



## The Status of Allied Health Professionals in India: Need for a SWOT Analysis

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### Abstract

India is struggling hard to meet the healthcare needs of its vast population and the major cause is shortage of human resources at all levels of healthcare system. To meet this demand, Government of India is planning to integrate allied healthcare professionals into main stream of Indian healthcare delivery system. At present, there is no governing body to regulate the training and services of allied health professionals in India. There is a strong need to establish an individual council for the regulation of allied health institutes and AHPs. Government of India is also working in that direction. This is the most optimum time when all allied health fields and professionals must analyze their current scenario and identify the most vital ingredients which can help them to excel in their fields. This will further help to establish a quality foundation for reintroduction of AHPs into the future public health care delivery system of India. SWOT analysis is an important managerial technique of introspecting the overall strategic position of a business, a project, an organization or an individual. If executed in a systematic way, this can become the foundation for evaluating the internal potentials and limitations and possible opportunities and threats from the external environment. By identifying the strong and weak attributes, AHPs can overcome existing threats in a systematic way by assimilating the opportunities in the best manner. At this time, if the leaders of allied healthcare professions perform an introspection and carry out SWOT analysis in a systematic manner, they can identify various important elements. Then, it is possible that it will help them to reap much-awaited rewards in the form of improved health outcomes for the population of the country. It will also ensure providing their due recognition and status in the society.

**Key Words:** Allied Health Professionals (AHPs), SWOT Analysis, Health Sector Reform, Regulatory Framework, India

**JEL Classification:** I21, I180, I280

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### Introduction and Background

During the last few decades, though India has made much progress in the area of public health care delivery system, still it is placed at the rank of 118 among total 191-member countries of WHO as far as healthcare performance is concerned (Ramani & Mavalankar, 2006). India is struggling with constant increasing population associated with heavy burden of diseases including various epidemics and emerging new infections. Since life expectancy has been enhanced during last decades, life style and non-communicable diseases are also on the rise

(Reddy et al., 2011). Despite various improvements and progression in healthcare services, India is still struggling with high rate of maternal and child deaths (Ray, 2014).

The WHO report (Fan & Anand, 2016) stated that there is acute shortage of doctors, nurses and midwives in India. The average nurse-patient ratio across the country is around 1:40 which is very much lower to that of Indian Nursing Council (INC) norms. INC recommends a nurse-patient ratio of 1:4. Similarly, there is doctor-patient population ratio of 1: 1,674 and it is ranked at the position of 67th among developing nations (Pharma-news, n.d.). India is supposed to achieve the doctor population ratio of 1:1000 as recommended by 'High Level Expert Group (HLEG) for Universal Health Coverage' constituted by the Planning Commission of India (Planning Commission, 2011). Though India is committed to achieve UHC (universal health coverage) and affordable healthcare for all, but the constraints of poor GDP spending on health, unequal geographical distribution of health services, urban- rural gap and expensive health insurance are the major barriers (Gupta, 2002).

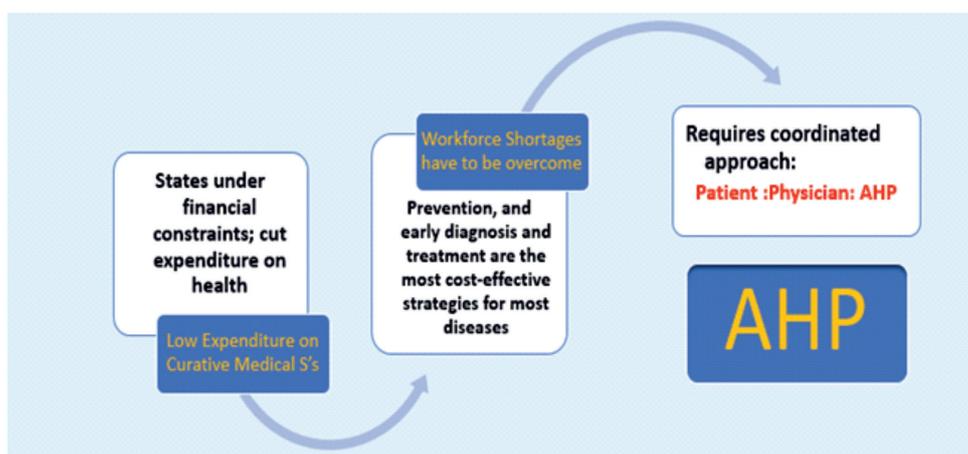


Fig. 1: Need to Include AHP in Main Healthcare Stream

### AHP: A Suitable Alternative to meet Healthcare Needs of the Country

According to the Health Ministry of India, there is an acute shortage of 0.6 million doctors in the country. However, primary care can be made available to the rural and under-privileged areas by paramedical staff and allied healthcare professionals. Thereby, reducing the dependency on medical graduates, health services can reach a vast majority of our population with minimal investment (Bajpai, 2014).

As shown in Fig. 1, In India, the health is the state subject. However, states are already under financial pressure to meet the overall expenditure and there is a tendency to cut short the investment on health services. Under these conditions, there is the need to strengthen the areas of preventive medicine, early diagnosis and patient management and to make the health services affordable at every cost. Hence, there is a need to overcome workforce shortages by involving allied health personnel in the main stream of patient care. However, a coordinated team-work is a pre-requisite to enable the sustainable healthcare system to meet the health needs of the general public. Under such demanding environment, strengthening the AHPs is the only cost-effective strategy. There is a remarkable difference in the cost incurred on training an AHP and a medical graduate. An AHP is a suitable alternative in areas where a medical physician is not available especially in providing primary health services.

## Allied Health Professional

An AHP is a part of healthcare team but distinct from a doctor, nurse or a pharmacist. They provide a range of patient care services like curative, preventive, diagnostic, rehabilitative, monitoring & therapeutic services and also includes research and development. In some of medical academic programs, their role is of utmost importance to provide quality teaching materials. AHPs provide a range of services in diverse clinical or non-clinical environments. The precise nomenclature, duties and responsibilities of AHPs vary from one country to another depending upon their needs (Allied health professionals, n.d.). For instance, AHPs involved in patient diagnostic services, provide objective data to medical practitioners to select the correct clinical management of the patient. According to Rodney Forsman, Administrative Director Emeritus of the Mayo Clinic Medical Laboratories, around 94 percent of the objective medical data in the patient record comes from the diagnostic services (Rohde, 2014).

## SWOT Analysis

SWOT analysis is a robust planning technique developed by Albert Humphrey at Stanford University in nineteenth century (Freeman, 2010). SWOT Analysis is the most trusted and effective tool used for analyzing and auditing the overall strategic positioning of any organization and its environment. It creates a firm business model by identifying the strategies that will best align an organization's resources and strengths to the requirements of the environment. It forms the basis for evaluating the potential, reducing the limitations, exploring opportunities and eliminating the threats in the organizational environment. The environment in which the organization operates, must be studied well so that the changing trends can be predicted well in time. This in-turn assists in the decision-making process and remedial measures can be applied well in advance (Wheelen et al., 2014).

### Essential Elements: SWOT Analysis

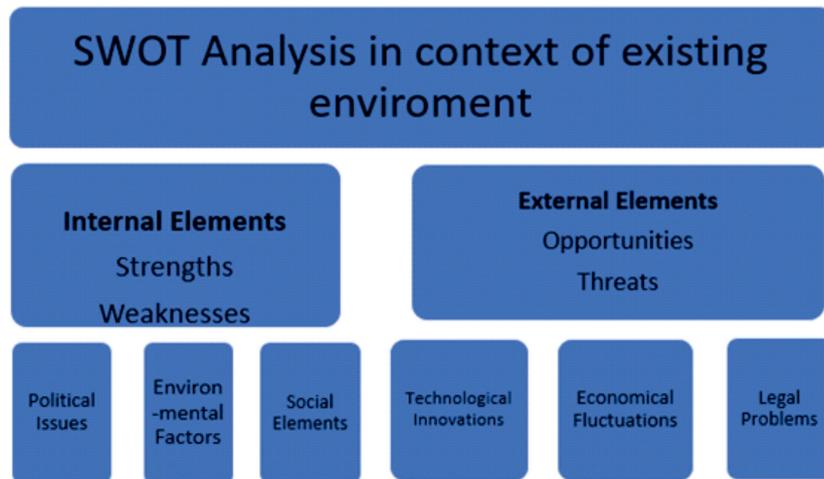


Fig. 2: SWOT Analysis

Fig. 2 illustrates important elements for performing SWOT analysis for any business organization or a project or program or an individual himself. The critical elements to be studied in detail are the strengths and weaknesses of internal environment and existing opportunities and possible threats in the external environment. Various environmental issues influencing the

organization, social elements and tendencies, political issues and technological innovations which are emerging periodically are considered as external factors. Other than these, the economical fluctuations and legal regulations also need to be addressed while performing the SWOT analysis. If above factors are considered during evaluation, it is possible that by assimilating one's strengths on existing opportunities, one can eliminate the possible threats. Thus, be in the position to convert internal weaknesses into internal strengths. This becomes more interesting when a resource based proactive approach is taken well in time, which in turn, can even replace the threats into opportunities (Freeman, 2010).

## Why SWOT Analysis for AHPs?

### An Initiative by GOI

GOI is investing on a large scale basis to make primary healthcare services accessible to all. This poses a great challenge especially in rural and under-served areas of the country as this population is already suffering due to difficult geographical locations. These are the signs of a meaningful and sustainable health sector reform to meet the healthcare needs. Health Ministry, GOI has taken an initiative to establish nine institutes country wide (one national and eight regional institutes in different states of India) dedicated to training of allied health professionals (Livemint, 2012). This is a part of a paradigm shift in Indian healthcare system moving from a doctor-centric to a team-based approach. This paradigm shifts of integrating allied health force into traditional human resource of Indian health system will help achieve the affordable and accessible health to masses (NIAHS Report. Ministry of Health & Family Welfare, GOI, 2012).

However, in times of extreme complexity, acceleration, and change, making the right decision is extremely important for strategic planning.

### Are AHPs really ready?

Until now, the role of AHP in India is like an unsung hero of patient care team due to medical-dominance. However, in recent years, it has been realized by healthcare administrators that under scarce resources, an AHP is the most suitable person to help India in achieving universal health cover in the most cost-effective manner (NIAHS Report. Ministry of Health & Family Welfare, GOI, 2012).

Hence, this is the most optimum time when each field of AHP must review their internal strengths, weaknesses and existing opportunities and threats of external world.

## Strengths of AHPs in Indian Perspective

Strengths are the tangible/ intangible qualities that enable us to accomplish the organization's mission; on the basis of which continued success can be made and sustained (Shinoj, 2016).

In Indian scenario, considering PGIs (Post Graduate Medical Institutes) and AIIMS (All Indian Institute of Medical Sciences) as the model of imparting allied health care education and training, the major strengths of AHPs observable are:

- Strong Institutional base & reputation (nationally & internationally)
- High class Laboratories
- Tradition and knowledge transfer
- Research & Development on priority basis

- Exposure to high profile professionals and peers
- Exposure to special expertise and high-end technology
- Low cost but strong infrastructure
- High quality results
- Competent workforce

AHPs are integral part of multi-disciplinary healthcare team. They complement skills sets of doctors and nurses in therapeutic, diagnostic and curative realms of medicine. In India, in the top medical institutes of national excellence like PGIMERs and AIIMs, students of allied health professions are getting opportunities to get the training and skill set from top medical professionals. They are being oriented to top class laboratories due to strong infrastructure and facilities available there, during their training period. Since these students are working and learning on the same platform, as those available for postgraduate medical students, they are imbibing a strong skill set at their very early age which help them to become the leaders, competent professionals and good managers in their respective fields.

### **Weaknesses of AHPs in Indian Perspective**

Weaknesses are those internal attributes/ poor elements which prevent from accomplishing mission. These act as hinderances in achieving full potential. However, weaknesses are controllable (Richter & Pahl, 2007). Major weaknesses of Allied Health Sciences observable are:

- No councils and regulatory mechanism
- Inability to meet demand
- Uneven geographical distribution
- Low paid job opportunities
- Limited utilization of AHPs
- Lack of associations and union activities
- Low priority areas for the GOI
- Limited career options
- Very weak promotion avenues after employment
- Social stigma due to low esteem resulting into high rate of brain drain
- No dedicated infrastructure for training of AHPs
- No dedicated faculty (doctors are acting as teachers who are already over-burdened)
- No attention is paid to faculty development program
- Lack of motivation and recognition

As mentioned under the heading of strengths of AHPs at PGIMER and AIIMS, students of the relevant fields are getting opportunities to work and learn with top medical professionals. But at the same time, there does not exist any dedicated faculty, infrastructure and facilities for their education and training. They are sustaining under the shadow of medical doctors and this results in their low self-esteem, confidence and lack of future opportunities, most of the time. Moreover, whatever the efforts are put by them for the patient care, is not appreciated or appraised even. The root cause of these problems is absence of council and a regulatory body for AHPs in India. It is also observable that most of the time, their potentials are not utilized to their best extent since the authorities are not aware enough to use them in an appropriate manner. The situation worsens

when an individual amongst AHPs carry all potentials and sufficient qualities within him to excel in his/ her field but there are not supportive factors/ environment available to him. This leads to their profession killing and motivates/ compels him to migrate to other countries where his potential is well appreciated.

### **Opportunities of AHPs in Indian Perspective**

Opportunities are presented by the environment within which our organization operates. The strategies should be executed to enable more fruitful and profitable outcomes. The essential item is to recognize the existing opportunities (Schroeder et al., 2010). The major identifiable opportunities for diagnostic AHPs in Indian context are:

- Arrival of new medical technologies.
- Emergence of new marketing opportunities.
- Advancement in technology demand trained individuals who can handle sophisticated machinery to produce reliable results in conjunction with patient safety.
- Health sector reform at national level.
- Today, there is an urgent need for competent people for accreditation and licensing of healthcare organizations.
- Better job prospects both globally and nationally (Job Outlook, 2018).

In fact, the medical diagnoses and treatment protocols have become so dependent on technology that the role of allied health staff has become vital in delivering successful treatment and patient management. Delivering a quality patient care without an active role of allied health professionals has become almost impossible. Utilizing modern medical technology in an optimal manner is dependent on specialists in the various fields of medicine and allied health sciences. In the era of modern technology and dependence of quality medical services on sophisticated instruments, the allied health professionals are getting huge opportunities to prove their worth in the healthcare fields as well as in the society.

The literature review witnesses that the advancement in technology has been instrumental in bringing a fundamental shift in health care during last decades. It has enabled to utilize the entire healthcare team in an optimum manner beyond clinicians. The studies in developed countries have witnessed an extended role of AHPs in every dimension of healthcare system. Thus, it can be apprehended that AHPs are the key to health-sector reforms in India too, particularly because of the shortage of doctors and nurses in its semi-urban and rural area (From Paramedics to Allied Health Sciences, 2012).

Currently GOI is preparing for health sector reform as far as the healthcare delivery system is concerned. So, at this point, a proactive approach on the behalf of AHPs will help them to reap good career prospects in the future. This will be possible only if they assimilate the existing opportunities in the best possible manner.

### **Threats of AHPs in Indian Perspective**

Threats are uncontrollable external factors that may work against you and warn you to take protective action. When they relate to the weaknesses, they compound the risks, enhancing the organizational or individual vulnerability. Threats are uncontrollable putting at stake the stability and survival (Chang & Huang, 2006, p 158). The possible threats in this regard may be:

- Ever changing technology; (Evolving technologies you're unprepared for)
- Changing market trends
- New and increased competition
- Economic slowdowns/ difficulties
- Lack of standard protocols for their education and practical training in different parts of India
- Mushroom growth of unauthorized teaching institutes; giving diplomas/ degrees without providing quality teaching or practical training

High medical domination has been instrumental in lowering the status of AHPs in the eyes of people and is one of the reasons for the low morale and self-esteem among AHPs. At this transition period, if AHPs don't explore and apply their potential at the time of their demand in the country, then health sector reform coupled with low self-esteem amongst AHPs may be endangering their status further in the society.

### **However, Threats can be Replaced**

An external factor can, sometimes, be both a threat and an opportunity. For example, the emergence of an evolving technology (requiring extra/ new skill) that replaces the existing one is a threat if you do nothing about it. However, it becomes an opportunity if you commit to be one of the early experts.

The role of government and its policies are very important to convert the threats into opportunities. In many countries like in United States, United Kingdom, Canada and Australia, governments have been successful in introducing new policies dedicated to AHPs for appropriately utilizing them in their public healthcare delivery system. That way, AHPs have been relieved from medical dominance and have been able to get their due credits in the society (From Paramedics to Allied Health Sciences, 2012).

### **Discussion: Items to be Addressed and Gaps to be Filled**

Many foci for improvements for AHPs need to be addressed in India. It is possible that AHPs can be trained appropriately by learning new skills. This will enable them to perform outside the traditional scope of their practices. This will further aid in improving patient access to receive quality health services in an affordable manner since the cost incurred on their training is much lower than training a medical graduate. It will also help to reduce waiting time to see a medical specialist. It is highly important that the essential elements to work in the healthcare team must be imbibed during the training period of an AHP. The previous studies in other countries have shown that inter-disciplinary collaboration amongst healthcare team is very important for patient safety. It is also evident that up to 70% adverse events occur due to lack of communication and absence of team spirit (Fewster & Velsor, 2008).

According to the NIAHS (National Initiative for Allied Health Sciences) report submitted by PHFI (Public Health Foundation of India), the process of establishing the national and regional institutes of excellence for AHPs is under pipeline. As the Ministry of Health and Family Welfare, GOI is getting ready to up-lift the entire allied health workforce, this is the most appropriate time when every stakeholder must review their resources and capabilities NIAHS (2012).

At the same time, it becomes highly important for the GOI to study this allied healthcare group in detail before reintroducing them into the system. The study must review existing inputs including

all resources, processes of their education and training and finally the outputs which must review the impact on overall patient outcome and improvement of health services. It becomes equally important to standardize the existing and upcoming institutions where the AHP students will receive training and skill sets to get prepared for their new roles and responsibilities. At the same time, the government of India also has to take pro-active approach in finding a suitable strategy to retain the trained health work force by revisiting their career paths and further progression in their job profiles. This becomes important because the developed countries like Australia is also tackling the same problem of retaining AHPs especially in rural areas (Struber, 2004).

It is equally important that the existing experts and institutions in the field of various allied healthcare professions have still to prove their worth in context of their future role. The in-depth review of existing curriculum and a lot of research is seriously needed to explore various issues in the matter so that a firm foundation for the future AHPs can be laid down.

## Conclusions

The development of AHPs is the key to health-sector reforms in India. By integrating the new team of healthcare professionals into the existing Indian healthcare delivery system, it is possible to bridge the gap between supply and demand for medical workforce in the country. It is therefore necessary to regulate these professions by setting up councils on the lines of the councils for pharmacy, nursing and other professions. A holistic regulatory framework is required which will help to re-evolve AHPs. The uniformity in their course curriculum and by adopting standard training methods, India will be in the position to produce sufficient man power to meet the healthcare needs of the population especially in difficult geographical areas and rural parts of India.

## Recommendations

Through this research article, the author wants to convey the message that during the time of paradigm shifts in health care delivery system (HCDS) of India, the administrators and leaders of every field of AHP must review their possible internal strengths and weaknesses to overcome the outside threats. If a proactive approach is taken well within time, there is every possibility that the present threats may be converted to possible opportunities of tomorrow. It would not only uplift the social status of AHPs but also help in laying down a solid foundation for an improved health care delivery system for the country soon.

## References

- Bajpai, V. (2014). The challenges confronting public hospitals in India, their origins, and possible solutions. *Advances in Public Health*, 2014,1-27.
- Chang, H. H., & Huang, W. C. (2006). Application of a quantification SWOT analytical method. *Mathematical and computer modelling*, 43(1-2), 158-169.
- Fan, V., & Anand, S. (2016). *The health workforce in India (W/P No. 16)*. Geneva, Switzerland: World Health Organization.
- Fewster-Thuente, L., & Velsor-Friedrich, B. (2008). Interdisciplinary collaboration for healthcare professionals. *Nursing administration quarterly*, 32(1), 40-48.
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. UK: Cambridge university press.
- Planning Commission of India. (2002). *India Vision 2020*. Retrieved from <http://www.upscmantra.com/userfiles/documents/Vision%202020/India%20vision%202020.pdf>

- Government of India. Planning Commission of India. (2011). *High level expert group report on universal health coverage for India*. Retrieved from [http://planningcommission.nic.in/reports/genrep/rep\\_uhc0812.pdf](http://planningcommission.nic.in/reports/genrep/rep_uhc0812.pdf).
- Job Outlook for the Future. (2018). *Bureau of US Labor Statistics*. Retrieved from <https://www.bls.gov/ooh/>.
- Krishnan, V. (2012). *Govt to set up nine institutes to train allied health workers*. Retrieved from <http://www.livemint.com/Politics/F9KiJxx3HJK3hf8My4gFFL/Govt-to-set-up-nine-institutes-to-train-allied-health-worker.html>.
- NIAHS. (2012). *Ministry of Health and Family Welfare Report*. Retrieved from <http://www.mohfw.nic.in/WriteReadData/1892s/NIAHS%20Report.pdf>
- One World South Asia. (2012). *From Paramedics to Allied Health Sciences: landscaping the journey and way forward*. Retrieved from <http://southasia.oneworld.net/resources/from-paramedics-to-allied-health-sciences-landscaping-the-journey-and-way-forward#.WRL3yYiGPIU>
- Ramani, K. V., & Mavalankar, D. (2006). Health system in India: opportunities and challenges for improvements. *Journal of health organization and management*, 20(6), 560-572.
- Ray, S. (2014). An index of maternal and child healthcare status in India: Measuring inter-and intra-state variations from capability perspectives. *Social indicators research*, 117(1), 195-207.
- Reddy, K. S., Patel, V., Jha, P., Paul, V. K., Kumar, A. S., Dandona, L., & Lancet India Group for Universal Healthcare. (2011). Towards achievement of universal health care in India by 2020: a call to action. *The Lancet*, 377(9767), 760-768.
- Richter, N. P., & Pahl, N. (2007). *SWOT Analysis-Idea, Methodology and a Practical Approach*. Germany: Studienarbeit.
- Rohde, R. E. (2014). *The hidden profession that saves lives*. Retrieved from <https://www.elsevier.com/connect/the-hidden-profession-that-saves-lives>.
- Schroeder, A., Minocha, S., & Schneider, C. (2010). The strengths, weaknesses, opportunities and threats of using social software in higher and further education teaching and learning. *Journal of Computer Assisted Learning*, 26(3), 159-174.
- Shinoj P. (2016). SWOT Analysis for Assessing Entrepreneurship Readiness. In *Training Manual on Theeranaipunya - Equipping Fisherwomen Youth for Future* (pp.287-290). Kochi: ICAR-Central Marine Fisheries Research Institute.
- Struber, J. C. (2004). Recruiting and retaining allied health professionals in rural Australia: why is it so difficult? *Internet Journal of Allied Health Sciences and Practice*, 2(2),1-8.
- Wheelen, T. L., Hunger, J. D., Hoffman, A. N., & Bamford, C. E. (2014). *Concepts in strategic management and business policy*. UK: Pearson Education Limited.
- Wikipedia contributors. (2019). *Allied health professions*. Retrieved from [https://en.wikipedia.org/w/index.php?title=Allied\\_health\\_professions&oldid=883975192](https://en.wikipedia.org/w/index.php?title=Allied_health_professions&oldid=883975192)

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