

Workforce issues of general practice in a developing country: Pakistan

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Background

Pakistan is a developing country that has a double burden of communicable and non-communicable disease. Healthcare reform is required to combat these prevailing healthcare issues with the 'family medicine approach' to primary care. Developing a workforce of trained general practitioners (GPs) to implement this approach is essential but challenging, yet there are success stories not only from developed countries but also from a few developing countries.

Objective

General practice is a specialty that has been recognised only recently in Pakistan. This article reviews the challenges of developing a workforce of trained GPs for primary care and proposes solutions to address the gap.

Discussion

Involving all stakeholders and organisations related to the specialty of general practice, integrating the subject of family medicine at an undergraduate level and encouraging postgraduate training and capacity-building through on-the-job training of GPs working in rural and urban primary care are all essential to develop a workforce of trained GPs in Pakistan. At the same time, standardisation and accreditation of primary care sites for training and research through public-private partnership are recommended.

IN THE DEVELOPING WORLD, an effective primary care system is key to improving the overall health of the population.¹ The World Health Organization (WHO) defines primary care as a key component of a healthcare system. It functions not only as a first contact but also encompasses ongoing comprehensive care provision with care coordination at other levels of healthcare. This includes acute and chronic care, and aspects of disease prevention and health promotion for problems identified in local communities. A primary healthcare (PHC) system includes primary care provision via defined processes, infrastructure that determines access, equity and sometimes partnerships.²

Pakistan is a developing South Asian country where communicable diseases, such as polio, tuberculosis, measles and malaria, still prevail; there is also a heavy disease burden of non-communicable chronic diseases, such as diabetes and hypertension.^{3,4} Moreover, mental health issues are on the rise,⁵ further taxing the limited healthcare resources. While some health indicators have improved, others lag behind; for example, the infant mortality rate still remains high at 66 per 1000 live births⁶ when compared with 4.3 per 1000 live births in a developed country such as Australia.⁷ This calls for a robust PCH system that is equipped to deal with acute and chronic illnesses, in addition to focusing on health promotion and disease prevention, to decrease the burden on secondary and tertiary healthcare. Healthcare systems based on accessible and efficient PHC have repeatedly been shown to be successful, such as in Cuba and recently Brazil, where health indicators are comparable with developed countries.^{8,9}

The physician is the heart of the PHC workforce, acting as the first point of

contact and responsible for providing community-oriented preventive, diagnostic, therapeutic and rehabilitative healthcare. Originating in the west, the role of the physician has been adopted by Middle Eastern countries, where the specialty of community medicine and public health looks at the broader community perspective and the family physician works with individuals and their families.¹⁰ Pakistan is slowly realising the importance of primary care provision, with the trained family physician as an integral part. An overview of Pakistan's healthcare system has been provided to increase understanding of the PHC situation.

A country with a population of approximately 208 million (with more than 60% of its population in rural areas), Pakistan has 107 medical institutions offering a five-year Bachelor of Medicine program for medicine; each institution produces approximately 100 to 250 graduates every year.¹¹ As at 2018, the Pakistan Medical and Dental Council (the primary medical licensing body in Pakistan) has approximately 170,000 non-specialist physicians and more than 40,000 specialists (Table 1).¹¹ In an ideal situation this would translate to one primary care physician for every 1200 people; however, the reality is vastly different.

The government has set up one primary care unit per 10,000 people. Across Pakistan, these units comprise approximately 11,000 facilities, including basic health units, rural health centres and dispensaries that are not run by physicians. These facilities, however, have been largely ineffective because of a lack of trained personnel, basic infrastructure and resource constraints leading to underuse by local communities.¹² The private sector, on the other hand, is largely unregulated and has a fee-for-service structure.

In this scenario the general practitioner (GP) is the dominant primary care provider. The GP in Pakistan is usually a physician who obtains a medical degree and then goes into practice with no formal postgraduate training. Other primary care providers are family physicians who have formal postgraduate training in family medicine, but these are far fewer in number. Furthermore, the majority of GPs work in urban settings, leaving large gaps in rural healthcare provision. Trained family physicians are scarce because of resistance to adoption of training programs in family practice. Approximately 10 institutions are offering training programs for family medicine in Pakistan, out of which six are formally recognised (Table 1).¹³ These training programs involve two to four years of training in private hospitals, although recently one program was run in a public sector university hospital. Another issue is workforce attrition. Those who receive postgraduate training may travel overseas for more lucrative options, further depleting the meagre pool. Lastly, no single national organisation exists to provide advocacy and support to family physicians in Pakistan. Provincial organisations exist, with fragmented goals for the advancement of family medicine.

Therefore, Pakistan has multilayered problems weakening the base of its primary care health services and providers.¹⁴ There is evidence of success when the specialty of family medicine forms the core of PHC, but developing a workforce of trained GPs in Pakistan is indeed an enormous challenge.¹⁵ Recognising the importance of trained GPs in provision of primary care, WHO has recently developed a workforce development program for family medicine in Pakistan. This includes developing a well-planned training program that is geared to overcome challenges such as skill development, quality of education, accreditation of training and retention of trained GPs, accounting for internal and external migrations and providing a clear career path that would improve workforce motivation. The WHO recommends the development of a policy at a national level, which can then be implemented in all provinces to address workforce issues in implementing a 'family medicine approach in primary care'.¹⁴

A few critical steps are required to achieve the required workforce and strengthen primary care in Pakistan. First, funds need to be allocated for capacity building and training of master trainers. This can be accomplished through

the sharing of human resources from countries where family medicine is already established, such as the UK and Australia.¹⁶ Distant learning through use of technology is one of the ways to strengthen training programs. Moreover, as in other developed countries, incentives need to be given to doctors to specialise as primary care providers.¹⁷ Second, postgraduate training should be encouraged through provision of satisfactory incentives and defined career paths for primary care providers. As an example, Cuba has community-based clinics that serve as PHC units as well as a hub for research and teaching centres for medical and allied services.¹⁸ Provision of on-the-job training for existing GPs is another way to strengthen the primary care workforce. These can be accomplished by engaging in public-private partnerships that work towards incentivisation, standardisation, training and accreditation of providers that go on to work in both rural and urban centres set up by the government.¹⁹ A national family medicine organisation that works to promote the specialty of primary care via its academic and technical expertise is also an essential step towards this goal.²⁰

All of these steps require organised efforts involving all stakeholders including private and public academic institutions,

Table 1. Distribution of medical colleges, general practitioners, Family Medicine departments and training programs in different provinces of Pakistan

Province	Medical Colleges	Total GPs with bachelor degrees	Total number of specialists	Family Medicine departments in teaching hospitals	Recognised training programs of Family Medicine							
					Four years (FCPS)		Four years (MD)		Two years (DFM)		Two years (MCPS)	
					Program	Trainee	Program	Trainee	Program	Trainee	Program	Trainee
Punjab	58	72,826	20,788	3	1	1	2	0	2	0	1	5
Sindh	24	63,056	11,782	6	4	11	2	6	2	50	5	4
Khyber Paktoonkhwa	19	21,401	5,760	1	0	-	0	-	0	-	3	0
Balochistan	2	4,838	1,388	0	0	-	0	-	0	-	0	-
Azad Jammu Kashmir	4	3,644	964	0	0	-	0	-	0	-	0	-
Foreign Nationals	-	3,931	112	-	-	-	-	-	-	-	-	-
Total	107	169,696	40,794	10	5	12	2	6	4	50	9	9

FCPS, Fellow of College of Physicians and Surgeons of Pakistan; MD, Doctor of Medicine; DFM, Diploma in Family Medicine; MCPS, Member of College of Physicians and Surgeons of Pakistan

licensing bodies and governmental as well as non-governmental organisations committed to providing PHC. Community participation is essential for the success of such a system, which can be attained as provision of quality services becomes evident. A promising development in recent years has been the approval of family medicine as a mandatory clerkship in undergraduate medical education.²¹

One hopes that this paves the way to slowly developing postgraduate training programs as well.

Conclusion

The current priority for improving healthcare in a developing country such as Pakistan is quality primary care provision. One key intervention is to develop a workforce of trained GPs in Pakistan that can provide efficient and cost-effective primary care.

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