
- Medical doctors: 1.58/10 000 (GHO, 2020)
- Current Health Expenditure as % of GDP: 3.96 (GHO, 2020)

Model Essential Medicines List

Adaptation/uptake The WHO Model list of essential medicines (EML) is the key document that underpins the national EML, while taking into account other considerations such as cost of new recommended molecules, and national epidemiological context. Uganda has a structured process to review the EML on a six-monthly basis. This is an iterative process whereby the EML and treatment guidelines must be aligned, to ensure that new treatment protocols are supported by an up-to-date EML. In practice however, this is not happening in a timely manner, and at the time of the evaluation the country was still using the 2016 Essential Medicines and Health Supplies List, which can be at odds with disease treatment guidelines that are updated more regularly.

Use/implementation A key use of the national EML as part of the Universal Health Coverage (UHC) agenda is to guide the availability of the essential medicines in the public health care system where care is meant to be free of charge. However, because of budget constraints, procurement of medicines for the public sector to the National Medical Stores is restricted to a sub-section of the EML, the procurement list. In addition, even for medicines on the procurement list, budget ceilings allocated to health facilities to procure medicines are low in relation to requirements of facilities. There are other important lists that

influence the availability of medicines in the country. The registered list of medicines indicates what can be imported in Uganda and concerns the private sector. Some medicines are not included in the health facilities budget ceilings and are procured directly by external partners, such as the Global Fund and PEPFAR for specific health care areas such as HIV and TB.

Impact/monitoring Data on the availability of essential medicines and stockouts is not included in the HMIS, beyond tracer medicines such as HIV test kits and ARVs, IV artesunate and RDT tests for malaria, amoxicillin, ORS, and measles vaccine doses. So, it is unclear to what extent the EML contributes to improving the availability of essential medicines in Uganda. But, given that patients mostly procure medicines out-of-pocket from pharmacies and drugstores, it is likely that the influence is low. Other factors, such as vertical funding for specific medicines, play an important role on the availability of some essential medicines. A clinician from a Health Centre III in Kampala district confirmed that her department had the opportunity to submit lists of essential drugs they would want to be procured by the government: *"We choose from the list adapted from the WHO EML, but since the country cannot afford to purchase all drugs, only a few are purchased."* Another clinician from a Health Centre III noted, *"We receive very little medicine for NCDs. Once we receive stock, it is usually finished within one or two weeks, the patients have to buy drugs on their own".*

Gender/health equity Women and youth living with HIV have noted that they were able to access their ARV treatment and co-trimoxazole free of charge at the public health facility without difficulty. However, for other health conditions, they face economic barriers: *"The government hospitals are presumed to be free, but unless a patient pays money, they will be neglected. Unfortunately, the payment is not standard, it is not known how much one should pay for what, how you pay it and to whom it is paid."* Patients mentioned other barriers, such as the fact that the health workers do not have time to explain to them what the prescribed medicines are for and they do not have opportunities to ask questions. There are also gender related factors that influence access to essential medicines: *"The hospital visits are a big inconvenience for women because they bear the burden of domestic work, businesses and children. At the clinic, there is a lot of time spent lining up. Women do not have the luxury of waiting at the clinic but have to wait anyway if they are feeling bad. In the end, many women tend to miss their appointments, stay without pills because they have no time to go to hospital."*

Malaria Treatment Guidelines

Adaptation/uptake The WHO malaria treatment guidelines form the basis of the national guidelines. The adaptation process included an assessment of the country's needs and evidence generated at country level on successful approaches and lessons learned. WHO has supported the dissemination of the guidelines and has launched the Malaria Toolkit on the Magic App platform to reduce delays so that anybody can access WHO current guidance. However, this app does not seem widely used in the country and the Ministry of Health also developed an app to send guidelines to health workers, so there is need to ensure interoperability and alignment with the WHO app. National documents are well aligned to current global guidelines and there is a close relationship with WHO. Uganda also contributes evidence to update global guidelines on malaria. The Ministry made a presentation to the Malaria Partnership in the country, and WHO HQ reviews available evidence through the Malaria Policy Advisory Group to inform its guidelines. Uganda provided evidence from surveillance on resistance patterns when introducing new molecules. Recent global recommendation on malaria treatment in the first trimester of pregnancy were based on the Ugandan experience. Research on insecticide treated nets efficacy in Uganda also demonstrated that the three-year period of the long-lasting treated net was superior to the real efficacy of those nets, leading to a change on the WHO guidance on this.

Use/implementation Malaria has a high health burden in Uganda, representing 30% of outpatients and 20% of admissions. The treatment guidelines are cascaded to the different health settings. Tools are tailored for public hospitals, private facilities, and according to health centre size. The Ministry provides mentorship, trainings, and supervision to the various levels of the health system. In order to ensure compliance, it undertakes clinical audits and provides monitoring tools. Training on malaria treatment guidelines has been implemented down to Health Centre II level. After the COVID-19 pandemic experience, malaria

outbreaks management has shifted to an emergency type of response and depends on the incident commander in the Ministry and the WHO Incident Management Team (IMT). The malaria technical working group includes WHO. The Ministry uses the HMIS data to identify the most vulnerable groups down to facility level and make rapid strategic decisions. For example, after an outbreak was identified, the Ministry was able to deploy paediatric nurses to provide early treatment to children in 11 districts. However, the availability of guidelines varies among facilities, and a Ministry official considered that about 50% of facilities in the public sector would have the updated guidelines, and a lesser proportion of private facilities. Although the Ministry has extended the malaria treatment guidelines to the private sector, this has proved challenging especially in urban areas where there are many private health actors. Trained private facilities submit their data through a public health centre near them. In general, WHO malaria treatment guidelines are well implemented in Uganda, as key partners such as the Global Fund approve funding for the national response on this basis.

Impact/monitoring The Ministry has several data capture tools to monitor and track the malaria response from facility level, such as dispensing logs, community tools, OPD registers, lab registers, as well as a mobile phone tracking system, where data is sent on the M-track system weekly. In terms of compliance to treatment guidelines, the Ministry monitors key indicators such as positive and negative cases treated, and cases treated without testing. It appears that compliance is high, with 98% of malaria patients tested before treatment in the facilities. However, self-treatment is not quantified. From a patient perspective, this still seems widely practiced. Women living with HIV that were consulted were aware that when suspecting malaria, they should first go to a health centre and test before taking any medication. They reported having complied with testing their children for malaria. But they also reported that *"there are many people who just decide that basing on how they feel, they have malaria and go buy drugs. Most drug shops do not ask if one has a doctor's prescription or not. You ask, pay, and get the treatment".*

Gender/health equity The Malaria programme has identified key vulnerable groups, such as young pregnant mothers and children, as well as people in refugee settlements. While women and children are particularly at risk, they also have better health-seeking behaviours according to the programme. There are reported access issues in terms of outreach to rural communities and people with disabilities, who are not targeted specifically. However, disaggregated data is not done consistently in all data capture tools, some tools capture and analyse data by gender and age while others do not identify disparities among groups. The DHIS2 data is not disaggregated by gender, only children below or above five years old and pregnant women are captured. Women and youth living with HIV that were consulted identified economic barriers to access malaria care services. A woman testified that *"Some drug shops can offer you an under dose depending on the money you have, or they can offer treatment for one or two days only because that is the money a patient has".* A young woman participating in the discussion group was sick at the time, and considered she had malaria, but she did not seek medical attention or take a test. She said that she had no money to go to hospital or to self-medicate. But also said that once she got money, she would buy paracetamol *"to keep herself going".*

HEARTS Technical package for cardiovascular (CVD) disease management

Adaptation/uptake In Uganda, the WHO PEN package introduced in 2012 is the main reference guide on NCDs. Uganda was one of three pilot countries in the Africa region for HEARTS, a package which complements and updates PEN. In 2018, WHO held a stakeholder meeting in which HQ participated, with Ministry of Health, private health facilities, NGOs, and academia. HEARTS was contextualised, adopted, and piloted in the Mpigi District. But, following this, funding did not come through for monitoring and follow-up of the pilot, and the process of national dissemination was stopped. The Uganda Health Ministry has recently set up a fully-fledged NCD Department. Although there are national clinical guidelines for NCDs at PHC level, these have not been updated since 2016 and do not reflect HEARTS. The country also has a draft NCD Strategic Plan, which was meant to start in 2021, but has not yet been formally endorsed by the Ministry. This reflects the issue of the approval backlog

at the Ministry level, which contributes to national frameworks not being updated in a timely manner to reflect current global technical products, such as HEARTS. Another key issue is the lack of alignment of the health workers pre-training programme, as the curriculum is not based on HEARTS recommendations. National stakeholders consider that packages such as PEN and HEARTS are highly relevant for Uganda as NCDs are becoming a major public health issue.

Use/implementation The Uganda NCD programme has not been adequately funded. NCDs are the most stocked out medicines, and the last Health Sector Performance Review shows 28% of availability for NCD medicines whilst the other disease areas are around 60%. Outpatient services in health facilities at lower levels of the health system lack basic equipment to provide standard cardiovascular disease (CVD) care, such as blood pressure machines or scales. Health workers lack specific hypertension and CVD disease job aids and have not been trained on HEARTS. The PEN package is implemented to a larger extent at Regional Hospital and Health Centre IV levels with the support of external partners such as Resolve to Save Lives. There is now a drive to integrate NCDs in HIV clinics and services. These initiatives are supported by WHO, UNDP and MRC. PEPFAR has included NCDs in its 2022 Country Operational Plan, with US ($) 4.5 million dollars focusing on diabetes, cervical cancer, hypertension only for HIV plus patients at HIV care sites. These initiatives reflect the fact that given the lack of funding for NCDs, partners seek to make use of existing resources and structures from better funded programmes, such as HIV, to support NCDs, although this may not benefit the general population. WHO has sought to contribute to addressing the lack of funds for NCD care through advocacy to the parliamentary forum on this issue. WHO HQ, AFRO and country office also supported high-level advocacy meetings and WHO is part of efforts to revive the NCD multi-sectoral committee.

Impact/monitoring Given the low dissemination of the HEARTS package and funding available for NCDs, the services offered appear unsurprisingly limited. At a Health Centre III, the main NCDs that were attended to were diabetes and hypertension and the clinic for these two illnesses ran only two days in a week. The clinic had a scale, a blood pressure machine, a glucometer, and a stadiometer. However, during the observation session none of the patients was put on the stadiometer. NCD services monitoring at facility level remains limited, as performance indicators focus on the disease areas that are better funded such as HIV, malaria, or maternal and child health. The last epidemiological data on NCDs dates from 2014. Currently the HMIS is undergoing a revision but there is no funding to integrate NCDs.

Gender/health equity Clinicians and patient groups that contributed to this case study highlighted equity issues in access to NCD services. A woman living with HIV commented, *"CVD treatment is very expensive, and it is not clear whether this is well managed in government hospitals. The doctors just write prescriptions for pills which we have to buy in pharmacies. We have not been given any free drugs for high blood pressure or diabetes. CVD attacks are very bad, they often need urgent care, which one cannot easily find in a government hospital".* A clinician from a Health Centre III said, *"For hypertension, the essential drugs should include bisoprolol and amlodipine. The patients buy for themselves, these are pills which patients have to take daily or their health could be compromised. On the open market, these drugs are very expensive for the common people".*

mhGAP Implementation guide

Adaptation/uptake The mhGAP was adopted by Uganda at national level, with support from WHO HQ for the initial dissemination to a range of actors in Uganda, from Ministry of Health, Civil Society, international partners and academia. The Ministry adapted the tool to ensure its relevance to the Ugandan context. In particular, epilepsy is a key concern in Uganda, so the Mental Health division added a distinction between different types of seizures and changed the treatment protocol to align with the first line medication available in the national EML. Other adaptations were introduced. Using the mhGAP in emergency setting manual, they developed the PTSD module following the EVD outbreak. A module on self-care for health workers was added to support health workers to cope with the added stress and burden during the COVID-19 pandemic. Trainers and managers interviewed mentioned that more adaptations and tools were needed to implement the mhGAP: paediatric issues were felt to be insufficiently covered; a version for teachers may be helpful to address issues of mental health in children;

community health workers could use a simplified version of the mhGAP; and having simple monitoring tools for health workers would allow them to register their practice on mental health care. Another key issue is that pre-service training of health workers does not include the mhGAP, which is a missed opportunity to scale up its use. Overall, the mhGAP Implementation Guide 2.0 was seen as a quality, user-friendly tool and is considered as highly relevant to improve mental health integration in primary health care.

Use/implementation The use of the mhGAP Implementation guide was not supported by WHO, and to date it has not been widely disseminated. The Guide was first piloted by WHO in three districts. However, due to lack of funding, there was no follow-up or monitoring of the initial pilot. This has created challenges for trainers and managers. "*The training process went very well for health workers; they went away happy. But when we came back for support supervision it is as if we had done nothing. We are not using our time profitably with those trainings, they had not seen patients they had not used the books. We did not have any involvement from WHO, they were involved only in the pilot.*" Other partners beyond WHO have provided sporadic funding for the mhGAP rollout, but the programme has not been implemented at scale: THET provided funding to train 345 health workers in Western Uganda; World Vision Australia supported training in three districts, Basic Needs UK in one district and JHPIEGO trained 45 health workers also in the Western region. WHO country office has not been able to engage meaningfully in designing a scale-up plan or identifying resources to roll out the mhGAP in Uganda. At WCO level, there is no budget allocated for mental health activities and no full-time officer dedicated to this area.

Where training was conducted, health worker trainers and trainees identified several issues relating to implementation: most importantly, support supervision was not planned for adequately. A trainer considered that: *"The gap is on support supervision; it should not take three months. There is need for immediate follow-up and close supervision, on a weekly basis, to discuss specific cases."* In addition, the training is aimed at certain staff, such as nurses and medical officers. When one or two staff are trained in a facility, it is challenging for them to influence their hierarchy and advocate for integrating mental health services; they can only refer patients to a doctor who may not be trained. Finally, there are inherent difficulties in integrating another topic for general health care staff to deal with at PHC level. One trainer reflected that: "*We expect health workers that are already burdened with so many diseases to take this on… their purpose is to clear the line, not to understand what is going on emotionally with the patient. How can we expect them to take into account psychosocial aspects?*" In this respect, training community health workers to provide some of the diagnostic, counselling and referrals required to implement the mhGAP may be an opportunity to address some of the implementation challenges.

Impact/monitoring There is anecdotal evidence that the mental health services in facilities where the mhGAP training has taken place have improved. For example, private non-for-profit Mengo Hospital has started mainstreaming mental health assessments within the general health care services. In a public Health Centre III, health workers trained on mhGAP mentioned that they had endeavoured to share learning from the training with their colleagues. However, the evaluation did not document evidence of a consolidated approach to implement the Guide: the reference document could not be found at the facility, and there were no set assessment protocols implemented with patients. A clinician reported that in the absence of refresher trainings, the main impact on his practice was that he was sensitised about his role to detect and refer patients with mental health issues. Positive impacts on clinicians' practice included increased referrals to the Psychiatric Hospital of Butabika. A trained clinician reported that there was also an increased demand for mental health services. *"Mental health is stigmatised, you cannot easily get anyone who comes to you seeking mental health care. People think that people who need mental health are those who have reached the level of undressing, beating up people etc. But since the COVID-19, numbers of people visiting for mental health services have been growing day by day. Now we handle about 80 cases of mental health related cases monthly."* In terms of surveillance and monitoring of services, the recording of mental health cases seems to have improved nationally, with the inclusion of 36 mental health indicators in the HMIS. The Mental Health Department in Ministry of Health reports that stigma has decreased slightly in the facilities, as health workers are now registering cases of alcohol abuse and

mental health conditions. Overall, it appears that efforts to integrate mental health services in primary health care in Uganda through the implementation of mhGAP may have had a limited impact on mental health services so far.

Gender/health equity Women and youth living with HIV that were consulted all reported having experienced mental health issues, but not seeking care for them. From the group discussion, all the young women had experienced depression. They reported hating themselves, failing to sleep, failing to eat, and struggling to do their daily work. However, none had ever sought mental health care. They did not consider such signs should warrant medical attention, and when they have gone for routine check-ups, these emotional issues have not been asked about or attended to. They considered that health workers were focused on their daily tasks and not on their emotional wellbeing. They also mentioned not having time to seek care for these issues in addition to the HIV services. They resorted to their peers' support and self-care, as well as religion to seek comfort.

COVID-19 Intra Action review (IAR)

Adaptation/uptake The COVID-19 IAR process was conducted twice in Uganda. The first IAR was triggered as the first response plan had expired in 2020, and the second one in 2022 was conducted to support the development of the stabilisation plan during the wind down of the COVID-19 response. WHO led the exercise in a flexible way, and participants particularly appreciated the relevance of the IAR process as compared to after action reviews (AAR) as it allowed reviewing the response of an ongoing emergency. A participant regretted that the template used was mostly process based and did not provide a way to analyse the impact of the response.

Use/implementation The first IAR yielded the resurgence plan identifying oxygen supply as a major issue that had been neglected. Because the IAR coincided with the development of the country's Global Fund proposal, the IAR contributed to raising funds for oxygen supply in the country. The second IAR supported the national plan that allowed refocusing funding for the COVID-19 response. In terms of implementation, some respondents highlighted that there was a certain confusion of roles and competition for space between different actors. In particular, existing structures in the Ministry of Health such as the National Task Force on Emergencies may have been bypassed as the WHO IMT within the WHO Emergency Response Framework took the lead. The Ministry of Health however does not have efficient systems in place or up-to-date national guidelines for emergency preparedness and response. In addition, there may be competing frameworks promoted by partners, such as CDC and WHO which may issue concurrent guidelines for surveillance, standards, and terminology to use in emergency responses. Finally, respondents highlighted the importance to tailor WHO technical support to each country context. Uganda may contribute learning and action research on its experience in managing emergencies such as EVD outbreaks. Respondents identified a role for WHO to support the analysis and dissemination of country generated evidence at national, regional, and global levels. However, an increased focus on operation support during emergencies by WHO may hinder this process. A respondent commented, *"There is no home in WHO where this can be nurtured. WHO is very busy and too operational, and it limits the quality of the technical support".*

Impact/monitoring and Gender/health equity The impact of the measures recommended through the IARs on the health-related outcomes of the COVID-19 epidemic in Uganda were not specifically monitored. Gender, health equity and human rights implications of the COVID-19 pandemic and associated measures are not specifically considered in the IAR reports recommendations.

Indoor Air Quality guidelines

Adaptation/uptake Uganda has so far focused on ambient air pollution and has not had specific guidelines or strategy to address indoor air pollution. Although the Ministry of Energy and the National Environmental Management Authority (NEMA) have started adapting the WHO global guidelines on indoor air quality, WHO has not been involved or deliberate in encouraging this. Respondents highlighted that the global guidelines need a lot of contextualization and research and to be translated. The

process of developing national guidelines on indoor air pollution has started recently and the national standards has focused on three key parameters: efficiency of cooking stoves, indoor carbon oxide and PM 2.5 emission standards, and uptake of efficient cooking solutions.

Use/implementation Even in the absence of national guidelines, the Government of Uganda, and Kampala Capital City Council Authority (KCCA) have taken steps to tackle indoor air pollution. The Ministry of Energy has implemented the following measures: Developing national standards for clean cooking stoves; promoting the use of clean cooking fuels and solutions in order to meet the air quality standards on black carbon, PM 2.5; funding the procurement of 1 million liquified petroleum gas (LPG) cylinders for poor households; waiving off VAT on LPG; and encouraging the use of pressure cookers to reduce the amount of energy used to cook. KCCA also has a clean air action plan which is being implemented. For example, the Council is piloting a clean energy schools project in five primary schools to demonstrate clean cooking technologies and disseminate these to families. Funding for the projects is currently not the major issue: The World bank has offered financial support and USAID has funded the air quality monitors used by KCCA. The immediate need for KCCA is now technical support as air quality issues are not well understood, and there are few qualified specialists in the country working on this.

Impact/monitoring KCCA collects data on air quality on an ongoing basis, and regularly publishes its data. Uganda is one of the few countries in the Africa region which has done an apportionment study to identify which sources are contributing to air pollution and to what extent. At country level, health impacts of indoor air pollution do not, however, seem to be tracked, although there is data from the DHIS2 on the type of fuel used by households for cooking. The Ministry of Health, Environmental Health Department is not involved in air pollution.

Gender/health equity Despite sensitisation campaigns on clean and efficient cooking solutions, the cost of the technology may not be affordable to many. In Kampala, a majority of the population resides in slums and cannot easily afford to use gas. This has driven the project of the Ministry of Energy to purchase and distribute gas cylinders to households free of charge, since what is expensive is the initial purchase of the cylinder, while refilling is relatively affordable. The Ministry has also partnered with Makerere University to conduct studies on the impact of household air pollution on children's and women's health. They documented that poor air quality affects children and women more than any other group, as women do the cooking while carrying their babies on their back. The study concluded that women should be given priority when discussing air quality policy issues.

Conclusions

WHO has a strong relationship with the Ministry of Health and is a respected source of normative guidance and standards. WHO normative guidance is often more directed to the Ministry of Health than to other actors in the public, private and non-for-profit sectors.

There are strong systems in place in Uganda to adapt global guidelines to the national context. There is a high level of alignment of national frameworks to WHO recommendations, but there are bottlenecks in updating national guidelines in a timely manner.

WHO support is seen as mostly upstream, focusing on the national policy level, while less emphasis is placed on supporting implementation and monitoring of the use and impact of technical products. In some instances, WHO has provided for a pilot but failed to follow up, with the assumption that the government would then proceed with monitoring and scale-up. While the implementation of WHO's technical guidelines is sometimes supported by other partners, these initiatives are often small-scale and short-term, resulting in low geographical coverage. WHO guidelines are most effective when there are plans in place to mobilise resources for scale-up and the provision of ongoing support and training, as well as tools and systems in place for

monitoring use. This has implications in terms of the WHO country office's role and capacity to provide leadership, technical support and convene partnerships in areas such as mental health, NCDs, and environmental health.

Uganda has high capacity to produce research and document innovative practices and learning. In this context, WHO seems to lack a structured way of supporting feedback in the form of evidence and its uptake in global guidelines, as well as in national policies, in a timely manner.

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