

## A Review Of Nursing Education In Saudi Arabia

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### Abstract

*This paper aims to address two research questions dealing with the current status of Saudi nursing education and methods to address its problems now and in the future. A Google Scholar search identified 14 papers that were discussed under two sections corresponding to the two research questions. Most authors almost agreed on the cultural, socio-economic, and personal factors as the causes of the low enrolment rate of Saudi nationals (especially females) in nursing colleges and the high turnover of nurses from both public and private hospitals. These trends have led to serious gaps in the supply concerning the demand now and are projected to be more serious in the future unless some immediate remedial steps are implemented. To address both the current and future problems of nursing education, the Saudi Vision 2030 provides some clues. Increased involvement of the private sector in healthcare activities, automation of health services delivery, and conversion of patient records into electronic forms are the main strategies that have been suggested by most authors. Large increases in the enrolment of Saudi nationals in nursing colleges can be achieved only if both the Saudi government and the healthcare organisations implement policies and strategies favourable to removing the cultural, socio-economic, and personal obstacles to it.*

**Keywords:** *Nursing, Education, Saudi Arabia, Current Status, Future.*

### Introduction

Nurses are in high demand in Saudi Arabia. In 2018, there were 184565 nurses in Saudi Arabia. Of this, 62% were expatriates predominantly from India, the Philippines, and Malaysia. Natural disasters, pandemics like COVID-19, and better wages in their home countries will lead to large-scale withdrawal<sup>1</sup> of these foreign nurses from Saudi Arabia. This will lead to severe shortages of nurses in the country. Although enhancing the local availability of trained nurses is the only permanent solution, in 2018, there were only 11 nursing graduates per 100,000 people in Saudi Arabia. This is the lowest compared to OECD countries. Many nursing diploma students drop out in the middle, and many leave the job after a few years of work. There is a high rate of exit from Saudi hospitals in the case of both Saudi and foreign nurses due to unfavourable working conditions, low pay, low social status, and work-life balancing difficulties. The newly introduced Nursing Practice Act re-categorises diploma nurses as technicians, preventing them from providing direct nursing care. The changes are meant to ensure that nurses have the required skills for high-quality care to patients. However, across all sectors, 75% of Saudi nurses are diploma nurses who have completed a 2- or 3-year program only. In the absence of bridge programmes, they will be left out. Many Saudi nurses lack the skills and knowledge for high-quality care, as they are not continually developed by training, graduation, and

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workplace practice. The largest percentage of Saudi nurses are diploma nurses, 49502, followed by 14975 registered nurses and only 233 specialised nurses in 2018. Low work effort and low levels of policy, family, and social support also affect Saudi females in the nursing profession. Many Saudi nurses want to limit themselves to primary care for favourable working conditions in line with family life, absence of night shifts, less supervision and accountability, and salaries similar to hospital jobs. The absence of skills for hospital-level jobs is also another reason for Saudi nurses seeking primary care jobs. Different sectors related to nursing recruitment and jobs are in different reform stages, and hence, they work in cross-purposes sometimes. Also, there are no comprehensive national human resources plans to plan for the future adequately. Nursing education for Saudi females is seen as the permanent solution to all these problems (Alluhidan, et al., 2020).

The above discussions about the current status of the nursing profession and education show that a lot of strategic interventions are necessary to address the problems related to both the professional and educational aspects of Saudi nursing. It is possible to expand the capacity of nursing schools and establish a better pathway for nurses, starting from middle and high school and leading to a diverse career trajectory that includes further education. One way to encourage nurses to stay in the profession is to make the nursing practice more appealing and accommodating for families. Other potential solutions could involve shortening work shifts, restructuring the nursing team to include more allied health workers for a more balanced workload, modernising existing postgraduate nursing programs, introducing new postgraduate programs in nursing, and creating additional positions and career paths such as telenursing, informatics, and quality. Steps should be taken to create incentives and improve compensation packages for those working in underprivileged communities to address the shortage of nurses in rural areas. For efficient implementation of all these steps, MoH needs to collaborate with the private sector and other wings of the healthcare system and strengthen the nursing leadership at all levels.

In this paper, we focus on reviewing Saudi nursing. The objectives of the review are-

- a) To evaluate the current efficiency and effectiveness of Saudi nursing education in terms of the numbers of nursing diplomas and graduate nurses passing out of the institutions over the years, the proficiency levels of these nurses for quality care of patients, and the actual patient outcomes from these nurses.
- b) To propose policy and strategic initiatives for solutions to the current problems.

## Methodology & Results

### Methodology

Google Scholar was searched for the papers on the relevant topics highlighted in the above objectives, and after screening and selection, 14 usable papers were available for this review. These papers are discussed in two sections, corresponding to the above research questions below.

### Results

#### **The current efficiency and effectiveness of Saudi nursing education**

According to the Ministry of Education statistics given by KSA (2021), in 2017, there were 39 nursing colleges in Saudi Arabia, of which 13 are in the private sector and the remaining 26 are in the government sector. In Saudi higher education institutions, there are about 17,085 students enrolled in nursing programs, with 76% female students. The Saudi government also offers international scholarships to Saudi citizens to study nursing. About 813 Saudi students are enrolled in nursing schools in various countries like the United States of America and Australia. There were 956 postgraduate Saudi nursing students in 2017. PhD programme was started in 2019 by King Saud University. A doctorate in nursing practice (DNP) programme was initiated through collaboration between Saudi Aramco and Johns Hopkins University.

Nursing as a profession was recognised in Saudi Arabia only in 1954 by the Ministry of Health (MoH). The first official nursing school was started in 1958. Initially, only male students were enrolled. The duration of the course gradually increased from one year to the current four years. There were two nursing education programme pathways. One pathway was that in 1958 when government departments like the MOH and Ministry of Defence required nurses to run their health organisations. These programmes recruited both male and female students who had completed six years of elementary school, upgraded to intermediate level (ninth grade) in 1981, and secondary school in 1992. The second pathway began with the establishment of the Ministry of Education (MoE) in 1975 and started university-level programs with only female students. Male students have been accepted since 2004. Bridging to a bachelor's program in nursing was offered to those who had graduated with a nursing diploma or associate degree to complete the Bachelor of Science in Nursing (BSN) degree. In the 1980s, the first Master of Science in Nursing (MSN) program for female nurses was introduced at King Saud University in Riyadh and was extended to male nurses in 2013. In July 2011, a royal decree ordered the transfer of the 39 health institutes and colleges from the MOH to the MoE. These institutes were merged into 15 governmental universities. Since then, all students have graduated with a BSN degree according to the universities' system of running these programs. However, vocational nursing programs were reintroduced in 2018 with the encouragement of public and private healthcare organisations participating as training centres and fulfilling their nursing workforce needs without the need for university graduates (Aljohani, 2020). According to the Saudi Vision 2030, there is a need to enhance the nursing education system with a focus on regulations and policies. Therefore, a royal decree in October 2018 replaced the Education Evaluation Commission with the Education and Training Evaluation Commission (ETEC). ETEC evaluates and suggests improvements to nursing programmes based on the Saudi Arabia Qualifications Framework (SAQF) criteria. The Saudi Commission for Health Specialties (SCFHS) is responsible for the professional classification and registration of health specialities in KSA. Based on the rules of the SCFHS, three bodies dominate the nursing profession: 1) the Nursing Department, responsible for everyday nursing issues within the SCFHS's scope; 2) the Nursing Scientific Council, a nursing expert panel that provides consultation to the SCFHS on nursing education matters, especially postgraduate training programs; and 3) the Council of Professional Nursing Practice established by the SCFHS in April 2017, to improve nursing practice, to help to classify health speciality certificates, to create career paths for nurses, to develop solutions for nurses who have failed the Saudi nursing examination, and to develop courses for professional nursing development. Nurses can renew their licenses from the SCFHS only on completion of 15 hours of the Nursing Continuing Education (NCE) program for a one-year license, 45 hours for a three-year license, and 75 hours for a five-year license. Continuing education activities include conferences, seminars, workshops, training courses, publishing papers or books, research contributions, accredited online health-related activities, and panel discussions. Even with all these provisions for nursing education, there is a lack of coordination among these agencies, social and cultural issues, and the absence of a national scope of nursing practice, which is in the realm of SCFHS. Nursing schools are adopting different international scopes, leading to variations in learning outcomes. No guarantee exists that nursing graduates practice what they have learned and trained for during their studies. These issues are also applicable to Saudi nurses graduating from international nursing schools, including advanced nursing practitioners, as they are not guided by clear nursing practice regulations.

Saudi Vision 2030 may present a great challenge to nursing education due to the need to increase Saudization in the nursing profession by 60%. The accelerated production of graduates by nursing programs and regulating nursing committees will contribute to the growth of nursing as a profession and strengthen the backbone of the healthcare system transformation in KSA. There are also challenges faced by the nursing faculty, competencies, and the availability of clinical training facilities.

Some data presented in the paper of Alluhidan, et al. (2020) are discussed below.

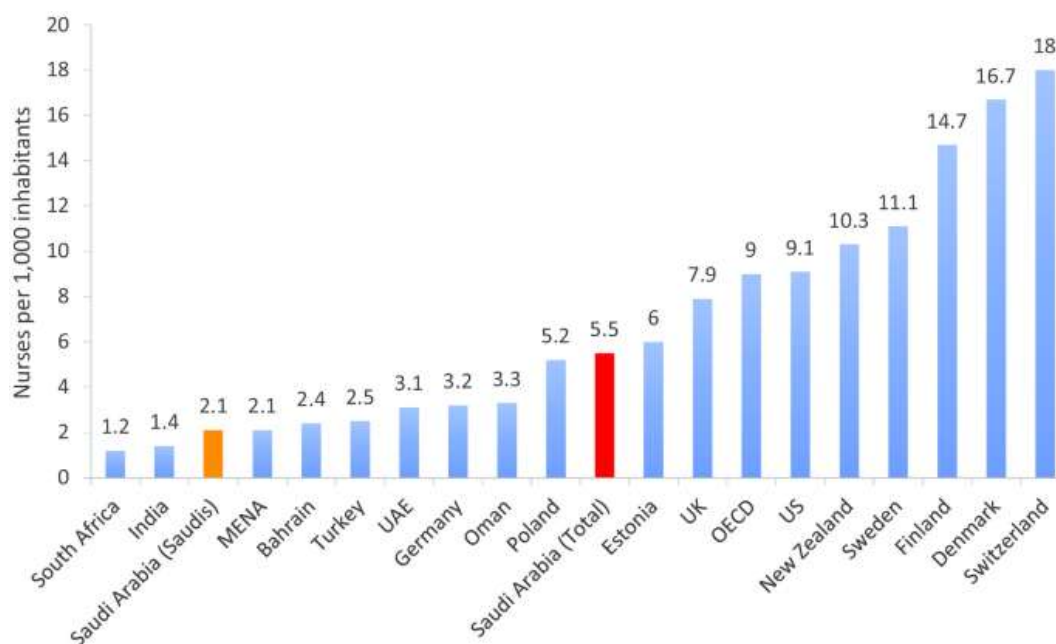


Figure 1 Number of nurses per 1000 population in Saudi Arabia compared to some other countries (Alluhidan, et al., 2020).

The data presented in Fig 1 shows that Saudi Arabia is better off in terms of the number of total nurses (5.5) per 100000 population compared to other countries around it and even Germany. This is also higher than the minimum required of three nurses per 1000 population (300 per 100000) according to the WHO standard. On the other hand, if Saudi nurses alone are considered, the number of nurses per 1000 is only 2.1, which is less than the WHO minimum.

Fig 2 shows the number of nursing graduates per 100,000 people in Saudi Arabia compared to different countries.

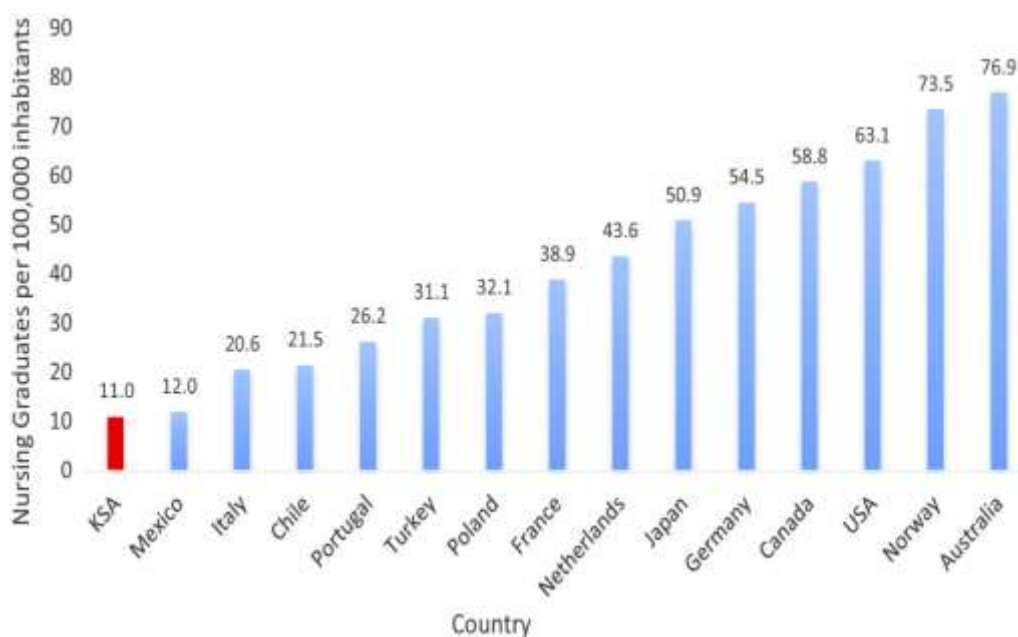


Figure 2 Nursing graduates per 100000 population in Saudi Arabia compared to a few other countries (Alluhidan, et al., 2020).

The number of nursing graduates is the lowest in Saudi Arabia (11) compared to countries like Australia, Norway, and the USA (63 to 77). This is indeed the cause of nursing shortages in the country. As was discussed above, the intake of nursing education is much lower than the demand for many reasons. The shortage of Saudi nurses is made up partially of foreign nurses, as is clear from Fig 3.

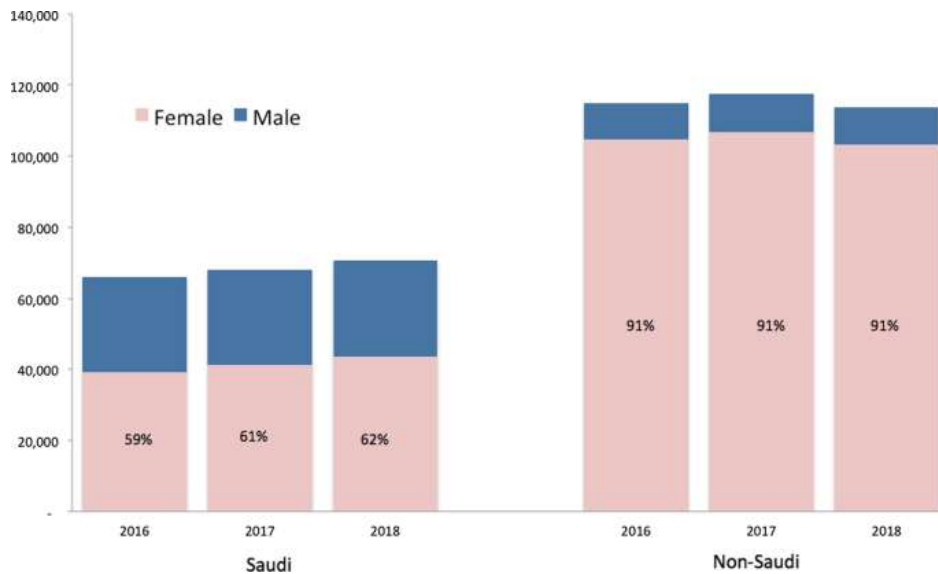


Figure 3 Number of nurses in Saudi Arabia by gender and nationality (Alluhidan, et al., 2020).

From 2016 through 2018, the total number of Saudi nurses was around 70000, and that of foreign nurses was around 120000. Thus, only around one-third of the total nurses in Saudi Arabia were from the native population. The rest was made up of foreign nurses, again reflecting the inadequacies of nursing education in the country. The proportion of Saudi female nurses increased slightly from 59% to 62% during the same period, demonstrating the subsidiary role played by the feminine gender due to socio-cultural factors. On the other hand, the proportion of foreign nurses was almost steady, around 91%, as there is not much scope to increase it further. In the case of the number of specialist nurses, foreign nurses are in larger proportions (4463) than Saudi specialist nurses (2608) in 2017. While the majority of the nurses in the MoH were Saudi natives, in the other government institutions and private sector, they were only a small percentage of the total nurses. This shows the skills and efficiency deficit of Saudi nurses compared to foreign nurses. This is also a reflection of the inadequacies in the Saudi nursing education programmes.

Despite the efforts being carried out by the Saudi government in developing and enhancing the health sector, there are inadequacies of efficient and effective services in the nursing sector specifically and the healthcare industry generally. The poor performance of nursing services in Saudi Arabia's public health sector is of particular concern (Al-Homayan, Shamsudin, Subramaniam, & Islam, 2013).

According to a study conducted by (Almalki, FitzGerald, & Clark, 2012), the job conditions of nurses in Southern Saudi Arabia's PHC centres had a significant impact on their quality of work life. Dissatisfaction with various aspects of their job, such as working hours, lack of resources and facilities, difficulty balancing work and family life, insufficient vacation time, inadequate staffing and management practices, limited professional development opportunities, and subpar working conditions, including security, patient care supplies and equipment, and recreational facilities, all contributed to this dissatisfaction. Furthermore, the negative perception of nursing in the community and low salaries added to the negative effect on their job satisfaction. Despite their love for their profession and sense of camaraderie with their colleagues, these negative factors greatly affected the overall work experience of nurses in these PHC centres.

The nursing competency framework for the nursing curriculum is important to ensure that the nurses coming out of college are equipped well with the proficiency and professionalism required for the quality care of the patients. A framework of knowledge, attitudes and skills given by Salem, El-Kom, Mubaraki, and Pandaan (2018) has seven components consisting of caring, professionalism, communication, leadership, safety, research, and teaching and learning (see Fig 4). There are certain assumptions for this competency framework related to education-practice partnerships using collaborative curricula, accounting for demographic shifts for current and future needs, and effective integration of the different sets of knowledge and teaching strategies of education and practice. Core competencies to be developed are patient-centred care, professionalism, communication, leadership, safety, research, training, and teaching. The outcomes of nursing education need to be evaluated using the framework and the core competencies.



Figure 4 The seven competencies of a framework (Salem, El-Kom, Mubaraki, & Pandaan, 2018).

### **Policy and strategic initiatives for solutions to the current problems**

One solution to improve the academic performance of Saudi nursing students may be to motivate them to engage in self-directed learning, as the survey results (Alotaibi, 2016) show. The preceptorship programmes for graduating nurses might give them good clinical competence, according to the survey findings of boshaiqah and Qasim (2018).

Heavy turnover of nurses from Saudi Arabia has been attributed Lamadah and Sayed (2014) to the influence of the prevailing negative images and perceived low status of nursing, community image, family disagreement, cultural and communal values, mixing with members of the opposite gender, and the reduced prospect for marriage. The main challenges are nursing training in the diploma and associate degree forms, the need for in-service hospital education, poor working conditions, high nursing turnover impacting the workload of those who remain and inadequate policies and organisational characteristics affecting the upholding of nursing professional image, social rejection of nursing profession, language problems of expatriate nurses and lack of personal interest in this



profession. One solution for these problems is to introduce and adapt the concept of magnetic hospitals to attract and retain qualified nurses from the USA. Magnetic-accredited hospitals are known for their interactive management style, decentralised organisational structure, competitive personnel policies, professional practice, and development.

To address the various problems related to nursing education in Saudi Arabia, Almalki, FitzGerald, and Clark (2011) suggested the enhancement of the status of nursing in Saudi Arabia, for which media should play an active role. The length of nursing courses can be reduced from four to three years, as in some developed countries, without dilution of the quality or content of the programme. Nursing students can be provided with scholarships to reduce their financial burden. Also, they need to be given full pay during their internship period, as medical students are.

The publication of more research reports by the nursing academic faculty can attract more nursing students to any university. The research contributions from the Saudi nursing colleges have been low for the last 16 years, as per the survey of the published papers from the Saudi public universities. Inadequacies in the areas of individual, institutional, and leadership characteristics related to nursing faculty research productivity were identified in this study (Althiga, 2021).

The population of Saudi Arabia is expected to increase by 33% in the next decades. As the country is already pressured by the shortage of nurses, the rapidly growing needs of the nursing workforce need to be addressed rapidly. Now, the demand is much higher than the actual supply. In this context, the government is trying to involve the private sector to make up for the deficits. The private sector will find healthcare services in Saudi Arabia to be lucrative businesses. The possible actions identified by Sajjad and Qureshi (2020) were automation of healthcare services will increase, leading to the requirement for fewer nurses. There will be an increased focus on the training and development of nurses to handle the automated services, and there will be a lot of development of primary healthcare centres. Almost all of these are parts of the healthcare strategies in Vision 2030. The need to address shortages without delay was stressed.

Based on the survey findings, Caswell and Kenkre (2021) recommended increased investment in resources for primary healthcare staff and medical facilities. This is to support primary care providers in becoming the accepted and preferred community frontline workers for the assessment of local healthcare needs and care delivery. As the majority of the nursing staff are expatriates, recruitment and training of Saudi nurses for the replacement of the expatriates need to be implemented.

According to Alnowibet, et al. (2021), Saudi Vision 2030 targets increased participation of the private sector in healthcare. Reducing the nursing shortages will lead to reducing the high unemployment rate, especially among women. The aim is also to increase the number of qualified Saudi nurses from the current 70.2 to 150 per 100000 populations. In 2020, the demand for nurses was 224278, and the supply was 6148. This gap of 218130 nurses is likely to increase to 303120 in 2030, with a supply of 22493 nurses against the demand for 325613. These gaps are also reflected in the increased demand for nursing graduates, which rose from 46.8% to 63.4% out of the total. Addressing these gaps requires urgent strategies and their implementation. Government policies impact only the government healthcare institutions. Much higher numbers of male students should be encouraged to enrol in nursing education. Suitable steps to reduce the dropouts from nursing colleges and the turnover rates from the hospitals need to be implemented. Steps to increase nursing effectiveness and efficiency will reduce the requirement for large numbers of nurses. Enhancement of patient information systems and automation of services using IT will also enable managing with fewer nurses.

## Conclusions

This paper aims to review the current status of nursing education in Saudi Arabia and suggest solutions to address the problems.

The literature search was done using Google Scholar. Most papers identified cultural, socio-economic, and personal factors as the causes of the current low enrolment in Saudi nursing colleges and high turnover of nurses from Saudi hospitals. These two trends have caused a serious shortage of Saudi nurses, who are only partially made up of foreign nurses. To address these current problems, the high output of Saudi nurses from nursing colleges is one of the ways. However, this strategy needs to be supported by policies and strategies by the Saudi government and healthcare organisations in a manner that is favourable to motivate large numbers of Saudi citizens to enrol in nursing colleges and get recruited in both public and private healthcare facilities. This is also linked to the healthcare targets of Saudi Vision 2030. Increased involvement of the private sector, automation of service delivery, and converting patient records into electronic forms are the main strategies suggested by many authors to reduce the burden of the Saudi government and reduce the need for a very large number of nurses now and in future.

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