Next-generation Solutions for Indian Health Care: Strengthening the Impact of Allied Health

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**Next-generation Solutions for Indian Health Care: Strengthening the Impact of Allied Health**

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Next-Generation Solutions for Improving the Impact of Indian Allied Health: A Commentary

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ABSTRACT
The contributions of allied health professionals to patient care is well recognized in developed countries. In developed countries, allied health providers can reach the general public easily and cater to the health care needs of the society. However, medical dominance in developing countries often curtails the autonomy of allied health professionals. The Public Health Foundation of India prepared a report in 2012 on allied health professionals in India. This report explained the role of the AHP in improving the health status of the country. The objective of this commentary is to provide a possible opportunity for better integrating the allied health professions in the provision of health care in India based on the report prepared by the Public Health Foundation of India.
INTRODUCTION
The positive impact that allied health professionals (AHPs) have on health outcomes across the lifespan and across healthcare sectors is widely recognised in many countries. However, AHPs in India are yet to be positioned to play an effective role in dealing with India’s complex health and social challenges. The Public Health Foundation of India (PHFI) report, commissioned in 2012 by the Indian Government Ministry of Health and Family Welfare (MHFW), provided an overview of the many educational, professional, and workplace challenges facing Indian AHPs.¹ These challenges have largely prevented AHPs from playing a greater role in improving health, function, and quality of life for Indian people. The PHFI report also proposed innovative solutions to this dilemma, considering issues such as the definition of allied health (AH), inclusivity and exclusivity issues, training, workforce levels and availability, cost, and engagement.¹ However, these issues are not just confined to India, and thus Indian policy-makers, educators, researchers, and clinicians could possibly benefit from other countries’ experiences.

The PHFI report is now six years old, and remarkable progress has been made in addressing some of the issues it raises. However, it is time to propose innovative “next generation” solutions to increase the impact of AHPs on Indian healthcare. Better engagement of AHPs in addressing India’s complex health and social issues could also provide leadership for other countries with similar challenges. The objective of this commentary is to discuss the issues raised in the PHFI report and to propose solutions to improve utilization of the Indian AHP workforce.

ALLIED HEALTH
Definition of Allied Health
There is no agreed upon definition of AH internationally, and it is often defined by lists of disciplines.² It is generally thought that AH does not include doctors or nurses, and consists of two main streams (therapies, scientific).²³ There should also be a “miscellaneous” stream for non-health professionals such as medical librarians, chaplains, medical photographers, ward clerks, aides, assistants, and others. The PHFI definition of AHPs appears to be an amalgamation of definitions from around the world: “AH professionals include individuals involved with the delivery of health or related services, with expertise in therapeutic, diagnostic, curative, preventive and rehabilitative interventions. They work in interdisciplinary health teams including physicians, nurses and public health officials to promote, protect, treat and/or manage a person’s physical, mental, social, emotional and environmental health and holistic well-being.”¹²⁵²⁶ Broad uptake of this definition in India could provide a platform for a common understanding of AHPs’ nomenclature, scope of practice, and purpose.²³

Supply and Demand
The PHFI report cites workforce statistics regarding how few AHP professionals are available to engage with the many millions of Indian citizens who require their services (demand exceeds supply).¹ Indian AH services appear to be most required in primary healthcare settings, where the real, grass-roots impact of disease and disability is generally encountered.³⁴ Primary healthcare often also represents the best “buy for spend” in terms of the most effective and efficient services that can be purchased for available health budgets.⁵⁷

In many developing countries, after people have received acute inpatient care for a potentially life-changing conditions (i.e. stroke), they are discharged to their communities to largely fend for themselves without adequate care or education about self-management. In India, the role and “value” of AH care in providing continuity of care and in supporting people with chronic health needs has been largely unexplored, particularly in terms of a cost-effective impact on function and quality of life for individuals, families, and communities.

The WHO Disability Report suggests that despite best intentions, it is unlikely that there will ever be sufficiently-trained AH professionals in any country to meet all patients’ needs, particularly in developing countries where need would appear to be greatest.³ To compound matters in India, there has been significant emigration of Indian AHPs to more developed countries where recognition, remuneration, and working conditions are perceived to be better.¹ Alternative and innovative workforce reforms in India are indicated to ensure a stable and predictable AHP workforce and equitable and effective provision of AH care across all healthcare settings in the country. The issues raised by WHO resonate with the PHFI report in terms of the urgent need for workforce innovation and service reform to provide AH services where none are currently available.¹³⁶

Training
In developed countries, AHPs are trained in regulated universities which are accountable nationally for educational standards. Moreover, AHP training programs are accredited with relevant national professional bodies, and students of any AH discipline must demonstrate an extensive suite of competencies prior to being allowed to register to practice. Teachers in AH programs are
regularly audited to ensure that they have the currency and skills to effectively impart up-to-date knowledge and to foster students' capacity for lifelong learning. Research training programs are embedded into AHP training courses, not only to teach students how to do research, but also how to read and critique research reports and how to implement research findings into evidence-based practice. Such training assists AHPs to retain relevance as effective healthcare providers, by encouraging them to continue to question, read, and integrate research into their clinical decision-making long after they have left university.

In India, there are many institutions producing AHP graduates; however, there are few quality controls. Universities and colleges may not be regulated, and can be variably funded. In addition, there is no formal accreditation of AHP training courses by professional bodies. Students have inconsistent exposure to clinical and research training. The Ministry of Health and Family Welfare recently prepared model curriculum for several AH disciplines that could be used as a national template; however, the quality of training and clinical supervision to enact the curriculum requires more focus. For instance, there are few controls on AHPs regarding their capacity for ethically competent practice on graduation. India could lead the way for other countries with uncontrolled AHP training environments by establishing a national body which accredits the content and delivery of AHP training programs. One suggestion is that only graduates from regulated universities which conduct accredited AHP training programs should be eligible to be registered to practice.

**Registration**

In developed countries, AHPs are legally required to be registered by a recognized authority before they can practice professionally. Registration requirements generally include evidence of regular professional development to maintain or improve graduate competencies. These registering bodies also monitor complaints about professional practice, and discipline individuals who practice in a manner that is unethical and/or harmful. One barrier in many countries to viewing AHPs as a unified group is fragmented registration requirements. For instance, whilst disciplines such as physiotherapy or occupational therapy are generally registered by a national legislative authority, other AH professions such as dietetics, medical radiations or social work are “registered” by their professional association.

India could learn from international experiences and legislate that all AHPs require national registration. The same national body which deals with program accreditation could be responsible for AHP registration. Standard graduate competencies should be specified for each AH discipline, and there should be an explicit expectation that registered AHPs demonstrate regular professional development. Recently, a trial registry for AHP was established by the Indian Government, and if, after evaluation, it is deemed to be effective, this registry may proceed to regulate all AHPs.

**Medical Dominance**

A challenge to greater AHP recognition in India is the power that Indian medical doctors hold, as designated “gate keepers,” not only of AH care, but also AH training and registration. This often reflects historical, or expected practice (e.g. within a hospital or a university). This is the hierarchical model where the doctor makes all the decisions regarding curriculum, or patient care, and these are then actioned by other doctors, nurses, or AHPs.

Medical doctors acting as gatekeepers of AH care is common internationally, not just in India. This can take the form of a referral, where the medical doctor recommends AH care but AHPs make the care decisions. However, more commonly in India, it comprises a prescription, where doctors refer the patient to the AHP and then dictate the care that AHPs should provide. AH professionals in many other countries are legally entitled to independently consult with patients without a medical referral. In many countries the right to first-contact practitioner status has been won by demonstrating to the medical profession, legislators and insurers, that AHPs are competent to provide safe, ethical, effective, independent practice, because of the rigor of their training and their registration requirements. Competency on graduation from a training program with an AH degree is recognized in many countries by the legal right to independently assess and treat patients, without the need for a doctor’s “oversight.” Indeed, it is argued that the need for a medical referral (and/or prescription) is wasteful of scarce health resources, particularly in primary healthcare environments where medical practitioners’ knowledge of best-practice care for chronic disease and disability may be poorer than that of a well-trained AH professional.8

Establishment of national regulatory, accrediting, and registration bodies for Indian AHPs would go a long way to changing legislators’, insurers’, and medical doctors’ perspectives on the need for the medical “gatekeeper” role. AH personnel who can represent the spectrum of AH disciplines should be integrally involved in establishing any national regulatory and accrediting body, so that these bodies address the complexities of AH training and service delivery.
Recognition of the Role of Allied Health
The World Health Organisation (WHO) Global Disability Action Plan 2014-2021 sets rehabilitation as the key health action strategy for the 21st Century. Rehabilitation is the remit of many AHPs, and is key for optimizing function, reducing disability, and minimizing the effects of existing chronic conditions. The spotlight on rehabilitation internationally follows the changing epidemiology of communicable and non-communicable disease. Around the world, the prevalence of communicable diseases is decreasing as a result of research investment, new technologies, and curative strategies, whilst the prevalence of non-communicable diseases, disabilities, and injuries from trauma, is increasing. This has produced an overt shift in focus globally from medical care for communicable diseases to rehabilitation for chronic diseases and disability in primary healthcare settings.

India has a huge unmet need for rehabilitation services for the millions of people suffering from chronic disease, disability, or injury. Many of these people may be unable to contribute to their family’s income or their country’s economy. The lack of a living wage as a result of unemployment and lack of access to government grants means that they and their families live in poverty. This produces a vicious and often perpetuated familial cycle of ill health, poor nutrition, poor health literacy, poor education, and little hope. The PHFI presents a strong case for strengthening the role of AH in rehabilitation in India, and suggests the need to invest in best practice rehabilitation services in India is urgent. However, before effective rehabilitation can be implemented across India, it needs to be strengthened by better evidence, effective AH workforce reforms, and AHP training.

AHPs also play an important role in chronic disease prevention, and the impact of an increased focus on AHP-led disease prevention initiatives for Indian citizens can only be guessed at. AHPs can provide multipronged, multidisciplinary disease prevention activities, such as education on better health maintenance and lifestyle choices. They can assist mothers-to-be to experience healthy pregnancies and to deliver their babies in the safest way possible to reduce maternal and child mortality. They can assist older people to reduce their falls risks and optimize bone health to reduce preventable fractures. They can assist parents to improve their own literacy so as to help their children to obtain better education and to make wise choices regarding their family’s healthy behaviors.

Multidisciplinary Care
The GP-gatekeeper model is in direct contrast to the increasingly-accepted multidisciplinary model of collaborative healthcare in primary healthcare, described in the PHFI report. This is where patients are assessed by multidisciplinary healthcare teams, which can include medical doctors, nurses and AHPs. Patient health issues, circumstances, and goals are considered, care plans are determined, and the best way to action care is considered. Combining knowledge of different healthcare providers offers efficiencies for patients and the healthcare system in providing access at one point in time to healthcare providers who share their knowledge and experiences to determine the most appropriate interventions for patients. Momsen et al reported an overview of 14 systematic reviews regarding multidisciplinary rehabilitation team care, finding convincing evidence to support improved functioning for elderly people in general, elderly people with hip fractures, homeless people with mental illnesses, and adults with multiple sclerosis, stroke, acquired brain injury, chronic arthropathy, chronic pain, low back pain, or fibromyalgia.

Patient-Centred Care
Multidisciplinary teams are increasingly including patients and their families. This is a relatively novel concept in India, where patients are often perceived as passive and uneducated recipients of care, rather than active team members who have opinions and can make choices. The consumer engagement model proposes that patients know their health needs better than anyone else, and they hold singular knowledge which could increase healthcare efficiencies and effectiveness if they were given a voice. To have a voice however, requires that patients have a level of health literacy allowing them to meaningfully engage with healthcare providers, express their views, and make informed care decisions.

Improving patient health literacy in India is a challenge which could be taken up by AHPs. AHPs often have much longer periods of contact with patients than medical doctors, particularly during rehabilitation. As part of their treatment, they could educate patients about their health conditions and how to prevent their symptoms from worsening. AHPs could also educate patients about disease prevention that may be relevant for their family or community.

Best Use of Scant AHP Resources
A challenge in India is how to make best use of available AHPs to provide effective care to as many people as possible. The PHFI report suggests specific nomenclature related to the amount of education obtained by Indian AHPs. Those with undergraduate university degrees are called AH professionals; diploma holders are called AH providers; and certificate holders are called AH workers. Such distinction may be unknown outside India; however, it could offer a novel way forward to make best use of India’s...
scant AH workforce to provide specific services efficiently to the many Indian citizens who need them but are not currently receiving them. To address the current shortage of Indian paramedical professionals around the country, a mentoring system could be established between different groups of AHPs, where an AH professional might assess the patient (perhaps as part of a multidisciplinary team) and develop a care plan with the patient and family. The care plan could then be actioned by AH providers and supported by AH workers under supervision and regularly monitoring by one or more AH professionals.

Moreover, operating in this manner could offer professional skills “escalators” and career advancement opportunities for AHPs holding certificates or diplomas.\(^2\)^\(^1\)\(^2\) These people already have some competencies to undertake meaningful curative, rehabilitation and/ or prevention roles under the guidance of AH professionals (as well as doctors or nurses), whilst also having the capacity to up-skill to higher levels of professional recognition. These opportunities would require additional education but could also include “apprenticeship” or “internship” whilst working under the supervision of a better-qualified healthcare provider.

There also appears to be the opportunity to establish a new AH worker, a “generalist” primary healthcare AH paraprofessional who could act under instructions from paramedical professionals and deliver a broad level of community care at a lower cost than could be delivered by multiple paramedical professionals. Whilst this is no substitute for care provided by a multidisciplinary team or by AHPs, a generalist AH worker could have basic skills across a number of AH disciplines and provide regular one-to-one or group rehabilitation activities in the community. For instance, under supervision, they could deliver gait and balance training, strength training, cardiovascular fitness training, fine and gross motor training, basic occupational retraining, and nutritional and wellbeing advice.

Political Voice
To support the many reforms required to strengthen the impact of AH in India will require a credible, recognized national voice, sitting within the MHFW. This process has recently been initiated.\(^1\)\(^2\) Ideally this secretariat will draw on input from policy-makers; AH researchers (including epidemiology, service quality and clinical interventions); vocational and tertiary educators; clinicians; and health economists. This secretariat should have ready access to national patient consumer groups to ensure that national AH policy reflects and meets the needs of end-users of AH. It should develop and administer a national system of registration for AH providers which enforces ethical action and continual professional development. It should have the capacity to conduct epidemiological surveys of rehabilitation need (chronic disease and disability), as well as improvements in health status as a result of access to rehabilitation. It should also be responsible for commissioning regular state and national reviews of training and workforce reforms to ensure that they are providing value for money and satisfaction for end-users. This national AH secretariat should also have the staffing and policy capacity to link with other sectors in government, such as employment and social services, to enable investigations into the impact of AH on matters other than health.

CONCLUSION
The PhFI report provides the foundation for a rare capacity-building opportunity for AHPs in India. To be successful in realizing the potential of AH care in India, this will require:

- credible AH voices at National Ministry of Health level which can speak knowledgeably to community rehabilitation need, AH capacity, workforce innovations and AH impact, and which can develop innovative policies to spread the value of AH care to all citizens which require it;
- a concerted focus on standardizing AH training across the country, including better research methods training, critical thinking, training in consumer engagement and community participation (goal setting, contextualizing knowledge to local issues and need);
- a national authority to accredit training institutions and curricula, and register AHPs; and
- evidence across healthcare sectors to demonstrate how strengthened AH services impact on individual health outcomes, community health and the Indian economy.

REFERENCES

1. The Public Health Foundation of India report From Paramedics to Allied Health Professionals: Landscaping the Journey and Way Forward; commissioned by the Ministry of Health and Family Welfare, Govt of India, 2012.
7. Hoffman K. Non-communicable diseases in South Africa: A challenge to economic development 2014; *SAMJ* 104 (10);
8. Greenfield G, Foley K, Majeed A. Rethinking primary care’s gatekeeper role. *BMJ* 2016; 354 i4803 doi: [https://doi.org/10.1136/bmj.i4803](https://doi.org/10.1136/bmj.i4803)