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

This case study examines primary health care (PHC) in the context of the COVID-19 pandemic in Oman between early 2020 and July 2022, outlining response strategies and actions and key lessons learned.

Data were sourced from journal papers and grey literature including national reports and policy documents to describe disease trends and COVID-19 responses. Stakeholder consultations were conducted with health leaders and decision-makers in the three most densely populated governorates to identify PHC strategies employed. The WHO health system building blocks (1) were used to help with data collection and the Astana PHC Framework (2) informed analysis and reporting of results.

The findings highlight key strengths and challenges relating to the transformation of primary care service delivery, multisectoral collaboration, the utilization of technology for continuity of health care, the COVID-19 vaccine campaign, and features of the response during the natural disaster of Cyclone Shahin that occurred alongside the COVID-19 pandemic. The case study discusses key challenges, the dynamics of the pandemic response, individual and community mobilization and their contributions, and the role of the mass vaccination campaign in reducing transmission. A key lesson is that investing in PHC improves the capacity to provide continuity of care while implementing essential public health strategies and activities.
Introduction and national context

Oman has a population of around 5 million people. The country has a relatively high Human Development Index (HDI) score of 0.816 based on the latest values for 2021 (3). The country is located in the Middle East and shares land borders with three countries: Yemen, Saudi Arabia and the United Arab Emirates. Oman has connections with other countries by sea and air travel that serve social, commercial, religious, touristic and educational purposes. The presence of large Omani families and extended social connections created an environment with a high risk of importation of COVID-19 and increased risk of transmission within the community (4).

Oman Vision 2050 is a long-term health vision for health system development over the coming 30 years (5). The aim of Oman Vision 2050 is for the Omani people to live healthy and productive lives, through the establishment of a well-organized, equitable, efficient and responsive health system, grounded by societal values of equity and social justice. The strategy includes setting health research priorities; strengthening health research capacity; defining and implementing norms and standards; developing health research (quality and quantity); translating evidence into policy, strategy and practice; monitoring and coordinating research; financing health research; and evaluating the impact of research.

Primary care is supported by the Ministry of Health (MoH), which manages 212 primary care centres and 36 local and wilayat (provincial) hospitals (6). Comprehensive health care services are freely available to all Omani citizens and non-Omani government workers (7). Primary care centres were established to provide basic services including child immunization and maternal care. However, over time, the role of primary care services has expanded to meet increasing demand from a growing population. The expanded services cover the management of communicable and noncommunicable diseases (NCDs), which includes close monitoring of patients, screening for complications and the provision of long-term care. In addition, primary care services in Oman offer public health functions such as primary and secondary prevention and health promotion as part of their comprehensive mission to enhance the health and well-being of communities. Clinicians at primary care level are actively involved in teaching and research alongside their clinical practice, while family physicians contribute to the provision of essential medical services in primary care centres (8).

The declaration of the pandemic coincided with the first two confirmed cases of COVID-19 in Oman on 24 February 2020 (9). Between early 2020 and July 2022, efforts were made in Oman to achieve and sustain PHC levers to support the provision of primary care services during the pandemic. The MoH supported the availability and accessibility of community-based services to maintain continuity of care during the pandemic response (10).

The Sultan of Oman supported early response efforts by enabling the establishment of the National Supreme Committee for COVID-19 entrusted with undertaking measures to tackle developments resulting from the pandemic, which was founded on 10 March 2020 (10, 11). This multisectoral committee was
Introduction and national context

headed by the Minister of Interior and involved participation of other relevant sectors, especially the MoH. Major meetings were chaired by the Sultan of Oman. Multiple response actions were implemented to limit the impacts of the pandemic and to support the global response under the framework of the International Health Regulations (IHR 2005) (12).

Containment measures consistent with global health standards were implemented to prevent disease spread among health care workers and communities. In primary care institutions, the frequency of in-person outpatient visits was reduced and telemedicine services were initiated to sustain patient follow up (13, 14). Physical distancing and the wearing of face masks was mandatory for all visitors and health care workers. These measures were implemented to avoid further transmission and to safeguard the health of the workforce. New medical management policies and guidelines were generated and implemented for the management of COVID-19 and chronic diseases (11).

The use of technology-enabled health care increased in Oman during the pandemic, revealing the importance and feasibility of virtual and digital approaches to health care and disease surveillance (15, 16). As part of these efforts, the MoH produced and implemented an electronic application – the Tarassud Plus platform – early in the COVID-19 pandemic response to support surveillance. The platform also supported contact tracing and geofencing using electronic wristbands to monitor confirmed cases and their contacts. The platform was also used from the time of the initial outbreak to register and track travellers, including those in quarantine, and it was later used to schedule COVID-19 immunizations, to record any vaccine-related adverse events and to generate digital vaccination certificates (15, 16).

The Omani health system as a whole, and primary care services in particular, worked hard to achieve and sustain an effective, robust pandemic response during the period under review.

Methodology

This case study examines PHC in Oman in the context of the COVID-19 pandemic between early 2020 and July 2022. Data were collected through document review and stakeholder consultations. Information about the COVID-19 pandemic response was sought from the densely populated Muscat, Al Dakhiliya and Al Batinah regions. A task force team was formed for the case study, which comprised health care leaders and COVID-19 focal points at the primary care level in these three regions. The role of the team was to review national and subnational published and unpublished literature on the COVID-19 pandemic. In addition, the team led stakeholder consultations with four experts in the primary care response in each region (including health directors and community leaders) between 25 May and 12 June 2022. Task force members met in person and online to discuss and evaluate the data. The WHO health system building blocks were used initially to categorize the data (1). The Astana PHC framework (2) – which emphasizes primary care and essential public health functions, multisectoral collaboration and community engagement – was then used to interpret the key findings and to structure the case study.
How primary care and essential public health functions are responding to COVID-19

Pandemic preparedness and response efforts commenced in Oman prior to the first two cases of COVID-19 being confirmed in the country on 24 February 2020 (9). In 2020, all governorates began initiating their strategic preparation and response plans for COVID-19 based on recommendations informed by the MoH and the WHO (11, 17). The aim of these strategies and plans was to control COVID-19 infection, reduce exposure, combat false information and misinformation, protect vulnerable community members, prevent death and illness, and accelerate equitable access to health facilities (11). The ultimate goal was to minimize the impact of the pandemic on the national health care system and communities (4). The Center of Operation Management in the capital city of Muscat oversaw the surveillance and collation of epidemiological data (18).

All governorates created subcommittees that were responsible for working collaboratively to implement response measures, including clinical, educational, media, administrative and interdepartmental training coordination (10, 19). The directors of primary care in each governorate made several field visits to primary health institutions to alert health workers and assess readiness for the emerging disease. The recommendations of the visiting team were then put into action, where all critical medical services continued to function while measures were implemented to address the expected increase in COVID-19 cases (4, 10).

The aim of all strategies and activities implemented at the primary care level was to reduce the frequency of visitors to health centres to prevent disease transmission, achieve containment and prevent new cases, unless patients required urgent or emergency care. This was done by suspending certain routine services, minimizing the frequency of in-person follow ups and contacts, and replacing chronic disease follow-ups with virtual consultations (4, 10). Screening services were temporarily interrupted including well-being clinics, pre-marital screening, breast cancer screening, autism assessments and elderly care programmes. Dietary counselling and postnatal clinics were also suspended, except for patients with urgent medical concerns, especially during the postpartum period. Antenatal visits were minimized to only four visits for low-risk pregnancies (20, 21). The expanded programme on immunization (EPI) for infants was continued but additional testing of hemoglobin levels at age 9 months was withheld (4, 10). Consequently, the number of visitors to primary care centres in Muscat governorate declined from 115 324 in January 2020 to 109 719 in March 2020; however, essential health services were maintained for vulnerable populations, women and children, with accompanying protocols to limit transmission of COVID-19 (10). General practitioners at PHCs worked on a walk-in basis, and all general practice cases such as screening, preemployment screening, breast screening, NCD screening and elderly screening saw a 45% reduction in outpatient visits - from 8 529 623 in the year 2019 to 4 689 800 in 2020 (22).

Telemedicine services were initiated at primary care centers in March 2020 to sustain access and provision of health services for patients with chronic diseases and to facilitate continuity of care. Services were extended to include
How primary care and essential public health functions are responding to COVID-19

a landline telephone number, assigned clinics, and guidelines for telemedicine and virtual consultation (15, 23). Trained doctors followed up with high-risk patients including those with chronic disease or on home oxygen therapy (15). Moreover, telemedicine was used for the follow-up of patients who tested positive for COVID-19 and suspected cases that required isolation. Trained medical teams were responsible for daily well-being checks, tracking patient progress and asking patients to report to the health centre if they showed any concerning symptoms or if their condition worsened (15, 16). Primary care physicians largely accepted the use of telemedicine as a tool for follow up and the management of long-term conditions; however, some challenges were reported. A 2020 study reports that physicians were dissatisfied with communication by telephone, due to the absence of visual cues, lack of comprehensive assessment and the inability to perform a physical examination. The study also reports problems with documentation during teleconsultations with patients (14). Thus, a framework was developed to enhance the use of telephone-based consultation and encourage service continuity. In addition, audiovisual tools were provided to health centres using a comprehensive consultation module accessible on digital tablets, which also supported the provision of test results to patients via virtual means.

Some structural changes at primary care institutions were made in response to the containment and prevention measures. A new triage system was employed at the entry point of health centres to filter cases and direct patients to either COVID-19 or non-COVID-19 areas. This early checkpoint was called pre-triage and it helped to minimize cross infections. Each health centre established a designated isolation room to triage and manage all suspected cases of COVID-19, attended by an assigned health care professional who had been trained to follow specific precaution and protection criteria (4, 10).

Health care professionals received continuous education and training regarding the COVID-19 virus and disease management to ensure their clinical and infection control competency and confidence. Virtual scientific lectures and seminars were conducted regularly to share information about COVID-19 updates with health professionals from both the private and public health sectors (4, 19). In addition, comprehensive training on the proper use of personal protective equipment (PPE) was provided to all health care professionals in compliance with international safety protocols and to ensure the safety of health personnel (4, 11, 19). Due to the need to reallocate health care professionals to surveillance centres and COVID-19 temporary hospitals, primary care services faced critical workforce shortages. To address this issue, the concept of merged health centres was implemented. This concept involves two or more local health centres working together to provide essential general practice services (10).

The primary care system also supported tertiary-level providers to help manage the additional inpatients throughout the pandemic period. At the early phase of the pandemic, tertiary hospitals were overwhelmed by the numbers of critical patients, a lack of beds and shortages of expert staff in intensive care units.
to accommodate patients who required critical care. By June 2020, multiple health care workers (HCWs) had reportedly contracted COVID-19, which further contributed to workforce insufficiency and workload burden. This subsequently prompted greater involvement of the primary care sector in the pandemic response (25).

Scientific committees were assigned to oversee aspects of COVID-19 management and the implementation of short-stay care and oxygen therapy at the primary care and tertiary levels (26). At any time when the number of hospital inpatients exceeded the capacity of that hospital, short-stay admissions were specified for COVID-19 patients who were classified by a senior general practitioner or family physician as having mild to moderate symptoms (10, 26). Subsequently, home oxygen treatment was introduced and regulated at the primary care level, which was prescribed for patients with moderate disease who required supplementary oxygen but without additional need for hospital admission (27).

When a mass vaccination campaign was launched for COVID-19, primary care services were given the responsibility to initiate and regulate immunization among the public according to a sequential national vaccine plan. At the start, vaccinations were offered to specific population groups at designated centres across the wilayat of each governorate. Later, vaccination centres were launched in non-health facilities such as school halls, sports complexes and exhibition centres to meet growing demand. The vaccination rollout was initially aimed at high-risk populations including HCWs and people with chronic comorbidities (28, 29). A strategy to reach 70% of the total population was then enacted, including a deployment plan to distribute the vaccine in two phases according to health risk and vulnerability (29).

Information about the vaccine target groups was disseminated via the media, and participants were requested to register through the Tarassud digital platform. Eligible people were given vaccination appointments according to their level of health risk and safety criteria (4, 28, 29). Primary care nurses and clinicians were trained to vaccinate visitors, while administrative staff were responsible for registration and volunteers for event organization. All patients visiting PHC facilities who matched the target population were recommended to get the vaccine and were supplied with pertinent information, including risks and benefits (4, 29).

Primary care services were also involved in managing the referral pathways for confirmed COVID-19 cases in collaboration with emergency departments at the tertiary care level and field hospitals. This was to ensure the appropriate distribution of services and workload, to avoid overwhelming Oman’s health care system and to provide optimal care for patients (4). All HCWs were informed and trained on the referral algorithm, which was updated by the Directorate General for Disease Surveillance and Control and the Directorates of PHC as the pandemic progressed and according to the available health institute resources (4, 11). Meanwhile, referrals to secondary and tertiary care were limited to urgent and emergency cases only. During surges in confirmed infections, non-urgent
cases were deferred, and only urgent cases were seen in polyclinics at the secondary care level (4, 11). Eventually, primary care referral pathways were updated based on the infection curve of COVID-19 and the number of beds available in tertiary care settings. There were multiple meetings between primary and tertiary care providers to coordinate referrals, in which decisions were made through mutual agreement and approval (4). In addition, primary health services played an essential role in maintaining services at the field hospital, which was launched on 5 October 2020 to provide inpatient care for moderate to severe cases. The field hospital was supported by medical cadres including senior family physicians, general practitioners, nurses and administrative staff (30).

Despite these various measures taken as part of the pandemic response, the primary care sector faced multiple challenges throughout the period under review. Health centres were not fully equipped to deal with critical cases due to a lack of expertise and insufficient capacity to accommodate the growing number of COVID-19 cases (10, 31). Communication with patients who were suspected of or confirmed as having COVID-19 was sometimes delayed due to staff shortages. Medication that was required to treat COVID-19 patients was approved at later stages of the pandemic and challenges were faced too during the rollout of the vaccine. For example, some patients refused or were not convinced of the efficacy of the vaccine, which slowed down implementation of the mass immunization programme (4, 19, 31).

How multisectoral policy and action are supporting COVID-19 responses

In March 2020, the MoH ordered active surveillance and 14 days of mandatory supervised quarantine for all individuals who had come into close contact with a confirmed case of COVID-19, as well as for those travelling from countries with a high number of confirmed COVID-19 cases. Subsequently, the Supreme Committee entrusted with undertaking measures to tackle developments resulting from COVID-19 introduced a policy to impose stringent physical distancing measures, including the suspension of all public events and the closure of all public facilities such as schools and offices. The country shifted to a model of distance learning and working (32).

As the number of confirmed cases of COVID-19 escalated, the Supreme Committee ordered movement restrictions. These were applied initially within specific affected regions and later extended nationwide except for emergency services and the distribution of essential goods (4, 32, 33).

Nonhealth sectors – including governmental and nongovernmental organizations, communities, the media, police, educational sectors and aviation authorities – played a key role in the implementation of national disease control strategies (4). For example, the Ministry of Higher Education, the Aviation Authority and the Ministry of Social Development implemented quarantine policies for travellers, and private health providers volunteered to visit, follow up and provide medical services to patients in isolation. The primary care sector worked with the Oman
Royal Police to make sure that all advice from the Supreme Committee had been followed by organizations and communities. Meanwhile, the education sector, sports complexes and the Oman Royal Police collaborated with the PHC and public health systems to utilize their premises, especially during the vaccination campaign. Assistance was also provided by the private sector to create mega vaccination centers in numerous governorates (4).

In addition, the plan for institutional quarantine was implemented successfully through a partnership between the Ministry of Tourism and private hotels, in which free rooms were provided to citizens who could not isolate in their homes (4, 10). An institutional quarantine team was formed in collaboration with private health providers, with personnel divided into home visiting teams, a hotline team and a service continuation assurance team. Each team monitored those in quarantine, either in designated buildings or under self-isolation in the community, addressing concerns and directing the community to the hotline for advice. The service continuation team ensured that all health care workers knew how to manage COVID-19 cases and devised an implementation plan for the continuity of all other primary care services (4, 10).

The Ministry of Information ensured transparent communication with the public by disseminating comprehensive information about the virus and up-to-date statistics and data and informed the population of their role in limiting transmission. Such information was shared regularly with the public to facilitate understanding of the roles of government, community and individual collaboration in combating the pandemic. Official media interviews were held frequently with health care professionals and key stakeholders to answer public enquiries and increase awareness (19).

Tarassud Plus, a web-based phone application, was developed in collaboration with the Ministry of Telecommunication and the MoH to provide all residents in Oman with transparent and updated information on the status of COVID-19 in the country, including the number of confirmed cases, hospital admissions, suspected cases and related deaths. The system has been recognized by WHO as one of the most powerful technological solutions deployed in the Middle East to track the spread of COVID-19 and to ensure patient compliance with isolation measures (15). Tarassud Plus combines a mobile application using artificial intelligence with enhanced features to offer COVID-19 statistics, guidelines and best practices, thus helping to prevent the spread of infection. At the time of writing, the application was available in English, Arabic, Urdu, Hindi and Bengali. During the pandemic, Tarassud Plus also provided patients with access to medical hotlines and support staff who directed them to facilities where they could be treated for their reported symptoms. Following diagnosis, a medical tracking bracelet connected to the application ensured that a person stayed at home for the duration of their quarantine or isolation. The platform was also used for surveillance and electronic notifications and as a database for COVID-19 vaccination data (15).

Collaboration between the private sector and primary care services also occurred in COVID-19 testing for all symptomatic patients. The medical centre at Petroleum Development Oman and other private health centres provided
How multisectoral policy and action are supporting COVID-19 responses

support to the primary care system in testing suspected cases and in screening for COVID-19 using rapid antigen tests or polymerase chain reaction (PCR) tests according to published protocols (34).

The vaccine roll-out programme started in Oman at primary care facilities; however, due to increasing demand, nonhealth sectors (e.g., the Ministry of Municipalities; the Ministry of Culture, Sport and Youth; and the Ministry of Education) collaborated to establish vaccination centres. Over time, the vaccine campaign expanded to larger facilities, including sports complexes, government schools and the Oman Convention and Exhibition Centre (29, 35). The private health sector provided support through an outreach vaccination campaign and by providing nurses and doctors to work in public vaccination centres. As demand grew for COVID-19 vaccinations, outreach initiatives were activated by primary care teams in collaboration with the Oman Automobile Association and other volunteer groups to support drive thru vaccination services (36).

Although the fundamental preventive activities were similar throughout different regions of Oman during the COVID-19 pandemic, coastal and border areas received greater attention, prioritization and faster vaccine distribution. This was needed due to the continuous movement of travellers across those areas, which consequently caused a rise in infections (31).

In Musandam, the Supreme Committee ordered the closure of regional access points as a precautionary measure to prevent the spread of COVID-19. Immunization efforts were expanded to include the adult population, despite facilities experiencing challenges in cold chain management. This rapid vaccine deployment, which involved prioritizing the first vaccine dose, may have contributed to reduced COVID-19 hospital admissions in Musandam compared to neighbouring regions with lower immunization coverage (31).

On 2 October 2021, the coastal areas of Oman were hit by severe tropical cyclone Shahin, which destroyed major infrastructure in the North Al Batinah region. It has been estimated that 362,000 people were affected by the cyclone, and that the storm damaged about 66,000 buildings as well as 22,000 business establishments (37). The government activated an emergency management plan to increase multisectoral efforts in response. An Emergency Management Multisectoral Committee was formed to plan and execute all strategies and activities relevant to natural disasters and the COVID-19 pandemic. The Department of Engineering and Maintenance Affairs was tasked with mobilizing human and physical resources, including to ensure water supplies, the availability of backup generators and fuel. The department was also responsible for maintenance, cleaning and opening whole road water drains and the placement of electricians in mountainous and coastal health care facilities. Health facilities were equipped with an emergency vehicle and prepared refrigerators to preserve the deceased (38).

Primary care services reported any power outages, leaks or damage to the facility, ensured that refrigerators were functioning to preserve COVID-19 vaccine vials and medicines, and transferred vaccinations to other facilities when necessary. They were also asked to provide human resources to support the
workload in tertiary health facilities, to ensure the readiness of ambulances and their ease of movement, and to report road closures to and from health facilities.

Urgent meetings were held under the chairmanship of the wali (mayor) of each wilayat to discuss, plan, provide support and implement activities if any emergency occurred in the district. These committees included the heads of health institutions in the wilayat, in addition to the officer in charge of the Civil Defense and Ambulance Centre, the head of the volunteer charity team, MoH representatives, and a member of the municipal council (39, 40).

Multisectoral collaboration was therefore critical in the pandemic and natural disaster response efforts, supported by strong central government leadership. Key challenges to multisectoral efforts reflect social, geographic and resourcing factors that could be considered in future pandemic planning. For example, large families have extended social relationships and connections, which may have contributed to reluctance among some groups to adopt social distancing measures. Geographically, the many land border crossings increased the risk of the virus being imported into the country. In addition, Oman’s migrant working class faces an underdeveloped health insurance system, which inhibited access to COVID-19 testing, clinical care and vaccination, thus contributing to outbreaks in high-density communal residences of migrant workers (dormitories). Key resourcing challenges included few experts in risk communication and community engagement, a limited public health workforce and an underdeveloped digital platform for disease surveillance (4).

How communities are responding to COVID-19

The concept of community and individual involvement in health care and public health is not novel in Oman. The MoH introduced a community participation approach in 1991 based on the involvement and collaboration of community-based groups in the implementation of public health interventions to improve population health. This approach resulted in the formation of healthy cities (HCs) and healthy villages (HVs), supported by community members. In responding to COVID-19, Oman was able to draw on experience and knowledge of community participation accumulated from past outbreaks and endemics such as H1N1 in 2009, as well as efforts in the country to eliminate many vaccine-preventable diseases including measles (19, 41).

During the pandemic period from early 2020 to July 2022, communities were responsive in implementing preventive measures and in supporting the transformation of health care services. This involvement supported the dissemination of information at all levels, especially during the COVID-19 vaccination campaign to alleviate vaccine hesitancy. The community also contributed to reducing disease transmission by adhering to nonpharmaceutical measures of social distancing, wearing of face masks and maintaining hand hygiene, which were further reinforced by government by-laws (29, 32, 41).
How communities are responding to COVID-19

The HCs and HVs provided critical contributions in coordinating and encouraging individuals to follow national plans and policies. For example, Al Buraimi HC responded to the pandemic with a community-based campaign called “We are all responsible”. The campaign aimed to raise community awareness about the importance of social distancing, hand hygiene and face masks to reduce the transmission of COVID-19, especially during religious occasions such as Eid and Ramadhan where residents were urged to avoid mass gatherings and preferably stay at home (4, 19). Nizwa HC initiated a project to enhance collaboration with civil society and academics to improve community empowerment and responsibility. The project involved developing, producing and disseminating trusted health education materials and reliable information, helping people to understand COVID-19, and become aware of and comply with precautionary measures. Messages about the importance of a healthy lifestyle to minimize the risk of infection – including a healthy diet, physical activity, avoiding smoking, mental health and geriatric care – were also distributed via billboards and social media. Meanwhile, the community in Nizwa was also involved in active discussions and seminars about their role in combating the pandemic and the consequent distress felt, via virtual meetings and training courses that allowed direct communication and interaction (42, 43).

Wilayat health committees (WHCs) led multisectoral collaboration in proposing and identifying solutions to social, health and lifestyle concerns during the pandemic, which resulted in the generation of community-based projects. Civil society organizations also played a key role, fundraising and providing medical equipment for specific populations to continue their treatment at home. For example, the geriatric civil society was able to provide the community with home oxygen concentrators to enable patients with COVID-19 to be managed at home with close follow-up by family physicians from the catchment health centres. This initiative had a positive outcome in reducing the patient load in health facilities and in reducing the period of short-stay admissions in health centres (19).

Mental health was also an essential aspect of the COVID-19 response, with services provided by different levels of the health care system including at the primary care level. Several efforts were made to mitigate the psychosocial consequences of isolation, boredom, fear and stigmatization that arose during periods of movement restriction. Psychosocial support services were provided to the general public via telephone calls and health care workers at mental health facilities in both the public and private sectors. A private psychology clinic, Whispers of Serenity, established a mental health awareness campaign named Not Alone. This campaign advertised a hotline to support people experiencing signs and symptoms of depression or anxiety, and for those experiencing suicidal thoughts, violence and bullying. It also introduced a WhatsApp messaging service to allow people to send anonymous messages if they needed psychological support, with the service available in six languages: Arabic, English, Urdu, Italian, Tagalog and Persian. Another community-based mental health support initiative was the launch of a smartphone application called Naftas for meditation. The app contained guided meditation and audio tools for relaxation, sleep issues, anxiety and stress reduction, and also provided content tailored to the COVID-19 pandemic to enhance individuals’ mental function and well-being (42–44).
Conclusions and lessons learned

Oman’s well-structured primary health care system, managed by the MoH, played a crucial role in containing the COVID-19 pandemic. The government’s swift response through the establishment of the Supreme Committee, tasked with addressing pandemic-related challenges, was a key factor in the success. Adopting a multisectoral approach, Oman demonstrated the importance of collaboration among different sectors in pandemic response.

The COVID-19 pandemic also highlighted the necessity of developing a comprehensive network of public health professionals and accessible digital platforms for data analysis, enabling evidence-based policy-making. Strengthening supply chains and promoting local production of PPE and medical supplies also emerged as essential strategies for supporting the pandemic response.

Despite the disruptions caused by the pandemic, essential health care services were largely maintained in Oman, particularly for vulnerable populations, women and children. However, primary care facilities experienced staffing shortages due to the reallocation of health care personnel to surveillance and temporary COVID-19 hospitals.

To prevent cross-infections, primary care centres implemented structural adjustments, such as the implementation of triage systems to direct patients to COVID-19 or non-COVID-19 health care facilities. Isolation areas were established within health centres to handle and triage suspected COVID-19 cases.

Telemedicine services were introduced at primary care centres to facilitate continued access to health care services for patients with chronic conditions and to support continuity of care. Additionally, the development of the Tarassud Plus web-based application provided transparent and up-to-date information on the country’s COVID-19 status, including confirmed cases, hospital admissions, suspected cases and related deaths.

In conclusion, Oman’s experience during the COVID-19 pandemic highlights the importance of a well-structured PHC system, including multisectoral collaboration, digital platforms for data analysis and adaptive strategies to maintain essential services. These lessons can guide future preparedness efforts and enhance the resilience of health care systems in the face of similar crises.
References


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References


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