Speaking for Myself

Mid-level healthcare providers: Making a fresh case for modern Indian healthcare

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ABSTRACT

To compensate for physician shortage, many countries around the world have introduced a cadre of mid-level healthcare providers (MLHPs) into their health systems to shoulder many of the conventional responsibilities of a physician. Besides backing their clinical competence and service quality, evidence and experience on MLHPs also supports their lower turnover and higher rural retention rates. In India, mainstreaming of MLHPs has time and again been met with resistance from organized medicine. We explore a fresh case for MLHPs in India in view of some recent developments and the probable future contours that Indian healthcare is likely to assume. Aided by global precedents, we broaden the rationale for mainstreaming MLHPs, address some common misunderstandings, and describe the conducive emergent legal and policy landscape. We also explain how a possible reorganization of Indian healthcare, highly likely under expanded publicly financed health insurance and value-based healthcare regimes, can warrant greater health workforce differentiation and an expanded role of MLHPs in mainstream healthcare delivery. We also touch upon important political economy considerations, including the need for navigating organized medical opposition, involving medical stakeholders in the MLHP mainstreaming process, autonomous regulation of MLHP professions, streamlining MLHP competencies, and inclusive health financing systems.

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INTRODUCTION

Health systems around the world have regularly had to contend with a deficit of health human resources, mainly physicians, as they pursued their healthcare expansion goals. This has been compounded by epidemiological and demographic transition, rapid and uneven urbanization, and rising healthcare demands and costs. Many developing and developed countries alike have conceived of a partial solution in mid-level healthcare providers (MLHPs)—healthcare personnel who successfully undertake many clinical and public health functions that are usually meant for a physician, after short-term training in medicine ranging anywhere from less than a year to four years in duration. MLHPs come in a variety of cadres globally, including physician assistants (PA), health assistants, community health officers, clinical officers, rural health practitioners, nurse practitioners, etc. They exhibit similar diversity in entrance requirements for training (from secondary education in Kenya to experienced paramedics in Israel); need for physician supervision (considerable PA autonomy in the Netherlands to strong physician oversight in much of the USA); and the kind of settings they practice in (mix of primary and specialist care for PAs in the UK to predominantly specialist care in Ireland).[1]

Evidence shows that MLHPs can, under certain circumstances, provide care of an equivalent quality and safety to that of physicians at lower overall costs, across a range of settings.[2–8] They have also been found to fare equally well or better in terms of patient satisfaction and trust,[4,9] apart from evident contributions to improving healthcare access and utilization in underserved and rural areas. Evidence also indicates that MLHPs are less prone to emigration and more likely to remain in underserved areas[10]—two prominent problems that have perennially plagued health systems when it comes to physicians.

In India, both Central and state governments have from time to time conceived of bridge courses in allopathy to address the shortage of doctors in rural areas. In 2010, a proposal to start a shortened medical degree in rural healthcare was proposed, which was backed by the Planning Commission. States such as Assam and Chhattisgarh have successfully deployed state-level MLHP cadres to improve access to primary healthcare in rural areas. However, attempts to mainstream MLHPs have time and again been resisted by organized medicine, mainly on the premises that they can worsen quackery and amount to discriminatory treatment with rural citizens.

While the evidence and the many international precedents have been widely discussed in the literature, this article draws out a renewed and emerging case for mainstreaming MLHPs in India—inspired mainly by recent developments and the likely future healthcare trends in the country. First, we expand the arguments for MLHP incorporation into the healthcare system and address some of the common fallacies that prevail. We then examine the historic and contemporary legislative and policy milieu for MLHPs, and describe how a possible reorganization of Indian healthcare, driven by the goal of universal health coverage (UHC) and technological improvements, can entail greater health workforce differentiation. Finally, we discuss some political economy considerations and recommendations to that effect.

BEYOND CLINICAL COMPETENCE: EXPANDING THE RATIONALE

It has been increasingly acknowledged that few health systems have the luxury of ensuring that all their routine healthcare

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services are delivered by none other than an experienced physician.[11] Every profession has its characteristic culture, evident in its education and training, that defines its values and worldview. As Hall[12] has argued, medical training tends to exalt saving lives over improving the quality of life, and the archetypal medical doctor is gravitated towards complex, life-threatening, and rare cases over simple, chronic, mundane ones. The direct corollary is that practising cutting-edge, resource-intensive medicine carries much greater allure over providing frugal preventive care. There is therefore little wonder that specialization remains the holy grail in medicine worldwide with few exceptions, and that countries struggle to fill primary care positions that can address 80%–90% of health problems. While reorienting medical education to primary care is key, progress in this direction has evidently been slow and is unlikely to be complete. This is where MLHPs can step in, not as a stop gap measure but as a sustainable and evidence-based remedy.

A common concern has been that MLHPs are second grade doctors, and assigning them to rural areas amounts to dispensing discriminatory treatment to the rural populace. There is evidence to believe that most rural populations may not be any better positioned even otherwise. In his seminal 1971 article, Hart[13] had discussed how working-class areas in Britain attracted general practitioners who generally had lower morale, fewer higher qualifications, and were less likely to have studied in premier universities. More recently, a study by Warriner *et al*.[14] comparing MLHPs and physicians in rural areas of Nepal found that MLHPs, in general, had more years of clinical experience than physicians. This resonates with the common observation that rural areas predominantly attract newly graduated physicians who have little past clinical experience, especially when driven by state instruments such as mandatory bonded rural service; those with familial ties in rural areas; or, as Hart states, those that are 'attracted by large lists…and an uncritical clientele' (p. 407), where clinical acumen matters little. MLHPs, whose abilities to deliver quality care and improve access with relatively lower turnover are backed by evidence and experience, can only serve to alleviate the rural–urban divide.

It is also unwise to expect that with time, economic development and an increased production of medical doctors will naturally close the rural–urban gap. Experience shows that even in developed countries with adequate doctors, retaining physicians in rural areas can be challenging and is often vulnerable to changing conditions. For instance, New Zealand faced challenges in retaining doctors in rural areas due to emigration to Australia and other countries, leading to an interest in PAs.[1] Bulgaria faced similar emigration of physicians after joining the European Union. This is unlikely with MLHPs as their credentials are not readily recognized the world over, particularly in developed countries. Measures to improve rural doctor retention have had limited success so far and cannot be expected to drive competent physicians down to the last sub-health centre, which is crucial for equitable, timely and patient-centric primary care.

Manufacturing human resources for health (HRH) is time- and resource-intensive and often fails to keep pace with national healthcare expansion targets. This has important implications for India's goal of UHC by 2030, and the country is poised to attain the WHO recommended HRH levels only by 2040.[15] Short-term training courses, such as those for MLHPs, may allow for relatively rapid and inexpensive scaling up without compromising on care quality and safety. For instance, Kenya, as part of its 'Big Four Agenda', which includes universal health care, made major investments in expanding training facilities for clinical officers.[16] Salaries for HRH also account for the major share of national health expenditures. It is notable that some developed countries with no apparent physician shortages have shown greater interest in the success of MLHPs over expansion of medical schools. An example is the Netherlands, where PAs have grown considerably over the past two decades. An economic rationale for MLHPs is evident in entrepreneurial systems such as the USA, and this has played an important role in reconciling their acceptance by physicians and other clinical staff.[1] It was also noted by Warriner *et al*.[14] that MLHPs possess a less resource-intensive style of practice, have a more balanced gender representation, and are culturally more acceptable than physicians.

THE LEGAL AND POLICY SIDE

In pre-independence India, licentiate medical practitioners (LMPs) comprised nearly 70% of the medical professional workforce. The Indian Medical Council (IMC) Act, 1933, did not recognize LMPs as qualified physicians;[17] and the LMP concept was discarded in the years following independence based on the recommendations of the Bhore Committee. In recent times, there have been two spirited attempts to revive MLHPs at the state level, by Assam and Chhattisgarh. In both cases, organized medical opposition was based on legal grounds in addition to other common objections such as quackery and discrimination.

In 2004, the state of Assam passed the Assam Rural Health Regulatory Authority Act, which provided for a regulatory authority in the state to train a cadre of rural health practitioners through a 3-year Diploma in Medicine and Rural Health Care (DMRHC), and regulate their education and practice. Substantial improvements in availability and utilization of primary care services were noted at the sub-health centre level, in an evaluation published in 2014. In response, the Indian Medical Association (IMA) moved the Assam High Court challenging the validity of the Act, and it was struck down on the grounds that it conflicted with the Central IMC Act, 1956, since professional and technical education come under the concurrent list of the Indian Constitution.[18] Following this, the state government promulgated the Assam Community Health Professionals' (Registration and Competency) Act, 2015, which was deemed valid since it did not directly deal with regulating medical education. Similarly, the state of Chhattisgarh created the Chhattisgarh Chikitsa Mandal in 2001 to train Rural Medical Assistants, which was challenged on similar legal grounds and finally stopped in 2008 after a series of strikes and protests.[19]

Some more recent policy and legislative measures have offered renewed hope for a systematic revival of MLHPs in India. First, the Comprehensive Primary Health Care (CPHC) guidelines under the Central government's flagship Ayushman Bharat Mission make provisions for a community health officer (CHO).[20] These CHOs will be stationed in refurbished sub-health centres and provide an expanded set of primary care services within a team-based approach. Concurrently, the National Medical Commission (NMC) Act, 2019, which supplanted the IMC Act, 1956, has made allowances for training and licensing a cadre of community health providers with limited but independent practising privileges in primary care. Secondly, the National Commission for Allied and Healthcare Professions Act, 2021, seeks to standardize and regulate paramedical education and includes PAs. Thus far, with no

overarching legal recognition, PAs and their courses in India enjoyed little popularity, found limited employment opportunities restricted to the private sector, and have remained confined mainly to a few specialties such as surgery and cardiology. Further, some initiatives to train nurse practitioner cadres in midwifery and critical care are also under way.[15,21]

CHANGING HEALTHCARE TRENDS

The Indian healthcare system today stands at the cusp of a reorganization. A number of factors can be thought to have heralded this transformation. With UHC in sight, the government is considering the expansion of publicly financed health insurance (PFHI), including outpatient care insurance, to cover 85% of the population through public–private partnership.[22] Currently, both Central and state PFHIs cover mainly the poor population, with lesser-than-expected levels of awareness and utilization. Besides, some policy pronouncements have also envisaged value-based reforms in healthcare financing, and the consolidation and formalization of dispersed private providers in the outpatient care space.[23,24] Needless to say, digital health received a tremendous impetus in the aftermath of Covid-19 and stands to reconfigure existing healthcare delivery paradigms.

Some thinkers on value-based healthcare (VBHC) have envisaged reconfiguring primary care provision into integrated practice units (IPUs), each of which address a specific set of similar primary care needs.[25] This is because the traditional primary care organizational paradigm, where all primary care needs are met under one roof, militates against accurate outcomes measurement, which is the cornerstone of value-based financing. While VBHC reforms in primary care are much needed, improper execution can lead to a fragmented system. Family practice teams have to be at the centre of integrated care networks. Notwithstanding, the expansion of PFHI and implementation of VBHC will invariably result in more regionalized and consolidated healthcare organizations since their current multiplicity is inefficient.

While on the one hand, the boundaries between primary and secondary are likely to be increasingly blurred, on the other hand, an increasing demand for care under insurance will compel payers and providers to seek greater efficiencies and economies. One of the obvious options will be to depart from the existing physician- and nurse-dominated system and create a well-differentiated clinical workforce that includes MLHPs and permits greater task shifting. With their clinical versatility, MLHPs stand poised to fill a range of roles across primary and specialist care. For family practice units, incorporation of MLHPs can greatly help expand catchment size and improve outreach while generating cost savings, which will be crucial to thrive under regulated financing systems.

POLITICAL ECONOMY AND FUTURE CONSIDERATIONS

In Australia, a demonstration project on PAs launched in 2005 showed positive results and led to a PA training programme in the University of Queensland.[1] However, it was soon aborted due to resistance from organized medicine, and while PAs continue to be a part of Australian healthcare, they have failed to catch on and face an uncertain future. Taiwan also instituted a programme to train nurses into PAs but had to roll it back due to opposition from doctors and nurses associations. In the UK, the creation of a Faculty of Physician Associates at the Royal College of Physicians played a major role in the success of the physician associate profession in the country. Organized medical opposition remains the prime threat to the mainstreaming of MLHPs for obvious reasons. For India, the refurbished organizational structure of the NMC and its strong centralized direction offers some promise and is likely to contribute to a greater acceptance of MLHPs across the Indian states. However, much more will need to be done. As discussed by Cawley and Hooker,[1] a deficit of physicians legitimizes the expansion of MLHPs, both by weakening medical opposition and strengthening the position of the state. At the same time, however, it is also crucial to involve medical stakeholders early on in the mainstreaming process. This can be facilitated by demonstrating to physicians the many benefits accruing from the role of the MLHP assuaging any fears of its untoward consequences on their practices, social justice or quality of healthcare. As seen in the USA example, the cost-effectiveness rationale can be a great facilitator for MLHP acceptance among physicians, particularly under organized insurance-based systems. Experience shows that such concerns as increased competition and diminished physician earnings can be allayed by reduced physician workloads, more free hours for teaching and academic activities, and better team performance and outcomes that result from incorporation of MLHP.[1,26] Effective regulation of MLHP practice and education, and well-defined and negotiated areas of practice, can satisfactorily address concerns like quackery.

Over the longer term, however, it is unlikely that the MLHP cadre could flourish without having their own, dedicated professional council that oversees and regulates their training and practice. Such a council is to be distinguished from a common commission for all paramedical personnel. For instance, clinical officers in Kenya are regulated by the Clinical Officers Council, which also accredits training institutions and approves course syllabi.[16] Laying down substantive career advancement pathways for MLHPs may not be possible within the clutches of organized medicine.[26] It may also unduly circumscribe their scope of practice below equilibrium levels, and cause less than adequate attention to be given to aspects such as continuing medical education. In Kenya, diploma clinical officers can undertake specialized higher diplomas, bachelors, masters, and even doctorate qualifications.[16] Such avenues also offer the added advantage of at least partly reorienting medical research towards common and widely prevalent health problems that are often considered ‘unattractive’ by physicians.

Within more dynamic, better integrated and well-organized systems of care, the narrow conception of MLHPs as mere ‘rural primary care adjuncts’ will need to go. In the long run, the current dichotomy between rural CHOs and privately working PAs will cease to make sense, and they would need to be brought under a common umbrella. At the same time, the undue specialty-focus that prevails among Indian PAs today will need to be balanced with a greater emphasis on primary care. The nurse practitioner path should also be explored. However, owing to the already serious shortage of nurses in the country and the high opportunity costs involved, they may not be suitable as the predominant MLHP cadre. Similarly, circuitous routes such as retraining dental and alternative medical graduates through bridge courses may be a good stop gap arrangement but wasteful and unsustainable in the long run.

Last but not the least, in the absence of inclusive health-financing systems that reimburse for care delivered by MLHPs, the entire model will implode. One of the reasons for the failure of the Australian PA model was that unlike in the USA, Australian

Medicare did not reimburse for PA care. This will need to be planned in tandem with UHC expansion and backed by robust costing data.

CONCLUSION

So far, the idea of mainstreaming MLHPs in healthcare has been met by a visceral alarm and knee-jerk resistance by organized medicine. Studied and implemented carefully, the MLHP model can create win-win combinations within healthcare that can benefit patients, doctors, healthcare financers and the society at large. Policy-makers will need to work towards finding greater acceptance of MLHPs among existing health occupations, by demonstrating their complementary role in patient care and assuaging long-established concerns such as quackery. Coupled with professional practice models that ensure long-term growth and career advancement, MLHPs can bolster India's journey to achieve and sustain UHC.

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