



Primary Health Care in Oman: Shaping the Future

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The success of any health care system in any part of the world depends entirely on the strength and reliability of its primary health care (PHC) system.^{1,2} It is the first portal of entry for patients to the health care system and is the place where all their PHC needs are addressed including preventive care. It is “that level of a health service system that provides entry into the system, provides person-focused care over time, provides care for all but very uncommon or unusual conditions, and coordinates or integrates care provided elsewhere or by others”³

The four main features of PHC are availability close to the community, accessibility, comprehensiveness, and continuity of care.¹ Since the 1960s, family medicine has evolved as one of the major medical specialties in the world, and family physicians have become the main providers of PHC.

The evidence of the benefits gained from implementing PHC in health care systems is strong and has been confirmed in several studies.² Countries with strong PHC have been shown to have healthier populations.⁴ They also tend to have lower all-cause mortality rates, lower infant mortality rates, and higher life expectancy.² An analysis of 10 studies in the US revealed that an increase of one primary care physician per 10 000 population was associated with a 5.3% reduction in the overall mortality rate.⁵ Other evidence has also shown that an increased supply of primary care physicians was significantly associated with lower mortality rates from heart disease, cancer, and stroke.²

The cost-effectiveness of PHC was demonstrated in the analysis of 13 industrialized countries, which showed that countries with a strong PHC system had lower overall health expenditure.⁶ A greater

supply of primary care physicians was also associated with lower overall costs,⁷ which could be explained by lower hospitalization rates due to the provision of good primary care services including preventive care.

The effect of implementing PHC was demonstrated in the Finnish North Karelia project, in which preventive care measures targeting serum cholesterol, blood pressure, smoking, and diet were intensively applied and resulted in an impressive 85% reduction in the rate of coronary heart disease mortality over 35 years.⁸

In Oman, PHC has played an enormous role in the development of health care throughout the Sultanate. Over the last four decades, PHC provision has extended to include all regions. The total number of PHC centers reached 206 during 2016,⁹ and the number of general practitioners per 10 000 population rose sharply from 0.2 in 1970 to 10.8 in 2016.⁹ The same period also saw a significant increase in the total number of qualified family physicians.

Despite the successes and achievements of PHC in Oman, there are still many challenges that should be addressed. Some of those challenges will be discussed here.

The current situation of increasing costs and demands on health care systems calls for fostering investment in PHC. It is important for policy-makers in Oman to allocate additional resources to PHC to meet these additional demands.

Legislation to reinforce clearly defined catchment areas for each PHC center should be considered. If implemented, such regulations will transform clinical care, and make it more focused and comprehensive. This can be achieved, as has been done in other countries, by linking a unique identifier such as the national identity card with the medical records of

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each individual. This will also facilitate the exchange of patient medical information within PHC centers and between them and hospitals. It will prevent repeated and unnecessary investigations, improve the coordination of care, and will eventually result in better patient care. Reviving the idea of 'family folders' by which each individual is treated as a member of a bigger family (and was implemented successfully in PHC centers in the past) will transform the practice of family physicians into a true family practice by strengthening the principles of comprehensiveness and continuity of care.

Provision of essential technological user-friendly tools to collect important clinical information which can greatly help in measuring and monitoring of PHC key performance indicators will also be of great value.

Strategies should be introduced to retain existing family physicians in active practice and attract more doctors to this specialty. Such strategies could include giving these physicians equal opportunities for career progression, fellowship training, and the option to work in private practice as physicians from other specialties.

PHC centers were initially established to provide basic services of child immunization and maternal care, but the needs of the population and the role of primary care have expanded considerably. The focus has also shifted from communicable to non-communicable diseases (NCDs), which usually require close monitoring and long-term care. Primary prevention has become an essential aspect of medical care. Doctors in primary care have also become more involved in teaching and research. Given all this, the time has come for decision-makers to consider expansion of the existing PHC facilities to meet those emerging needs. Additional PHC centers are required in areas with higher population density to achieve the World Health Organization's recommended doctor to population ratio.¹⁰

The availability of a sufficient number of qualified family physicians in each health center is very important. Efforts should be made to train a larger number of physicians, both locally and abroad, because qualified family physicians constitute only a minority of the total number of PHC physicians who work in health care centers. The ratio of qualified family physicians to population was estimated in 2011 as 1 per 19288, which is far from the recommended target of 3 per 10000.¹¹ Strategies

should also be developed to attract new medical graduates to family medicine, to maintain the delicate balance between generalists and specialists in the country.

There is a need to expand the armamentarium of laboratory tests and medications to include those used in all common diseases to enhance the efficiency and effectiveness of PHC and avoid unnecessary referrals to secondary or tertiary care.

A well-developed and efficient digital PHC is of utmost importance given the rapid innovation in the health care system and the huge amount of information. Reinforcing existing network connections will strengthen the coordination of care between PHC institutions and secondary and tertiary services. Expanding digital services to include those that can be initiated by patients (such as booking appointments, requesting repeat prescriptions, and accessing medical reports) will reduce the burden on both patients and health care providers and enhance the quality of health care.

Incorporating the role of nurse practitioners into primary care services will help to address a wide range of simple patient needs and requests. The focus of primary care physicians will then be directed to patients with more complex and serious presentations.

Although a comprehensive approach is a main feature of PHC, the majority of PHC centers offer several specialized clinics for diabetes, hypertension, and asthma. While this approach might have its advantages in terms of organization of care, there is no substitute for a comprehensive and holistic approach, which should always be maintained.

Encouraging a team-based approach that includes family physicians, nurses, dieticians, health educators, pharmacists, and social workers results in better care, especially for chronic disease management and preventive care. Teamwork is the key component of a proposed Chronic Care Model, which was found to improve the care of patients with chronic diseases through interaction between informed activated patients and prepared proactive practice teams.¹²

The incidence of NCDs in Oman is rising, accounting for 67.7% of all deaths, with cardiovascular diseases the most common cause, followed by diabetes, cancer, and respiratory disease.¹³ PHC is best placed to prevent these diseases by introducing and implementing proper screening programs.

Supporting such programs and extending the service to include all regions could be of great value. Family physicians could put themselves in the best place to deal with the challenge of NCDs by implementing evidence-based practice and adhering to continuity of care.

Research in PHC in Oman should also be promoted, particularly in areas that are directly related to clinical care and the development of innovative health care services.

In conclusion, PHC is the cornerstone of the health care system in Oman. Strengthening such care by overcoming the challenges will result in better outcomes and improved quality of care.

“PHC has given Oman extensive experience in health promotion and disease prevention. Expand on this experience.”

-Dr. Margaret Chan

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