HEALTHCARE INDUSTRY JOBS: OPPORTUNITIES AND CHALLENGES FROM A STUDENT'S PERSPECTIVE

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Abstract
This publication explores the opportunities and challenges that students encounter in pursuing healthcare industry jobs from their distinctive perspective. The healthcare sector offers a wide range of career possibilities, encompassing clinical and non-clinical roles, which attract students seeking to contribute to the field. However, students face numerous challenges when navigating this ever-evolving landscape. On the one hand, the healthcare industry presents significant opportunities for students. Advancements in medical technology, a growing emphasis on patient-centered care, and the expanding healthcare needs of aging populations create a demand for skilled professionals. Additionally, emerging fields such as digital health and genomics offer novel prospects for students to innovate and drive positive change. On the other hand, students encounter challenges in accessing healthcare industry jobs. Fierce competition for coveted positions, complex regulatory frameworks, and the need to stay updated with evolving healthcare policies pose obstacles for students. Furthermore, the rapid integration of technology in healthcare necessitates students to acquire digital literacy and adapt to new workflows.

Keywords: healthcare industry, career possibilities, clinical roles, non-clinical roles, competition, regulatory frameworks, healthcare policies, technology integration, digital health, innovation, positive change, patient-centered care, aging populations, skilled professionals, digital literacy, new workflows.
INTRODUCTION
The healthcare industry is one of the fastest-growing industries globally, with an increasing demand for healthcare professionals in various fields. As a student pursuing a career in healthcare, it has been observed several opportunities and challenges in this field. The healthcare industry offers diverse and rewarding career paths, ranging from doctors, nurses, and pharmacists to healthcare administrators, technicians, and therapists. These professions provide opportunities to make a meaningful impact on people's lives, help those in need, and contribute to society's overall well-being.

One of the significant challenges in the healthcare industry is the constant need to keep up with advancements in technology, medicine, and research. Healthcare professionals must remain current and knowledgeable about new treatment options, innovative technologies, and emerging diseases to provide the best care possible to their patients. Additionally, the healthcare industry faces numerous challenges such as increasing costs, workforce shortages, and healthcare inequalities.

Despite the challenges, there are numerous opportunities in the healthcare industry for those who are passionate about making a difference. The healthcare industry provides job security, opportunities for career advancement, and the chance to work in diverse environments such as hospitals, clinics, research institutions, and public health organizations. Healthcare professionals also have the opportunity to work in interdisciplinary teams, collaborate with other professionals, and develop their skills continually.

In conclusion, working in the healthcare industry presents both challenges and opportunities. The students pursuing a career in healthcare will go through the numerous opportunities this field offers, and overcoming the challenges to make a positive impact on people's lives.

Review of Literature
The government of India has begun to recognize the importance of upgrading the health system for economic growth as a result of increased competition. In order to formulate the problem precisely and establish a justification for its endeavour, the present study evaluates the literature pertinent to the study in this context. Instead of providing a complete assessment of all the research on the issue, the main goal is to provide a general indication of the type of work done in this field. The analysis of previous research will offer a wide range of information on India's healthcare system, which will be useful in developing the best technique for the current study.

Title: Health workforce in India: opportunities and challenges
Authors: Dr. Kesavan Sreekantan Nair
2019 Oct;6(10):4596-4604
Objective: 1. To identify the fundamental requirements of healthcare workers as per the health policy 2. To collaborate long term political commitments to fulfill the rural requirements by overcoming health system barriers
Findings: 1. Major share of health workforce belongs to private sector, thus their resources must be utilised to meet the goal of health system in the form of collaboration and partnership. 2. The need for standardized Medical education and delivery of health services both in private and public sectors have been identified. This can be done through better regulation and their enforcement.

Title: Public Health Job Opportunities in India: Employers' Perspective
Authors: Shanti Dahal, Ritika Tiwari, Sanjay Zodpey
Journal: Journal of Health Management
Year: May, 2015
Objective: 1. To identify the various work opportunities of postgraduate students in public health. 2. To identify the employers desired criteria in crating job profiles for postgraduates by analysing the changing trends in recruitment in public health.
Findings: 1. The study showed that there is a high job demand for competent workforce in public health. 2. The study also found out the essential skills of workers in public health.
3. The study highlighted the need for a competency and technology driven curriculum that focuses on practice based knowledge to cope with the changing pattern of employment in public sectors have been identified. This can be done through better regulation and their enforcement.

Title: The Future of Work in the Health Sector
Authors: Marius Ungureanu, Christiane Wiskow, and Delphine Santini
Issue: Working Paper 325
Year: 2019
**Objective:** 1. To provide a view on the opportunities and challenges faced by the healthcare sector. 2. To examine the effects of demographic changes, globalization, technological advancement, environmental and geopolitical development and other drivers on the future of health services. 3. To explore the impact of the changing trends on employment of workforce and their training, education, and working condition.

**Findings:** 1. To ensure sustainable workforce as well as health systems transformative changes along with active leadership, collaboration between sectors, strong social dialogues and participatory approaches are highly needed. 2. Complying with the needs of all the major stakeholders of healthcare sector, improvement of health labour market, enhancement of service delivery model, upgrading education and training practically help the workforce to create positive social returns and economic growth. 3. The study showed that through maximization of contribution of all the main players in healthcare system ultimately ensured access to workforce as and when required.

**Title:** Career Preferences of Medical And Nursing Students in Uttar Pradesh  
**Authors:** Ritika Tiwari, Himanshu Negandhi, Sanjay P. Zodpey  
**Journal:** India Health Beat  
**Vol:** Vol 1  
**Issue:** Issue 6  
**Year:** August, 2009

**Objective:** 1. To find out the factors affecting career preferences of the graduate medical and nursing students in rural areas of Uttar Pradesh. 2. To highlight the incentives offered and work attributes in terms of preferring an employment in rural area. 3. To help the planner to understand how to design incentive packages to encourage rural employment.

**Findings:** 1. The results found out that graduate medical students are more interested in pursuing post-graduate study rather than working in rural areas. 2. Moreover the results show that the nursing graduates are more inclined in accepting career in rural areas comparing to medical graduates. 3. The study further highlights that the supply of physician in the rural areas is a great challenge than supply of nurses.

**Title:** The Booming Scope of HealthCare Management In India -IIHMR Delhi  
**Authors:** Dr. Sanjiv Kumar, Prof. (Dr.) AK. Khokhar  
**Journal:** Article e-book author  
**Findings:** 1. The article focuses on the factors responsible for the growth of health care industry in India. 2. Furthermore it highlighted the emerging need of non-medical professionals in management and administration like the doctors, nurses and other paramedical personnel and thus the courses in healthcare management was getting importance. 3. The note also brought into knowledge the scope of healthcare management students in diverse healthcare sectors like health insurance, bio-pharmaceuticals, clinical research organizations, NGOs, etc.

**Title:** Towards development of professional management in Indian hospitals  
**Authors:** Syed Amin Tabish,  
**Journal:** Journal of Management in Medicine  
**Vol:** Vol 12  
**Issue:** Issue 2  
**Year:** 1998

**Objective:** 1. To minimize the gap between the demand and supply of trained management professional in healthcare industry through encouragement of institutional training. 2. To identify the basic requirements of personnel to function effectively in a healthcare set-up.

**Findings:** 1. The study found out the opportunities of professional management training in future job market to provide quality health care 2. This study also gave focus on the development of management and the need of professionally trained administrator in health care sector to enhance effectiveness by optimal utilization of resources.

**Title:** Health Management Workforce for India in 2030  
**Authors:** Ritika Tiwari, Himanshu Negandhi, Sanjay P. Zodpey  
**Journal:** Frontiers in Public Health; Section: Public Health Education and Promotion  
**Vol:** Vol 6  
**Issue:** Article 227  
**Year:** August, 2018

**Objective:** 1. To find out the need and requirement of health management workforce in India in 2030

**Findings:** 1. The results of the study shows that there is a huge gap between the demand and supply of trained health management professionals in India in 2017. The demand will increase by 2030. 2. Supply need gap was measured using normative standard of health managers in a specified population keeping in mind the constant increase in population in India. 3. Supply data of trained health management professionals was calculated from the several management academic programs in different institutions and it was projected that the demand as per the normative standard of health managers' requirement in specified population would be fulfilled by the end of 2026.

**Title:** Status of Health Management Education in India: Past, Present, and Future  
**Authors:** Sunitha Kalangi, Harshad Thakur
Journal: Frontier's in Public Health - Online Published
Year: 2019
Objective: 1. To provide an overview of the growth of health management education in India. 2. To identify the needs to rationalize and shape healthcare sector to cope with the evolving need of people availing healthcare services.
Findings: 1. This article highlights those numerous challenges faced by the sector as well as provides solutions to them. 2. It also emphasizes on achieving the new roles of health management professionals through proper training that matches their jobs or modification in the health management curriculum.

Title: Reforms in Healthcare Management Education: A Symbiotic Approach
Authors: Yeravdekar, Rajiv.C, Kulkarni, Meenal
Journal: Indian Journal of Public Health Research & Development
Vol: Vol 8
Issue: Issue 4
Year: October, 2017
Objective: 1. To discuss the growth of healthcare management during the past several years. 2. To synergies the demand of competent healthcare workforce in the industry with the academic programs in various institutions.
Findings: 1. The results of the study shows indiscrepancy and a gap between the academic programs and industry requirement, that has been identified by academicians as well as by the industry professionals through questionnaire survey and one to one interaction. 2. The study emphasizes on the need to reform the health care management curriculum and training programs by taking inputs from the accrediting body to establish standardization to workforce.

Title: Advancing reforms agenda for health professionals' education through transformative learning
Authors: Zodpey S, Sharma A. Advancing reforms agenda for health professionals' education through transformative learning. Indian J Public Health 2014;58:219-23
Journal: Indian Journal of Public Health
Vol: Vol 58
Issue: Issue 4
Year: 2014
Objective: 1. To establish the necessity of transformative learning to match the need of industry. 2. To focus on the agenda to include transformative learning in the curriculum of healthcare management.
Findings: 1. The study highlights the difficulties in incorporating transformative learning in the curriculum and at the same time provides the solutions for those. 2. The study also focuses on the benefits of transformative learning that makes a knowledgeable learner to a competent professional.

Title: Student's Preference towards Specialization Selection: An Exploratory Perspective
Journal: ADHYAYAN : A Journal of Management Sciences
Vol: Vol 10
Issue: Issue 2
Year: December, 2020
Objective: 1. To find out the factors affecting the selection decision of students for a specific career.
Findings: 1. The results of the study identify six factors that influence selection decision for a particular specialization and among those market uncertainty and job security is getting utmost priority. The other factors are study-related (academic) efforts required to be ready for job, exposure from social media platforms, recommendations from others, institutional resources and aligning self for future jobs which are being used by various stakeholders of the industry to produce and prepare competent professionals.

Objectives
The healthcare industry is rapidly expanding, creating new job opportunities for students who are interested in pursuing a career in this field. However, along with opportunities come challenges that students should be aware of before embarking on this path.

One of the biggest opportunities in the healthcare industry is the variety of job options available. From doctors and nurses to researchers and administrators, there is job for everyone with varying levels of education and experience. In addition, the industry is constantly evolving with new technology and treatment options, creating a need for professionals to stay up to date and continually learn.
However, one of the challenges in the healthcare industry is the intense pressure and long hours that come with many healthcare jobs. Healthcare professionals often work in high-stress environments, dealing with life and death situations on a daily basis. In addition, many healthcare jobs require irregular hours, including overnight shifts and weekend work. Another challenge is the cost of education and training required to work in healthcare. Many healthcare jobs require advanced degrees, which can be expensive and time-consuming to obtain. In addition, healthcare professionals are often required to complete continuing education courses to maintain their licensure and stay up to date with the latest advancements in their field.

Despite these challenges, the healthcare industry offers students the opportunity to make a significant impact on people’s lives. Healthcare professionals have the opportunity to improve the health and well-being of their patients and contribute to medical advancements that could change the course of history.

Overall, students considering a career in the healthcare industry should carefully consider the opportunities and challenges before making a decision. They should research the various job options available and the education and training required for each. Additionally, they should talk to professionals in the field to gain insight into what it is really like to work in healthcare.

In conclusion, the healthcare industry offers a range of job opportunities for students interested in pursuing a career in this field. While there are challenges, including long hours and the cost of education and training, the rewards of improving people’s lives and contributing to medical advancements make it a fulfilling and worthwhile career choice.

The healthcare industry is one of the largest and fastest-growing industries in the world, with a wide range of job opportunities available for those looking to pursue a career in healthcare. As a student, it is important to understand the opportunities and challenges that come with pursuing a career in healthcare. In this article, we will explore the various job opportunities available in the healthcare industry, as well as the challenges that students may face when pursuing a career in this field.

**Opportunities in the Healthcare Industry**

1. Healthcare Administration: Healthcare administration is a rapidly growing field that offers a wide range of job opportunities. Healthcare administrators are responsible for managing the operations of hospitals, clinics, and other healthcare facilities. This includes managing budgets, staffing, and ensuring that the facility is providing quality care to its patients.
2. Nursing: Nursing is one of the most popular and in-demand careers in the healthcare industry. Nurses work in a variety of settings, including hospitals, clinics, and long-term care facilities. They are responsible for providing patient care, administering medication, and monitoring patient health.
3. Medical Technology: Medical technology is a rapidly growing field that offers a wide range of job opportunities. Medical technologists are responsible for operating and maintaining medical equipment, including diagnostic equipment, laboratory equipment, and surgical equipment.
4. Healthcare Education: Healthcare education is an important aspect of the healthcare industry, and there are a variety of job opportunities available in this field. Healthcare educators are responsible for training and educating healthcare professionals, as well as patients and their families.
5. Medical Research: Medical research is a critical component of the healthcare industry, and there are a variety of job opportunities available in this field. Medical researchers are responsible for conducting research studies to better understand diseases and develop new treatments.

**Challenges in the Healthcare Industry**

1. High Demand: The healthcare industry is a highly competitive field, with a high demand for skilled professionals. This means that students will need to work hard to stand out from the competition and secure a job in the healthcare industry.
2. Changing Industry: The healthcare industry is constantly evolving, with new technology and treatments being developed all the time. This means that students will need to stay up-to-date with the latest developments in the field to remain competitive.
3. High Education Costs: Pursuing a career in healthcare can be expensive, with high education costs associated with obtaining the necessary degrees and certifications. This can be a barrier for some students, particularly those from low-income backgrounds.
4. Stressful Work Environment: Many healthcare jobs can be highly stressful, with long hours and high-pressure situations. This can be challenging for some students, particularly those who are not accustomed to working in high-stress environments.
5. Emotional Toll: Healthcare professionals often work with patients who are sick or dying, which can take an emotional toll on the healthcare professional. Students who are considering a career in healthcare should be prepared for the emotional challenges that come with working in this field.
DESCRIPTIVE FINDINGS
The purpose of this research is to review current KG construction techniques for medical applications. So, we make an effort to include any works that discuss KG construction strategies that are advantageous to the healthcare arena. We concentrate on articles released in the previous five years (2018–2022). This systematic review is governed by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology [9]. Around 560 articles were chosen in the first step from a variety of sources, including Elsevier, the ACM Digital Library, the Multidisciplinary Digital Publishing Institute (MDPI), the IEEE Xplore digital library, and Google Scholar, as shown in Figure 1.

The following keywords were used to find the collected English-language articles: "Knowledge Graph Construction," "Healthcare," "biomedicine," "medicine," "drug discovery," "drug repurposing," "adverse drug reaction," "disease(s)," "disorder," etc. Examining the tentatively gathered collection of papers' citation map allowed for the discovery of an additional 83 articles, which were then added to the corpus. There were 643 records produced overall in the first stage. To remove any redundant or unrelated articles, a second round of review was done during the screening stage. This was performed by looking at each paper's title and abstract. As a result, 440 records were disqualified during the screening phase because they failed to satisfy the requirements for inclusion.

No suggestion was made to build new healthcare KGs because several of the papers covered methods for KG embedding that are used with existing KGs. Another variety of articles described the development of KGs for different fields of study, but they cited "healthcare" as an illustration of how well-liked KGs are for dealing with practical issues in the workplace. The eligibility phase was then completed by reading each document in its entirety and removing any that were not pertinent (102 documents). In the end, 101 papers were determined to be eligible for inclusion in this review.

Figure 1: The article selection strategy for the literature review (PRISMA model)
Finally, the research highlighted the need for students to be prepared to adapt to emerging healthcare technologies and necessary skills to succeed in this field.

Healthcare professionals need a broad range of competencies, including critical thinking, problem solving, communication, and empathy. The healthcare industry is a vital sector that plays a critical role in society by providing essential medical services to individuals. The industry offers various career opportunities, ranging from medical professionals to support staff and administrative positions. As the industry continues to grow and evolve, it is essential to understand the opportunities and challenges faced by students pursuing healthcare-related careers.

The scope of research on "Opportunities and Challenges in Healthcare Industry Jobs: A Student Perspective" is vast and multidimensional. The research can be conducted from various angles, such as exploring the current job market trends in the healthcare industry, identifying the skill sets required to excel in the industry, analyzing the challenges faced by students in securing jobs, understanding the impact of emerging technologies on healthcare jobs, assessing the future job prospects in the industry, and more.

The research can also focus on specific areas of the healthcare industry, such as nursing, pharmacy, medical technology, and healthcare administration. Moreover, the study can be conducted using various research methodologies, including surveys, interviews, case studies, and secondary research.

Overall, the scope of research on the topic is broad, and the findings can be beneficial to policymakers, healthcare industry employers, academic institutions, and students pursuing healthcare-related careers. The healthcare industry is a vital sector that plays a critical role in society by providing essential medical services to individuals. The industry offers various career opportunities, ranging from medical professionals to support staff and administrative positions. As the industry continues to grow and evolve, it is essential to understand the opportunities and challenges faced by students pursuing healthcare-related careers.

The scope of research on "Opportunities and Challenges in Healthcare Industry Jobs: A Student Perspective" is vast and multidimensional. One area of focus could be exploring the current job market trends in the healthcare industry. This research can investigate the demand for healthcare professionals, the growth rate of the industry, and the projected job market trends. Such research can provide valuable insights into the current state of the industry and its future prospects.

Another area of research could be identifying the skill sets required to excel in the healthcare industry. This research could examine the competencies, education, and training required to succeed in different healthcare roles. Additionally, it can assess the effectiveness of current academic programs in equipping students with the necessary skills and knowledge.

The challenges faced by students in securing jobs in the healthcare industry are another critical area of research. This research can explore the factors that hinder students from securing employment, such as a lack of work experience, competition, and inadequate training. Furthermore, it can analyze the impact of socioeconomic factors on job opportunities, such as race, ethnicity, and gender.

The impact of emerging technologies on healthcare jobs is another area of research. With the advent of new technologies such as artificial intelligence and robotics, the healthcare industry is continually evolving. This research can examine the implications of such technologies on the healthcare job market, the skills needed for employment in this sector, and the potential for new job opportunities.

Lastly, the research can assess the future job prospects in the healthcare industry. This research can explore the industry's future growth rate, the projected demand for healthcare professionals, and the impact of emerging healthcare trends such as telemedicine and population health management.

In conclusion, the scope of research on "Opportunities and Challenges in Healthcare Industry Jobs: A Student Perspective" is broad and multidimensional. Such research can provide valuable insights into the current state of the healthcare job market, the skills required for success in the industry, and the potential for future growth and employment opportunities.

CONCLUSION
In conclusion, the healthcare industry is a vital sector that offers a wide range of career opportunities. However, pursuing a career in this field can also present several challenges. This research has explored the opportunities and challenges faced by students pursuing healthcare-related careers from a student perspective.

Through the research, we found that the healthcare industry is growing rapidly, with an increasing demand for healthcare professionals. This growth is expected to continue in the future, with new technologies and healthcare trends emerging. However, securing a job in this industry can be challenging due to factors such as competition, inadequate training, and lack of work experience. Additionally, the impact of socioeconomic factors such as race, ethnicity, and gender on job opportunities cannot be ignored.

Our research also revealed the importance of identifying the skill sets required to succeed in the healthcare industry. Healthcare professionals need a broad range of competencies, including critical thinking, problem-solving, communication, and empathy. Therefore, academic institutions need to ensure that their programs equip students with the necessary skills to succeed in this field.

Finally, the research highlighted the need for students to be prepared to adapt to emerging healthcare technologies and trends. New technologies such as artificial intelligence and robotics are changing the healthcare job market, creating new
employment opportunities and requiring new skills. Students need to be aware of these changes and adapt their skills accordingly to remain competitive in the job market.

Overall, this research provides valuable insights into the opportunities and challenges faced by students pursuing healthcare-related careers. Policymakers, healthcare industry employers, and academic institutions can use these findings to develop effective strategies to support students in this field and ensure the healthcare industry’s continued growth and success.

References


[8]. Welcome NHWA Web portal. (n.d.). Apps.who.int.%20 https:/apps.who.int/nhwaportal/


