EVALUATION: WHO NORMATIVE FUNCTION AT COUNTRY LEVEL



WHO/Panos/Saiyna Bashir

PAKISTAN
COUNTRY CASE STUDY

INTRODUCTION

This is a case study conducted in Pakistan in the frame of the evaluation of WHO's normative function at the country level. It aims to investigate how selected normative products have been used and to what effect, and to identify the role of WHO in supporting the adaptation, use and monitoring of these products. The following normative products were included in this case study:

- **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**



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.

UHC coverage Index:
45 (GHO, 2021) **52** (MHO, 2022)

Medical doctors per 10,000:
10.84 (GHO, 2020)

Current Health Expenditure as % of GDP:
2.95% (GHO, 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 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 resource 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.



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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 + Norethestradiol CO pills 35mcg +1mg	Printed Monthly report register	Ethynyl estradiol + Norethestradiol CO pills 35mcg +1mg	Printed Monthly report register
11	Intrauterine Contraceptive Device		Intrauterine Contraceptive Device	

[1] http://www.ictadministration.gov.pk/

Figure 1. Islamabad Capital Territory DHO quarterly report of Jan-Mar 2023

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 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.

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 all the information and consolidate it 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 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 access to 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 specifically 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 antimalarial 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 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, they 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% in 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

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.

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.



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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.



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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 (MH), leading to the NCDs and Mental Health National Action Framework (2021-2030). A draft National MH Action Plan was since developed, focussing 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 trainer organized in 2017 by WHO and the Institute of Psychiatry, which then facilitated a training of trainers for 100 participants from 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 staff 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 resource 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 COVID-19, in line with the common experience of other countries that faced 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 a 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 6 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 explain 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, in particular through the coordination mechanism National Command and Operation Centre (NCOC) sat 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.



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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, the lab capacity developed 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 was 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 that was 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.

BOX 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 all the 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 lock downs in case of an increase 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 received, 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. It 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 as the third most polluted country in the world. Climate change and the 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 Pakistan's normative role illustrates that WHO Country Office's (WCO) 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 were planned 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 are 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 the 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. the 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.**

Scan for evaluation report