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Comparative Analysis of Challenges Facing Key Workers in the Health Systems of the United Kingdom and Saudi Arabia

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Abstract

This comparative analysis explores the challenges faced by key workers in the health systems of the United Kingdom and Saudi Arabia, highlighting workforce dynamics, policy frameworks, and healthcare infrastructure. The study examines common issues such as staffing shortages, burnout, and digital transformation, while contrasting the UK's publicly funded NHS with Saudi Arabia's privatization efforts under Vision 2030.

Findings reveal that while both countries struggle with retention and recruitment, Saudi Arabia relies more on expatriate labour, whereas the UK faces significant budget constraints and recruitment shortages in the aftermath of the UK leaving the European Union. The research underscores the need for strategic workforce policies, enhanced healthcare financing, and improved digital health solutions to address these systemic challenges in both nations.

Keywords

Key workers, healthcare workforce, United Kingdom NHS, Saudi Arabia Vision 2030

1. Introduction

The healthcare sector is a cornerstone of any nation's well-being, with key workers, such as doctors, nurses, and paramedics, playing a vital role in maintaining public health across a variety of settings. However, these professionals face numerous challenges that vary depending on the country's healthcare structure, policies, and socio-economic conditions. The purpose of this article is to examine the difficulties encountered by healthcare workers in the United Kingdom and Saudi Arabia, comparing workforce shortages, financial constraints, technological advancements, and policy reforms. This will be achieved by conducting a comparative analysis of a range of articles from reputable academic sources which address these issues.

1.1 The United Kingdom

The UK's National Health Service (NHS) is a publicly funded system established in the wake of the Second World War in 1948 and which provides universal healthcare at the point of demand (Eversley, 2001). Despite its strengths, the NHS faces significant challenges, including budget constraints, staff shortages, and increasing patient demand. In terms of structure, the NHS is publicly funded by central government through taxation and administered by local healthcare trusts. Consultations and treatments are free at the point of use but reliant on taxpayer funding, while some individuals choose to take out private health care insurance alongside the public health service. Its main strengths include the service's comprehensive coverage, through local general practitioner (GP) clinics and consultations, local general and specialist hospitals, and outreach services such as community nurses and homecare visits. The entire NHS is subjected to government oversight and funding is often a highly politicised issue on the U.K., with the focus on maintaining the tenet of being free at the point of use to all users (Honigsbaum, 1990).

This structure and funding model in turn bring several challenges. Firstly, there are considerable budget constraints, due to the need for government to control public spending and balance the fiscal situation in the U.K. Spiralling demand, the ageing population and the advent of new treatments and technologies have all led to an never-ending increase in funding. A major issue in the aftermath of the COVID 19 pandemic remains the lengthy waiting times which service users frequently experience (Dunn, Ewbank, & Alderwick, 2023). This is the main focus of the current Labour administration elected on July 2024, and it has had limited success in bringing down the main waiting times. Staff recruitment and retention are also major issues facing the NHS, and the proposed restrictions to overseas recruitment may continue to create pressures withing the service.

1.2 Saudi Arabia

Saudi Arabia's healthcare system is a mix of public and private services, with substantial government investment under the Vision 2030 strategy. This is a transformative national initiative which aims to diversify Saudi Arabia's economy, in order to modernize public services, while improving the quality of the country's healthcare and accessibility to its services. One key objective of Vision 2030 is to

transform the healthcare system, thereby ensuring high-quality service delivery, enhancement of the prevention of diseases, and of digital integration (Nurunnabi, 2017).

There have been significant reforms to policy alongside considerable financial investment as party of Vision 2030. However, the healthcare sector still faces certain challenges that have hindered the achievement of the main objectives. Chief among these issues are a shortage of labour, limited development of infrastructure, fragmented care coordination, particularly when comparing rural and urban healthcare provision where disparities remain (Elsheikh et al., 2018). Progress has also been slow in terms of the adoption of digital health solutions, while financial constraints have also delated progress. If these challenges remain unaddressed, Saudi Arabia risks inefficiencies in healthcare service delivery, growing disparities in care accessibility, and an increased burden on healthcare professionals.

This article will examine the main issues outlined above in the following sections, while conducting a comparative analysis of the challenges facing healthcare provision in the U.K and Saudi Arabia.

2. Workforce Challenges

This section examines the main challenges facing the U.K. and Saudi Arabia with regard to workforce recruitment and issues affecting retention in both countries.

2.1 Staffing Shortages

The UK struggles with a shortage of nurses and doctors, exacerbated by Brexit and the COVID-19 pandemic, as well as the effects of an ageing workforce (Castro-Pires et al., 2025). Historically in recent decades, there has been an over-reliance on international healthcare workers coming to live and work in the UK from both European Union countries as well as from non-EU countries such as the Philippines, India and English-speaking nations in Africa. Vacancy rates for nurses in England have persistently remained at around 10% of the workforce and reliance on the employment of foreign-trained nurses was 2.5 times higher than the OECD average (OECD, 2017). This is largely due to a lack of supply of domestically trained nurses and healthcare workers, meaning that before the 2015 referendum, the share of EU nurses employed in the NHS ranged from 0.5 to 22% according to different geographical locations (Castro-Pires et al., 2025).

In Saudi Arabia, one major challenge in the healthcare system is the shortage of specialized medical professionals, which continues to negatively impact the quality of service provided, as well as impacting patient safety and the general wellbeing of healthcare workers (Alsadaan et al., 2021). Global workforce planning models, including a high dependency on overseas healthcare workers may provide short-term solutions for the country. However, Saudi Arabia lacks research into workforce dynamics which are localized and data-driven, and which would provide insights into potential solutions. There is also a lack of research into recruitment challenges, or any resulting strategies for the improved retention of existing healthcare

workers. The resulting issues include high rates of turnover, and staff burnout, while the lack of specialized professionals all add stress to professionals within the Saudi healthcare system.

In the study by Al-Anezi (2025), which involved the surveying of a wide range of 421 healthcare professionals across Saudi Arabia, workforce issues, as well as capacity and infrastructure were reported as the main challenges facing the profession, with mean scores of 3.63 and 3.61, respectively. The respondents highlighted workforce shortages as posing a critical impediment both to their ability to deliver quality care and to meet the aims of Vision 2030. Such workforce shortages had previously been identified in the study by Gailey et al. (2021), in which challenges related to recruitment, retention, and skills development were highlighted in the findings. Consequently, the government has had to post large numbers of vacancies for healthcare professionals (Al Asmri et al., 2019), with most of the professional gap being filled by workers from overseas. According to 2010 data, the number of local Saudi nurses in the healthcare sector accounted for 48.7% of the total, while the remainder were overseas workers. In a similar trend, Salloum, Cooper, & Glew (2015) reported that the number of local Saudi physicians totalled 21.6% of the workforce, the remainder being recruited from overseas

In addition, significant differences were observed between hospitals in the public and private sectors, with differing levels of workforce satisfaction and resource allocation identified as holding back overall progress in the healthcare system. The government needs to focus on developing a comprehensive workforce plan, covering recruitment and retention strategies, as well as providing ongoing improved medical education, training and skills in order to enhance Saudi Arabian healthcare professionals' capacity and competency.

2.2 Working Conditions and Burnout

In the UK, NHS staff have consistently reported high levels of stress due to long working hours and increasing patient loads in recent years. According to a survey study conducted by Gemine et al. (2021), the 258 NHS staff respondents involved in the survey reported experiencing high stress, burnout, emotional exhaustion, and low morale. In addition, individual staff highlighted their personal concerns about thei perceived lack of control or consultation from managers when facing changes in their rota, wider job role, rota or setting. If such levels of stress persist for staff, causing them more chronic fatigue, the implications for their well-being, engagement and productivity, are significant, as are the impacts on both patient safety and outcomes.

In the study by Alkan et al. (2024), their findings suggest that organisational factors significantly affect both the securement and retention of healthcare workers, while the relationship between these factors depends on the setting and are complex in nature. For example, the findings were somewhat mixed when it came to issues relating to how workplace challenges may impact healthcare workers' intention to quit their job, or on retention of employees. On the one hand, the findings of some studies revealed that workplace challenges, including stress and working conditions, were closely associated with employees' increased intention to exit the profession. On the other hand, no significant relationship was identified in studies in different

settings. This phenomenon may be attributable to a range of factors, such as different application of study methodologies, the demographic characteristics of the employees, the specific context of the organisations analysed, and the individual characteristics of the challenges under examination. According to a recent systematic review by Alkan et al. (2024), nurses facing hugely disruptive events such as the COVID-19 pandemic showed a notably increased intention to leave the profession, with around 30% of nurses claiming they were considering leaving their posts.

In recent years, Saudi healthcare workers have experienced increased burnout due to the effects of rapid healthcare expansion and the demands of adapting to digital transformation. The fast pace of Saudi healthcare expansion has caused this increased workload stress, while the lack of adequate professionals to fill vacancies means that those already working within the system have no spare capacity. It also means that they may refuse to work overtime as this causes further strain and stress. The study by Salloum, Cooper, & Glew (2015) found that issues of work stress, especially burnout among clinicians, had a direct correlation to poor health service delivery and may have impacted health outcomes for patients. Moreover, the work-life balance experienced by medical professionals has deteriorated as a result of such changes and innovations while struggling to fill hours and cover for colleagues.

The challenges associated with digital transformation, including concerns related to data privacy and interoperability, have been well-documented in the literature (Rahman & Qattan, 2021; Alkhamis & Mirj, 2021; Rahman & Al-Borie, 2020). On the one hand, studies found that digital transformation yields opportunities to improve both healthcare efficiency and health outcomes for patients. However, notable challenges were also identified in other studies, especially in public hospitals. There is a need to address concerns around data privacy, levels of interoperability between systems, and digital literacy in order to unleash the full potential of digital health solutions. In order to successfully adopt and integrate new technology in the healthcare system, robust training programs and investment in digital infrastructure are essential.

3. Financial Constraints

This section examines the main challenges facing the UK and Saudi Arabia with regard to financing their healthcare systems and issues affecting working conditions in both countries.

3.1 Budget Limitations

According to the King’s Fund Report, the UK’s NHS operates under strict budgetary constraints, leading to funding shortages for staff salaries and hospital resources (Robertson et al., 2017). There have been annual budget deficits in NHS funding across recent years and such financial pressure is both severe and still shows no signs of easing. This is primarily due to a significant slowdown in funding growth: between 2010/11 and 2014/15, health spending increased by an average of 1.2 per cent a year in real terms and increases are set to continue at a similar rate for the

foreseeable future. At the same time as this decrease in funding growth, the NHS has consistently treated more patients than ever before, with pressures from increases in population, the growing ageing demographic and the need to manage chronic diseases. Consequently, the current trends in funding growth will fall short of meeting the growing demand, which costs NHS providers an estimated 4 per cent additional costs each year (Lafond et al 2016).

As a result of these funding issues, services across the NHS have come under increasing pressure, particularly genito-urinary medicine services, district nursing, elective hip replacements and neonatal services. It is clear that different sectors of the NHS have responded to these funding issues and productivity challenges in various ways. For instance, within the acute sector, deficits have effectively been tolerated, meaning that it ended the financial year against budget in 2013/14, 2014/15 and 2015/16, posting a deficit of almost £2.6 billion in the latter. Across the same period, the acute sector performed worse against key targets in terms of waiting times in both accident and emergency (A&E) and elective care (Murray et al., 2016).

Saudi Arabia, despite significant investment, faces financial challenges in sustaining free healthcare services. Financial sustainability remains another persistent concern, as rising healthcare costs and funding constraints challenge the ability to maintain high-quality services while ensuring equitable access. Across a range of international contexts, it has been found that balancing value-based care models, public-private partnerships, and strategic investments in primary care are all crucial elements in the attempt to achieve long-term financial stability (Hsiao & Yip, 2024). Moreover, global case studies have identified ways in which innovative financing mechanisms may lead to improvements in cost efficiency and service quality. These include pay-for-performance systems and the bundling of healthcare strategies to ensure efficient and cost-effective interventions.

However, the Saudi Arabian government’s implementation of a free healthcare model has brought with it several problems in delivering healthcare services. The initial levels of investment were subsequently increased due to the need to update medical equipment, build new clinical centres and pay for staffing costs (Al-Yousuf, Akerele & Al-Mazrou, 2002). Government data from 2010 indicated that 6.5% of government expenditure (US$ 345 per capita) was spent on the Ministry of Health in that year. According to Alharbi (2018), the subsequent rapid increase in expenditure is a significant feature of Saudi Arabia, whose government was able to invest heavily in support of the healthcare system due to oil revenue (Yusuf, 2014). Moreover, Amir (2012) noted that the rise in expenditure on healthcare was due to the significant rise in population across the previous two decades.

Vision 2030 was launched in 2021, and included a five-year plan to restructure the Saudi healthcare sector to be more comprehensive, effective and integrated in order to meet the needs of all citizens, residents and visitors. The specific aims of Vision 2030 in terms of healthcare are to improve the accessibility and quality of health services through optimal coverage, ensure comprehensive and equitable

geographical distribution of healthcare provision, and expand both e-health services and digital solutions (KSA, 2025).

Alongside the government's Vision 2030 strategy, Alasiri & Mohammed (2022) discuss how the use of Public Private Partnerships (PPPs) in health care is an effective way to reduce financial burden on governments and this is a central tenet of the Saudi Vision 2030. Thus far, the 2025 programme specific to the healthcare system includes the approval of nine health care privatization initiatives out of 23 such initiatives which are under review.

3.2 Salary and Compensation

In the UK, NHS workers often advocated for better wages and working conditions, frequently resorting to strikes or other industrial action to settle pay disputes. Particularly since the COVID-19 pandemic, there have been calls for better wages for nurses and frontline care workers, which have largely received the support of public opinion (Appleby, Leng, & Marshall, 2024). It is interesting to note that since the inception of the NHS, spending on it has grown at an average of around 3.4% per year in real terms (HM Treasury, 2024). Over this period, the GDP of the UK has risen by 2.1% per year on average, therefore, the percentage share of GDP that the NHS takes has risen from 3.2% in 1950-51 to 9.3% in 2022-23 (HM Treasury, 2024). Thus, paying for increased salaries for NHS staff is a political issue with recurring pay settlements and discussions being a permanent feature of UK policymaking.

Saudi healthcare professionals benefit from competitive salaries but face concerns over job security and privatization. According to Alluhidin et al. (2020), turnover rates among nurses in Saudi Arabia were approximately 20 percent in 2019, double that of the UK. Moreover, the cost of turnover for an individual nurse in the UK is US$15,000 (Duffield et al., 2014), and based on a similar figure for Saudi Arabia, nurse turnover annually costs the nation approximately SAR 2.6 billion. In general terms, nurse shortages in Saudi Arabia are due to an insufficient number of nurses entering the job market, largely attributable to the poor pay and conditions, limited number of trained nurses from inside the kingdom, and inadequate training in nursing skills, especially in the private sector. The problems are exacerbated by the high numbers of nurses leaving the job market, due to concerns such as anti-social working hours, and risk of infection and injuries at work.

To address this issue, the government should review the competitive status of salaries for nurses compared to other graduate professions. Alluhidin et al. (2020) reported that, in 2019, the minimum monthly salary awarded to graduate registered nurses was 7,130 SARs, equal to US$1,900 per month or an annual salary of US$22,800. The government should also benchmark overall compensation packages for nurses, and make the profession attractive to potential as well as existing nurse professionals.

4. Technological Advancements and Digital Transformation

This section examines the main technological advancements in the UK and Saudi Arabia with an analysis of the adoption of digital technology in both countries.

4.1 The Role of Technology

The UK has integrated electronic health records and AI-driven diagnostics but struggles with outdated infrastructure and lack of integration within the system. A major concern is the lack of sufficient primary care services, especially in rural areas, resulting in increased waiting times and delays in treatment. Research by Cannon and Cook (2015) highlights that rural communities experience higher rates of infant mortality and mental health issues, largely due to a shortage of healthcare professionals and limited attention to these concerns in remote areas. While telemedicine offers a potential solution to some of these disparities, there is a lack of comprehensive evidence demonstrating its effectiveness in improving healthcare access in rural settings. Although telemedicine has successfully reduced barriers in urban areas, the findings of Geifman et al. (2023) indicate that its ability to address the distinct challenges faced by rural populations, such as digital literacy, infrastructure limitations, and access to specialized care, remains uncertain.

Nelson et al. (2023) conducted a cross-sectional survey examining how mental health professionals integrate telehealth services in rural UK settings. However, there is still a significant gap in understanding telemedicine's broader impact on healthcare access and outcomes in rural communities. Much of the existing research has focused on specific aspects of telemedicine, such as mental health services, rather than assessing its overall effectiveness in improving healthcare accessibility and patient outcomes. As digital healthcare solutions become increasingly relied upon, it is essential to explore telemedicine's potential to address the systemic challenges faced by rural healthcare systems.

In Saudi Araba, the expansion of electronic health records (EHR) and AI-powered technology shows how the nation is rapidly adopting digital health solutions but faces challenges in implementation and workforce training. There are specific challenges that digital transformation brings, which include issues of data privacy and interoperability, alongside the opportunities it provides to improve efficiency and outcomes for patients (Kraus et al., 2021). It is essential to offer comprehensive training for users and sufficient investment in digital infrastructure in order to ensure that digital transformation can be implemented effectively and smoothly.

With particular regard to the cultural and organizational barriers to the adoption of EHR in Saudi Arabia, consideration must be taken of the unique norms and values that influence the healthcare landscape there. Issues of gender and access to work show how perceptions of society and attitudes of management towards gender roles also include attitudes to the adoption of technology (Bagilhole &Cross, 2006). Any such resistance may also reflect the challenges inherent in the adoption of EHR and other technologies, suggesting that successful implementation requires a nuanced approach to understanding attitudes towards technology in Saudi Arabia (Alhur, 2024).

4.2 Telemedicine and Remote Healthcare

The UK has expanded telemedicine services, improving accessibility in the aftermath of the COVID-19 pandemic. Research indicates a steady rise in telemedicine usage,

particularly during the COVID-19 pandemic, as a necessary solution for delivering healthcare services despite geographical barriers. In the UK, this trend underscores the increasing recognition of telemedicine's role in connecting rural communities with healthcare providers, effectively minimizing the geographic limitations that previously restricted access to medical care. A case study from Scotland illustrates this trend, where telemedicine was introduced to offer remote consultations for patients in rural areas who faced significant travel challenges in accessing primary care (Nanyonjo et al., 2022). By implementing video consultations, patients were able to connect with healthcare professionals without the need for long journeys, leading to shorter waiting times and an improved overall patient experience. This example demonstrates how telemedicine can effectively address the needs of rural communities by eliminating traditional obstacles such as distance and limited options in terms of transport and access.

Nelson et al. (2023) explored the experiences of healthcare professionals and patients during the pandemic to assess telemedicine's impact, particularly in rural mental health care. Their study found that while telehealth improved access to psychological treatments, it also introduced unique challenges. For instance, therapists reported difficulties in delivering effective care due to the absence of in-person, non-verbal cues, which are crucial in psychological therapy. Despite these obstacles, telehealth led to increased patient attendance and improved continuity of care in remote areas.

Saudi Arabia is investing in telehealth but requires better integration with existing healthcare frameworks. There have been some initiatives by the government to invest in telehealth expansion. Increasing home health nursing or telehealth nursing. Telenursing has been demonstrated to be effective in offering access to high-quality nursing care in a variety of settings (Yustikasari et al., 2025). There are many examples of such care, including post-discharge care, elderly home care, and triage over the telephone. The Ministry of Health in Saudi Arabia has successfully implemented a telemedicine programme, which it could consider extending to nursing, leading to greater workforce flexibility and working hours. However, any such developments must be carefully integrated into the existing healthcare services.

5. Policy Reforms and Healthcare Accessibility

This section examines the main government initiatives adopted in the U.K. and Saudi Arabia with regard to workforce recruitment and development, as well as analysing the different levels of accessibility to healthcare facilities in both countries.

5.1 Government Initiatives

The UK government has introduced workforce retention strategies and funding reforms. The NHS workforce retention strategies include, for example, additional funding for recruitment. Moreover, the NHS Long-Term Plan focuses on preventive care and efficiency improvements, by setting out a vision for the future of healthcare in England, aiming to improve patient care, address workforce challenges, and make the NHS more sustainable. Key points of the plan include funding increases, meaning the NHS will receive an average funding boost of 3.4% per year over five

years, as well as a move to integrated care to provide more joined-up services, including expanded community health teams and digital GP consultations. It will also focus on prevention and early diagnosis, placing greater focus on preventing illness, improving cancer survival rates, and tackling health inequalities, while in terms of mental health and primary care, there will be increased investment in mental health services and primary care. Finally, in terms of technology and innovation, there is a planned expansion of digital healthcare, including online GP consultations and AI-driven diagnostics (Alderwick & Dixon, 2019).

Saudi Arabia's Vision 2030 aims to modernize healthcare but requires more effective and integrated workforce planning. Vision 2030 focuses on privatization, digital healthcare, and medical research, alongside efforts to reduce dependence on expatriate workers. These overarching plans will require increased funding and investment, with the emphasis on educational opportunities. Saudi Arabia's healthcare sector is facing significant challenges due to a growing population and is undergoing major reforms in line with regional and global trends. The first theme of the National Transformation Program (NTP), "Transform Health Care," aims to restructure the sector into a more comprehensive and efficient system. A new model of care (MOC) will emphasize public health by promoting prevention and raising health awareness across society. It will ensure accessible healthcare services through optimal coverage, fair geographical distribution, and expanded e-health and digital solutions. Additionally, the reform will focus on continuously improving healthcare services by enhancing the experience and satisfaction of beneficiaries, aligning with international standards and best practices (Chowdhury, Mok, & Leenen, 2021).

5.2 Healthcare Accessibility

In the UK, NHS accessibility is hindered by long waiting times and regional disparities. There are still inherent challenges with long waiting times for treatments and surgeries. The NHS in the UK continues to face challenges with long waiting times and regional disparities in healthcare access. Despite efforts to improve efficiency, waiting times for treatments and surgeries remain a concern. The NHS aims to treat 96% of patients within its standard timeframes, with a specific target of treating patients within 62 days of GP referral at a rate of 85%. However, data indicates that fewer than 70% of patients meet this target. For example, in March 2020, approximately 11,000 patients had been waiting more than 62 days for treatment. This number surged to 34,000 by May 2020 before decreasing to 16,000 in December 2020. By September 2022, the figure had risen again to 33,950, later dropping to 24,555 in September 2023. As of the end of August 2024, the number of patients waiting beyond 62 days stood at around 18,751 (Limiri, 2025).

Saudi Arabia faces challenges in ensuring equitable healthcare access across urban and rural areas, with unequal distribution of healthcare facilities in different regions of the country. The government has already made efforts to improve accessibility in remote areas. However, the marked disparity between private and public hospitals may indicate the presence of systemic inequalities not only with regard to allocation

of resources, but also to the equitable healthcare service provision across the country. In order to address these challenges, the government should adopt a strategic planning policy, clear initiatives for the development of infrastructure, and reform policies leading to equity in access to quality healthcare facilities.

6. Conclusion

As seen from this comparative analysis, both the UK and Saudi Arabia face significant challenges in their healthcare systems, particularly concerning workforce shortages, financial constraints, and technological integration. While the UK struggles with budget limitations and staff burnout, Saudi Arabia faces hurdles in digital transformation and healthcare accessibility, particularly in rural regions of the country.

Addressing these issues will require careful planning, strategic policy reforms, investment in workforce development, and enhanced technological integration. Recommendations for both countries include the ongoing need for targeted policy reforms to improve conditions for healthcare workers and ensure that any digital transformation issues are handled through adequate training and implementation.

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