Morocco: a primary health care case study in the context of the COVID-19 pandemic
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Executive Summary

Primary health care (PHC) plays a critical role in prevention, preparedness and response and in ensuring the continuity of access to essential health services during health emergencies.

This case study examines PHC in Morocco in the context of the COVID-19 pandemic between early 2020 and August 2022, across the three PHC components codified in the 2018 Astana Declaration (primary care, multisectoral collaboration and community engagement) (1). A case study approach was used to combine documentation review and stakeholder consultations with 13 individuals who were selected to provide insights across a range of roles within the health system.

A National Plan of Surveillance and Response to Coronavirus 2019-nCoV Infection (2) was developed in January 2020 with the purpose of organizing and standardizing actions at the national and regional level in health care and other sectors. Resources and efforts were deployed at an early stage in the pandemic to increase surge capacity for diagnosing and managing confirmed cases. The PHC department and its large network of PHC centres were integrated in the national preparedness and response plans. The government capitalized on this network to supplement and augment the national response to COVID-19, with the aim of reducing community transmission, raising awareness, delivering health promotion and community education, reinforcing the importance of screening and early detection, and sustaining PHC essential services while also prioritizing staff safety.

Multisectoral collaboration was also strengthened to address the pandemic’s health, social and economic consequences. An emphasis on primary care was included in the national and territorial governance of the crisis, which strengthened linkages and referrals across different levels of care. The authorities also took measures to counteract the economic impacts of the pandemic through the creation of a special fund for medicines, materials and vaccines.

The involvement of PHC services led to reductions in other services and programmes, particularly in the context of insufficient human resources. However, the commitment of health professionals and the population made it possible to minimize the impact of the pandemic on other health programmes. Overall, Morocco’s response involved the mobilization of resources and innovative solutions to manage spread and impact and to ensure the continuity of health services.
Introduction

On 11 March 2020, the World Health Organization (WHO) first characterized the COVID-19 outbreak as a pandemic (3–6). The pandemic is a defining global and national political priority, with profound implications for nearly every aspect of health (7, 8).

The National Plan of Surveillance and Response to Coronavirus 2019-nCoV Infection in Morocco aimed to slow and stop transmission, and to prevent outbreaks; to provide optimized care for all patients, especially those who were seriously ill; and to minimize the impact of the pandemic on health systems, social services and economic activity (2). Unprecedented response strategies were needed such as mass surveillance, and the creation of a sophisticated network of diagnostics and medical facilities for the immediate detection and treatment of the disease (9). Also, at the start of the pandemic in 2020, general and individual transmission reduction measures were established to help delay virus spread (10, 11).

In public health emergencies, PHC plays a critical role in preparedness and response and in ensuring continuity of access to essential health services (12). PHC also has a role to play in improving equity, with the involvement of communities as partners (13). The Declaration of Astana on PHC acknowledges that a PHC approach empowers people and communities, addresses the determinants of health in a multisectoral way, and ensures strong primary care as the core of integrated service delivery with essential public health functions (1). In 2020 and 2021, many countries’ health systems prioritized the supply of hospital care to manage severe and critical cases of COVID-19 (13). In Morocco, the challenges were exacerbated by a severe lack of human resources for health (14) and weak health financing (15, 16).

Globally, primary care services were not sufficiently supported during the pandemic to conduct surveillance and to respond to or undertake community-based care with appropriate infection prevention and control and effective referral mechanisms (17). Gaps in PHC implementation weakened the ability of countries to detect and respond and to maintain essential health services (18).

This case study examines the role of PHC in the COVID-19 pandemic response in Morocco between early 2020 and August 2022, across the three components of the Astana framework.

Methods

The WHO Operational Framework for PHC was used in data collection and analysis (12). A case study approach was employed, with data collected in two phases. First, data were collected on the different components of the Framework using a comprehensive documentation review. This step involved a review of policy documents, legislative acts, guidelines, strategic plans and programmes,
and reports and research papers. PubMed and Google Scholar were used to search for published research papers and reports using the following search strategy: (novel coronavirus OR COVID-19 OR SARS-CoV-2) AND (primary care OR primary healthcare OR community OR family medicine OR outpatient OR ambulatory) AND (Morocco OR Moroccan). The websites of governmental bodies (including ministries and public agencies for national-level reports, legislation, plans and documents) and of key intergovernmental organizations (e.g., the United Nations Development Programme (UNDP), WHO and World Bank) were searched for relevant studies. News articles on the pandemic response were also identified and included.

Following this documentation review, stakeholder consultations were conducted to gain additional insights on all three PHC components and validate key findings. A question guide was developed with lines of enquiry corresponding to the different PHC components. Thirteen stakeholders across a range of roles within the health system contributed their insights. Stakeholders included national officials from the Ministry of Health (MoH) (MoH Division and services of the Population Directorate) and regional officials in the Fez-Meknes region, as well as doctors working in PHC centres, taking into account the place of residence (rural and urban). Data were collated, analysed and categorized according to the three PHC components.

National context

Morocco is a lower-middle-income country with a population of around 37 million people, of which nearly two thirds live in urban areas. The population grew at an average rate of 1.1% annually between 2010 and 2020 (19). The total fertility rate was 2.3 children per woman of childbearing age between 2015 and 2017, and life expectancy at birth was 76.4 years in 2019 (19–21). In 2020, it was estimated that around 28.2% of the population was under 15 years of age (19).

The 2011 Constitution established a democratic and parliamentary government system with a monarchy and a largely centralized administrative system (22).

The health system is organized into five areas: a hierarchical and compartmentalized public health system, a rapidly expanding private sector, a semi-public sector, mutual benefit institutions and traditional medicine. The MoH provides the vast majority of curative services and almost all preventive services, while public-private partnerships are currently underdeveloped (15, 22–24).

In 2019, Morocco had 159 hospitals and 2888 urban and rural PHC establishments. There were 12,034 doctors of all specialties and a workforce of 31,657 paramedics, compared to 13,545 doctors practising in the private sector, including 8,355 specialists. In the private sector, there were 359 clinics, 9,671 medical consultation offices, 3,614 dental surgery offices and 8,997 pharmacies (20).

There is a severe shortage of health professionals and great disparities in distribution – between regions and within regions, and between urban and rural
Table 1. Overview of key indicators for the health sector in Morocco, 2020

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic and socioeconomic determinants</td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>36 667 977</td>
</tr>
<tr>
<td>Urban population (%)</td>
<td>60.4</td>
</tr>
<tr>
<td>Sex ratio: male/female</td>
<td>1.006</td>
</tr>
<tr>
<td>Average annual population growth rate (%)</td>
<td>11</td>
</tr>
<tr>
<td>Fertility rate (per woman of childbearing age)</td>
<td>2.3</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>76.4</td>
</tr>
<tr>
<td>Infant mortality rate (deaths per 1000 live births)</td>
<td>18</td>
</tr>
<tr>
<td>Under-5 mortality rate (deaths per 1000 live births)</td>
<td>4.23</td>
</tr>
<tr>
<td>Maternal mortality rate (deaths per 100 000 live births)</td>
<td>72.6</td>
</tr>
<tr>
<td>% active population (aged 15–60 years)</td>
<td>62.4</td>
</tr>
<tr>
<td>Gross domestic product (GDP)</td>
<td>US$ 128.6 billion</td>
</tr>
<tr>
<td>GDP/capita</td>
<td>US$ 3442.4</td>
</tr>
<tr>
<td>Employment rate (% population)</td>
<td>39</td>
</tr>
<tr>
<td>Unemployment rate (% population)</td>
<td>12.2</td>
</tr>
<tr>
<td>% uninsured population</td>
<td>45.4</td>
</tr>
<tr>
<td>Social determinants of health</td>
<td></td>
</tr>
<tr>
<td>Literacy rate (%)</td>
<td>32</td>
</tr>
<tr>
<td>Poverty rate (% population living in poverty)</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Source: Data derived from WHO, MoH, Haut Commissariat au Plan (HCP) Maroc and World Bank (15, 19–23)

areas. The ratio of health professionals per 10,000 inhabitants is barely 6.2, which is below the WHO recommended threshold of 23 health professionals per 10,000 inhabitants. The number of paramedics trained in childbirth care is less than 2.28 per 1000 population (16, 22–26).

Total health expenditure for 2018 reached about 60.9 billion dirhams (approximately US$ 5.9 billion), compared to 52 billion dirhams (approximately US$ 5 billion) in 2013. This represents an overall increase of 171% and an average annual increase of 3.2% (16, 22, 25, 27). Households remain the main financiers of health, contributing 45.6% of direct expenditure on health services with the state
contributing 22.3% (28). In 2018, the contribution of international support to health financing represented 0.2% of direct health service expenditure (28).

Only 54.6% of the population has basic health insurance coverage. The various care services provided at PHC facilities are offered to the population free of charge. The National Health Insurance Agency (ANAM) is a public institution of an administrative nature, endowed with legal authority and financial autonomy. Its mission is to ensure the technical supervision of the basic compulsory health insurance scheme and the implementation of tools to regulate the system in compliance with related legislative and regulatory provisions.

The MoH is responsible for developing and implementing the government’s population health policy, which includes the national drug and pharmaceutical policy at the technical and regulatory levels (25). The 2011 Constitution made access to health care and social protection a basic right (23, 29).

Historically, the health system has gone through several phases of development (25). An ongoing major reform at the time of writing was the creation of a High Authority for Integrated Health Regulation (HARIS) and the generalization of national health insurance (29). At the time of writing, the country was implementing new health system reforms, articulated around four pillars: good governance, the development of human resources, upgrading health care services and digitization.

As of 7 August 2022, Morocco recorded 1,262,622 confirmed cases of COVID-19 and 16,257 related deaths (30). The number of adults fully immunized against COVID-19 was 23,469,735 (63.6% of the adult population) in August 2022 (31).

**How primary care and essential public health functions are responding to COVID-19**

The National Plan of Surveillance and Response to Coronavirus 2019-nCoV Infection (2) was created in January 2020 with the purpose of organizing and standardizing actions at the national and regional level in health care and other sectors. This Plan was developed by the MoH based on its assessments of risk and of the available capacity. The aim of the Plan was to prevent the introduction of COVID-19; detect cases early and contain virus spread; organize an appropriate national response from the health system; and strengthen measures for infection prevention and control. This approach emphasized coordination through the use of technology (for example, WhatsApp to speed up the dissemination of information).

The National Plan was followed by a general mobilization of the country’s health system. Priority was given to strengthening health care services, including the laboratory network. Indeed, the diagnostic capacities of laboratories were rapidly strengthened, notably by using existing resources and by creating new
capacities (e.g., through the involvement of university specialties in molecular biology). Diplomatic action and excellent relations between Morocco and other countries facilitated the availability of medicines, medical devices and other equipment.

Government departments and health professionals quickly mobilized with other sectors to respond to the COVID-19 pandemic in early 2020. An Interministerial Vigilance Committee piloted an action plan. The MoH deployed actions to monitor the epidemiological situation in real time, and established a Technical and Scientific Advisory Committee to inform adjustments to the response. The main mission of this Committee was to define a protocol for the management of patients with COVID-19, to adapt the organization of the care system in response to epidemiological data and to provide recommendations on information dissemination to the public.

On 15 March 2020, Morocco suspended all international passenger flights. In addition, a state of health emergency was declared on 24 March. On the same day, Decree-Law 2.20.292 was introduced, which serves as a legal framework to respond to COVID-19 (32). Decree No. 2.20.293 was also introduced, giving the government the ability to take all necessary economic, financial, social or environmental measures needed to curb the spread of the virus and ensure the protection of the population (33). This Decree also provides penalties for anyone found to contravene the orders and decisions of the authorities. The proclamation of a state of health emergency for an initial period of one month was accompanied by general movement restrictions.

At the initiative of His Majesty King Mohammed VI, the first support measure was the creation of a special fund endowed with 10 billion dirhams (approximately US$ 1 billion) to increase the capacity of the health system and support the economy. Authorities drew on the resources of the COVID-19 fund to compensate households in the formal sector who were in financial difficulty. Each employee who was momentarily out of work received a lump sum payment of 2000 dirhams (approximately US$ 195).

To ensure patient care and the protection of the population, the MoH secured the availability of essential medicines and personal protective equipment (PPE) (34–36). Resources were allocated to purchase medical and hospital equipment, drugs and medical consumables, and strengthen the operating resources of the MoH (37, 38). The MoH also took measures to increase and redevelop hospital capacities and improve the conditions for the reception of all patients in various cities (39, 40). Military field hospitals were deployed in cities or on their outskirts to reinforce the civilian health system with beds and intensive care equipment (41), while medical and health equipment were quickly imported and deployed in health establishments (42). Domestic companies specializing in the manufacture of medical equipment (e.g., respirators, material resources for hospitals) were called upon to accelerate production, and other companies were able to adapt their operations to produce respirators and masks (42). Stocks of essential drugs were also increased (43).
As the pandemic progressed, the definition of suspected cases to identify people infected with COVID-19 was subject to successive revisions (44). The MoH gradually strengthened its screening capacities by expanding the purchase of screening kits and the acquisition of various rapid diagnostic tests (44). Meanwhile, the territorial coverage of tests was extended to include University Hospital Centres (CHUs) in various regional cities and military hospitals (45). The population was offered free access to screening tests, and admission to hospitals and to hotels for patients placed in isolation (43). A national vaccination strategy was established with provisions for participation in clinical trials, for the purchase of vaccinations and for technology transfer.

To reduce the impact of the COVID-19 pandemic on access to services, the MoH in April 2020 requested that regional directors and health delegates maintain coverage rates for the national maternal, newborn, child, youth and special needs programmes. A committee was then formed to monitor the continuity of the delivery of national health programmes for the prevention and control of diseases. The MoH informed the public that, despite the epidemic situation, child vaccination activities were being maintained in public health centres and private medical practices, while a new appointment mechanism was established for maternal and neonatal health services to promote access. The authorities also took measures to ensure the continuous supply of the health service with contraceptive products, micronutrients, vaccines and medico-technical equipment necessary to maintain the continuity of essential PHC services and to avoid possible stockouts.

Online training was provided to health personnel on the management of pregnancy, childbirth and postpartum care. Stakeholders reported that this training was comprehensive and targeted, with good engagement at training sessions. National guidelines and technical procedures were also developed on the organization and management of pregnancy, childbirth and postpartum care. Hygiene, safety, prevention and control measures were also introduced into services and health structures and access to PPE was supported. The MoH organized online seminars on prevention and control measures for health professionals, with the support of WHO.

However, like all countries in the world, Morocco was not spared the impact of the COVID-19 pandemic. A study conducted by the Haut Commissariat au Plan (HCP) shows that 48% of all households with one or more members suffering from chronic diseases and 40% of households affected by ordinary disease did not have access to health services during the period when movement restrictions were in place (46). In addition, all maternal and child health activities were impacted by COVID-19. A decrease in the rate of these activities was observed in the first half of 2020 compared to the first half of 2019 (46). The pandemic also impacted cancer screening activities. Indeed, the administration of cancer screening tests was suspended for at least 30 days when stay-at-home orders were enforced and the activity of cancer screening services decreased by 70% compared to the pre-COVID-19 period (47).
Communication with the public involved the development of awareness materials for the media and social networks based on WHO guidelines for many topics (e.g., continuity of the use of essential services and care for children, management of sick children at home, continuity of care for children with co-morbidities and psychological support for children during confinement). Virtual conferences were also held on preventive measures and behavioural responses to mental health problems induced by confinement, on violence and confinement, on good nutritional practices and on continuity of care for children with chronic diseases. At the time of writing, no evaluations had yet been conducted on the population’s response to the official digital information provided.

In addition to its core activities, primary care was responsible for COVID-19 screening and diagnosis, case investigation and contact tracing, orientation of cases requiring hospital care, follow-up of cases, reporting of cases, sensitization and education of the population, and the COVID-19 vaccination campaign. The use of telemedicine for consultations, especially for women of reproductive age, aimed to improve service accessibility. In April 2020, the MoH launched a free voluntary national service based on medical teleconsultation through an electronic platform – www.tbib24.com. This involved volunteer doctors in different specialties giving remote medical advice to citizens at the national level and on a complimentary basis for cases not requiring a particular diagnosis. In parallel, a specific protocol for suspected and probable COVID-19 cases was established in health centres.

The COVID-19 response also benefited from an early detection and response system established in 2017 to detect, prepare for and respond quickly to public health emergencies (48). This involved the creation of a National Centre for Public Health Emergency Operations (CNOUSP), Regional Centres for Public Health Emergency Operations (CROUSP) and Multidisciplinary Rapid Intervention Teams (EIR) at the level of each of the regions, provinces and prefectures.

Finally, as part of the national solidarity campaign, several clinics nationwide volunteered to assist public hospitals in managing the virus (49, 50). Measures included the elaboration of a list of volunteer doctors from the private sector to reinforce medical resources in case of need as the pandemic progressed; reinforcement of the equipment available to public hospitals, especially respirators and monitors; management and monitoring of patients with pathologies other than COVID-19 and pregnant women; and management of possible cases of COVID-19 contamination.
How multisectoral policy and action are responding to COVID-19

The MoH played an integral role in steering the health sector response to the pandemic at national and territorial levels. Within a national governance plan for responding to health emergencies, and leveraging pre-COVID-19 health system capabilities, the MoH developed agreements, mechanisms and processes to facilitate communication and coordination among key government and nongovernment stakeholders.

To support the COVID-19 response, a Multisectorial Action Plan (43) was established around three priority areas: health, the economy and social order. In parallel, national, regional and prefectoral governance plans were established to manage and coordinate activities and measures between the relevant actors and stakeholders. A national, regional and prefectoral Command and Coordination Post (CCP) was also established. The national CCP was composed of four ministries: the Ministry of the Interior, the MoH, the Ministry of Economy and the Ministry of Transport. The mission of the national CCP was to monitor and coordinate, with the health service, efforts to identify and localize COVID-19 clusters, and to implement measures to manage the pandemic and its socioeconomic consequences. The regional CCP was composed of regional ministry representatives. Supporting this at the level of each prefecture was a series of health command posts were established. The objectives of the regional and prefectoral CCPs were to coordinate actions to manage the spread of COVID-19 and the daily processing of information related to the epidemiological situation. These tasks were overseen by the national and territorial governance plans, which enabled better coordination of actions and measures between key stakeholders (39, 43).

The Royal Armed Forces (RAF) also implemented a rigorous and progressive action plan from the beginning of the pandemic (51). The government mobilized security services and local administrative authorities to ensure compliance with containment measures, including movement restrictions. Military medical resources were utilized to reinforce medical structures dedicated to the management of COVID-19, which meant that a large number of medical, paramedical and social services personnel from the RAF were stationed at hospitals. Military hospitals were also restructured to receive both civilian and military patients. In addition, the RAF launched, in coordination with the Ministry of Interior, a 24-hour telephone platform, “Allô 300”, where military doctors and teleconsultants provided citizens with advice and information on COVID-19.

Multisectoral collaboration also involved the implementation of a strategy to ensure the continuity of education provision in primary schools, colleges, high schools and universities. The government established a protocol to guarantee pedagogical continuity at the elementary level, and in higher education institutions courses were delivered via videoconferencing to facilitate educational continuity. Specific measures introduced included:
the launch of the TelmidTICE internet portal to provide digital content, classified according to the branches of study, levels and subjects taught;

- mobilization of national television channels Attakafia, Laayoune, Amazighia and Arriadia, which enabled the delivery of courses via video across all levels of study;

- implementation of a participatory service to allow teachers to communicate directly with their students and to organize distance learning sessions;

- the launch of digital platforms for higher education to allow students to interact with their teachers, in addition to courses being broadcast on television and radio.

Low attendance was the main constraint for this distance learning model. In this context, 52% of teachers interviewed in a study felt that attendance was low to very low. The standard of living in households, lack of access to technology and the rural environment were the main reasons noted for student absences (52).

Efforts to strengthen PHC during the pandemic were supported financially by international organizations (WHO, the United Nations Children's Fund (UNICEF), the Spanish Agency for International Development Cooperation (AECID) and the Global Fund) within the framework of international cooperation in 2020 (53). Direct financial contributions from these donors amounted to more than 1.96 billion dirhams (approximately US$ 190 000) in 2020. The support focused on the synthesis of strategic priorities resulting from a forum on PHC, initiation of the process to develop a vision and a National PHC Strategy, the acquisition of medico-technical equipment necessary for the continuity of essential PHC services, strengthening of PHC structures, and the development of PHC safety guidelines and tools to monitor and evaluate their implementation. These efforts demonstrate that pre-established links with regional and global health authorities and international development and humanitarian agencies was a key factor to secure medical supplies and vaccines, and in training its health care workforce during the pandemic.

Technical and financial partners supported the national efforts to respond to the COVID-19 pandemic by contributing a budget of 120.91 billion dirhams (approximately US$ 11.8 million) in 2020, which included direct and in-kind donations. This support was utilized to strengthen health infrastructure and national laboratories, to implement communication strategies, and to build capacity in disease prevention, infection control and patient care. Budgetary support was also mobilized in the form of grants from WHO and the European Union, loans from the African Development Bank, the World Bank, the Islamic Development Bank and the European Investment Bank; and international cooperation with Japan and the Arab Fund for Economic and Social Development.

The hotel network also showed solidarity during the pandemic response, with some establishments taking the initiative and others asked by the national authorities to make their hotel units available to both health personnel mobilized to respond to the pandemic and to patients. Accommodation was often made available free of charge (54).
How communities are responding to COVID-19

A communication plan was developed during the COVID-19 pandemic to support the provision of continuous information via the media on the health situation, as well as the production of information kits in national and foreign languages, the development of educational materials for awareness-raising in schools, and the dissemination of targeted information for public and private health professionals (53).

Engagement and communication with communities took place at local, national and territorial levels. Official and traditional media channels were used, plus digital platforms such as WhatsApp. Daily active monitoring via WhatsApp of those in contact with a confirmed positive case was supplemented with quarterly surveys (55). These measures made it possible to monitor the response efforts in communities and implement new strategies as needed. The enrichment of communication channels through new technologies also made it possible to integrate community feedback into activities, responses and policies at all levels.

The majority of primary care centres engaged with their communities to disseminate health education and awareness messages on COVID-19, including updates on the vaccination deployment plan. All primary care centres worked with local government officials to disseminate health awareness campaigns, and some also worked with schools and volunteers to do the same.

New strategies were developed to manage the stress and mental health needs of communities stemming from the introduction of movement restriction policies. In this context, efforts were made to enable access to professional psychological assistance to the most vulnerable groups. Psychiatrists, psychology professionals and volunteer initiatives set up several digital platforms to provide psychological support and counselling services to citizens who developed severe anxiety, depression or acute panic disorder resulting from the new conditions of confinement (56). Civil society organizations also mobilized their capacities to support the elderly, to combat violence against women and children, to support students who experienced difficulties in engaging in their distance-learning courses, and to provide social protection to vulnerable groups.

The media, the scientific community, medical professors and health care professionals all played a key role in encouraging the community to get tested for the virus and to engage in the national COVID-19 vaccination campaign. To facilitate the involvement of the academic community, the MoH set up a scientific committee that informed the strategies, actions and measures of the government. In addition, learned societies (including the Moroccan Society of Medical Sciences, the Moroccan Society of Pediatrics, the Moroccan Society of Infectiology and Vaccinology, and the Moroccan Society of Anesthesia, Analgesia and Resuscitation) contributed to the development of protocols for the management of children and pregnant women as well as for the management of COVID-19 cases in general, severe and critical cases. The teaching community
also contributed in raising awareness and educating the population about COVID-19 through interventions in various media.

In sum, primary care played a critical role in community engagement and public awareness, enabling participation in response efforts and facilitating community trust in health services.

**Conclusion and lessons learned**

The COVID-19 pandemic revealed major limitations in the health system. It exacerbated pre-existing weaknesses and inflicted a significant burden of disease and social and economic costs on individuals and the country. However, Morocco reorganized its health system and proactively pursued multisectoral collaboration and community engagement to support the response effort.

Against a backdrop of limited health resources, Morocco proactively deployed action plans at several levels to minimize the health and socioeconomic consequences of COVID-19. The MoH was an integral component in steering the health sector response to the pandemic at the national and territorial level, with agreements, mechanisms and processes introduced to facilitate communication and coordination among key government and nongovernment stakeholders. This is critical to build resilience and preparedness in a health system and to mount an effective response in emergencies. Centralized management shaped the capacity of the government to lead the pandemic response, to coordinate multisectoral action and to minimize duplication and inefficiency. The establishment of expert technical and scientific advisory committees also helped to define patient management protocols and a communication strategy, enabling evidence-informed decision-making.

Understanding the importance of PHC, Morocco put in place several mechanisms to maintain essential PHC activities and provide the PHC system with the resources and means necessary to respond effectively (57, 58). Pre-established links with regional and global health authorities and with international development and humanitarian agencies were key to securing medical supplies and vaccines and training the health care workforce during emergencies. The crisis has also underscored the importance of multisectoral collaboration and community engagement.

Continuous dialogue between policy-makers, health care professionals, public health experts, communities, nongovernmental organizations, citizens, the private sector, researchers, funders and other relevant stakeholders could help to ensure these key lessons from the pandemic are embedded in PHC policy. The findings of this case study can be used to inform future policy and programme planning to deliver effective health services during public health crises and to build a more resilient health system.
References


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