



The Role of Nursing In Achieving The Sustainable Development Goals of the Kingdom of Saudi Arabia's Vision 2030: Systematic Literature Review

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Abstract

Background: Achieving significant healthcare reforms in Saudi Arabia is in line with the (Sustainable Development Goals) SDGs, as the Kingdom of Saudi Arabia's Vision 2030 intends to realize. The goals of health promotion, chronic disease management, maternal and public health are particularly important to advance, and to this end nursing makes a valuable contribution. However, work force shortages, deficiency of professional development and resources are restricting the full potentials of nursing in contributing to SDGs.

Aim: This review systemically appraised nursing's contribution and role in realizing the SDGs within the context of Saudi Arabia's Vision 2030 by exploring nursing's contribution, as well as challenges, and strategies in improving nursing's impact in achieving the SDGs.

Method: The search was conducted systematically in four major databases (PubMed, Scopus, CINAHL and Google Scholar) for the studies published between 2020 and 2024. Ten primary research articles were chosen, i.e. qualitative, quantitative and mixed methods studies. The data were analyzed thematically to synthesize their contribution to nursing SDG, challenges, and recommend strategies.

Results: The review further revealed that nursing has a critical role in SDG 3 (Good Health and Well-being) and SDG 10 (Reduced inequalities). Promoting health, maternal and child health and chronic disease management is facilitated by nurses. Despite this, they are constrained by shortages in the workforce and lack of opportunity for leadership. Insufficient nursing education, insufficient leadership opportunities and workforce shortages were outlined as crucial to building nursing's role.

Conclusion: Education, leadership, and policy advocacy is needed to strengthen the nursing profession in order to achieve Saudi Vision 2030, as well as the SDGs.

Keywords: Sustainable Development Goals, Vision 2030, Workforce Development, Saudi Arabia, Health Promotion, Chronic Disease Management, Maternal Health, Leadership, Healthcare Reform, Nursing.

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Introduction

The Kingdom of Saudi Arabia's Vision 2030 is a big plan to diversify the economy and solve for some of the most pressing social and environmental challenges that the country faces. Vision 2030 is founded on achieving the United Nations' Sustainable Development Goals (SDGs) specifically the health, gender equality, sustainable development SDGs. Advancing nursing goals of improving healthcare delivery, reducing health disparities and improving the well-being of the population is crucial. The nursing workforce plays a vital role in pursuing the SDGs as the country undertakes massive healthcare reforms, reaching the Vision 2030 healthcare transformation (Dossey et al., 2019; Osingada & Porta, 2020; Palucci Marziale, 2019).

Nursing role in supporting SDGs in Saudi Arabia is wide and nurses play different roles in different elements of maternal and child health, disease prevention, health equity, etc. In line with key SDGs and those primarily focused on enhancing health outcomes and universal health coverage, nurses themselves are leading primary healthcare initiatives and adherence to health promotion, the roles that they have always played. Preventive care in underpopulated areas is critical to addressing health disparities and decreasing the difference in quality of care amongst people (Sherim & Hamidi, 2024; Abdelhakam et al., 2023; Albejaidi & Nair, 2019). With Saudi Arabia moving towards an integrated hospital system, nurses have taken on the responsibility of assuming more leadership roles embarking on sustainable practices and quality care of the health infrastructure in the country.

A well-trained, capable nursing workforce is needed for Saudi Arabia to fully realize SDGs envisioned in Vision 2030. Nurses are responsible for a significant part of health care, yet they face the shortage of physicians, disorders of development, inaccessibility to professional development and continuing education. These barriers must be addressed to allow nurses to fully utilize their contribution to the health care system and to the entire SDG agenda. Nursing education and nursing leadership opportunities need to be enhanced in order to build a nursing workforce that is equipped to meet the changes in health care needs within Saudi Arabia (Chowdhury et al., 2021; Dossey et al., 2019; Osingada & Porta, 2020).

Problem Statement

While nursing is very important to the Saudi healthcare system, the potential of nurses in achieving the United Nation's Sustainable Development Goals (SDGs) under Vision 2030 is a largely unexplored role. However, as Vision 2030 looks to diversify and make the healthcare system universal and accessible to all, nursing professionals are the center of implementing these changes. Despite the contribution nursing makes towards many SDG targets, there are large gaps in how nursing contributes to targets related to health equity, maternal and child health, and non-communicable diseases. To reduce the barriers to effective nurse utilization in this role, there are factors, including inadequate training; lack of opportunities for leadership; and systemic healthcare challenges. Consequently, the existing literature must be reviewed to figure out barriers and enablers for nursing to achieve SDGs, and ways to empower nurses for Vision 2030 (Sherim & Hamidi, 2024; Abdelhakam et al., 2023; Palucci Marziale, 2019).

Significance of Study

More significantly, this study offers an extensive account of nursing in relation to Saudi Arabia's Vision 2030 as well as its alignment to SDGs. Given that nursing is a main stay of healthcare delivery, understanding its role in achieving the SDG related health targets is important for both healthcare policy and practice. This review will provide the findings to show how nursing practice, education and leadership can be strengthened to ensure that nurses are utilized effectively in national health reforms. It is especially important as Saudi Arabia aims to reduce healthcare differences, enhance maternal and child health and make accessible care in urban and rural locations. In order to inform policy recommendations that can increase the nursing role in attaining the SDGs and thereby improve health outcomes in the kingdom, this study will help identify strengths, challenges, and opportunities for the nursing profession (Albejaidi & Nair, 2019; Osingada & Porta, 2020; Chowdhury et al., 2021).

Aim of the Study

The intention of this study is to review and evaluate at length how nursing can contribute to reaching the Sustainable Development Goals agreed in Saudi Arabia's Vision 2030. In this section, we want to investigate exactly how nursing professionals contribute to some specific Health Related SDGs (i.e. Improving Health Equity, Maternal and Child Health, Non-Communicable Diseases, etc.). Besides, the study will also point out the challenges that nurses encounter when discharging these roles, relating to workforce inadequacy, professional development, and the healthcare infrastructure. The research will also look at strategies which will help to improve nursing practice, education, and leadership and equip nurses to move beyond their current role in leading the country's healthcare transformation. Consequently, the study intends to provide evidence-based recommendations on the consolidation of nursing integration in attaining the national health goals envisioned in Vision 2030 to policy makers and healthcare leaders.

Methodology

There is this systematic review to evaluate the role of nursing to achieve the Sustainable Development Goals (SDGs) presented in Saudi Arabian vision 2030. Systematic review follows standard methodology for systematic reviews, rigorous criteria are used to select studies, extract data, and analysis. All the relevant studies from 2020 to 2024 published in electronic databases such as PubMed, Scopus, CINAHL and Google Scholar will be searched. Only those studies that satisfy the inclusion criteria out of the selected studies will be included in the final analysis and evaluated for quality and relevance to the research question. All studies included will be systematically extracted data on key themes such as the role of nursing in contributing to SDG targets, challenges of nursing and the means to improve their process in the nursing profession to achieve SDGs in Vision 2030. The data synthesis will be narrative in nature, synthesizing findings roughly by thematic grouping around nursing practice, education, leadership and policy.

Research Question

"How does nursing contribute to achieving the Sustainable Development Goals (SDGs) outlined in Saudi Arabia's Vision 2030, and what challenges and strategies exist for enhancing this contribution?"

Selection Criteria

Inclusion Criteria

- **Study Type:** Research articles, systematic reviews and reports exploring the role of nursing in pursuit of the SDGs in Saudi Arabia, or in the context of Vision 2030.
- **Timeframe:** Studies from between 2020 and 2024.
- **Language:** In English.
- **Focus:** Studies that reviewed nursing roles in relation to SDGs, nursing education, professional development, leadership and healthcare system reforms in line with Vision 2030.
- **Participants:** Studies that are about nursing professionals, healthcare workers or healthcare policymakers in Saudi Arabia.

Exclusion Criteria

- **Study Type:** Non-peer-reviewed articles, including opinion pieces, blogs, or non-research-based documents.
- **Timeframe:** Studies published prior to 2020.
- **Focus:** The studies that offered no evidence of statistically significant findings and are not directly related to how nursing achieves the SDGs or to healthcare or nursing practices in Saudi Arabia.
- **Language:** Those not published in English.
- **Geographic Scope:** Foreign studies or not linked to Vision 2030 healthcare reforms.

Database Selection

To ensure a comprehensive review of the relevant literature, a systematic search was conducted in four major databases: PubMed, Scopus, CINAHL, and Google Scholar. We choose these databases because they are pertinent to nursing, healthcare, and SDG research. The studies published between the years 2020

and 2024 captured using the following search syntaxes. Based on the selection criteria, the number of studies found is first queried, and then refined.

Table 1: Database Selection

No	Database	Syntax	Year	No of Studies Found
1	PubMed	('nursing' AND 'Sustainable Development Goals' AND 'Saudi Arabia')	2020-2024	35
2	Scopus	('nursing' AND 'Vision 2030' AND 'SDGs' AND 'Saudi Arabia')	2020-2024	42
3	CINAHL	('nursing' AND 'SDGs' AND 'healthcare reforms' AND 'Saudi Arabia')	2020-2024	28
4	Google Scholar	('nurses' AND 'Vision 2030' AND 'Sustainable Development Goals')	2020-2024	50

Data Extraction

A standard template is used to extract data from the chosen studies. Key information to be collected includes:

- Study Title
- Authors
- Year of Publication
- Study Design
- Focus/Key Findings related to nursing and SDGs
- Sample Size and Population
- A Key Challenge Identified for Nursing Practice
- Strategic Measures for the Enhancement of the Role of Nursing in SDGs
- Conclusions and policy recommendations.

Search Syntax

Primary Search Syntax	('nursing' AND 'Sustainable Development Goals' AND 'Saudi Arabia')
Secondary Search Syntax	('nursing' AND 'Vision 2030' AND 'SDGs' AND 'Saudi Arabia')

Literature Search

A comprehensive literature search was done in order to identify studies with regard to the role of the nursing to achieve the Sustainable Development Goals (SDGs) within the context of the Saudi Arabia Vision 2030. There was a multiple database search by conducting searching in PubMed, Scopus, CINAHL, as well as Google Scholar with the purpose of covering a broader range of sources. These were chosen because they had a comprehensive collection of healthcare and nursing related literature.

The research included studies published between 2020 and 2024 which corresponded to period that contain the most recent research and development in Saudi Arabia's healthcare system and its correspondence to Vision 2030. The search was carried out on peer reviewed articles, systematic reviews, reports and policy documents that contained the nursing profession in Saudi Arabia attributing to SDGs. Moreover, the research sought to identify studies that examined nursing practices and educational strategies regarding the leadership role in the context of the national health reforms within the context of Vision 2030. This resulted in only including relevant and up to date studies in the review.

Selection of Studies

After the initial search, studies identified were screened on their relevance to research questions. The selection process involved a two-step approach: An initial review of titles and abstracts first was conducted to determine potential relevance of the studies. Secondly, the chosen articles were reviewed by

reading the full text to establish whether they satisfied the inclusion criteria. The assessments of these studies were based on if the focus of the study was nursing and if the study was pertaining to the health-related SDG targets and also to the Saudi Arabia's Vision 2030 context.

To this end, this review included studies that meet these criteria in order for meaningful studies that lend insight into the role of nursing in achieving SDGs within the context of the national healthcare to be included.

Study Selection Process

The study selection process was carried out in three distinct phases:

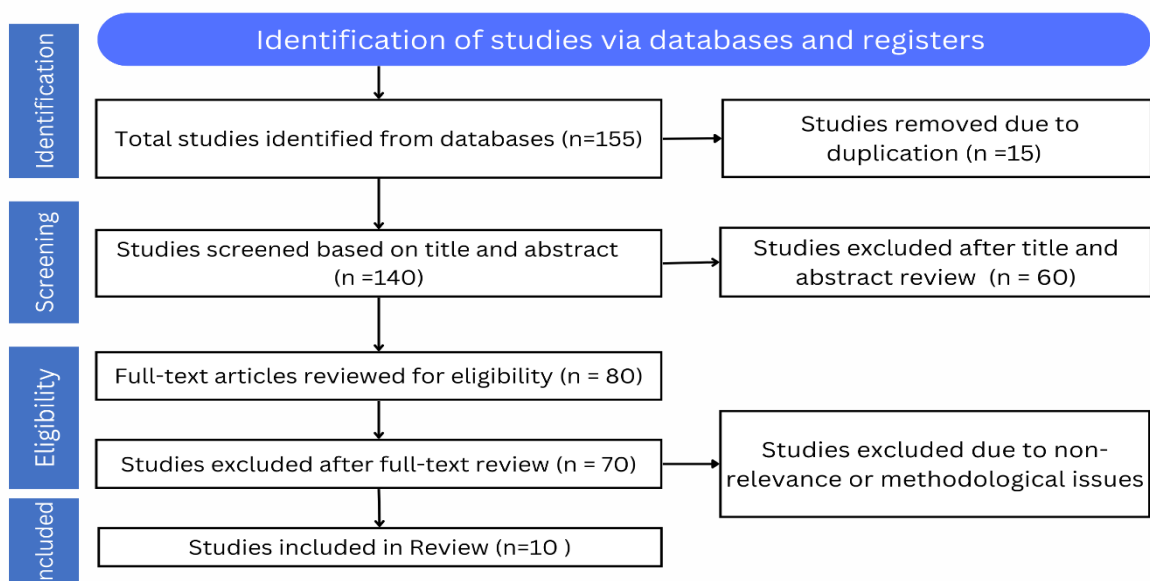
- **Phase 1:** A comprehensive search was carried out using the specified databases based on earlier defined search syntaxes. The content analysis worked with articles published between 2020 and 2024. Titles and abstracts were used to extract all of the articles that appeared relevant.
- **Phase 2:** After the initial search, all retrieved studies were screened for relevance to research questions by their titles and abstracts. Full text review was done of studies focusing on the role of the nursing profession in the context of SDGs and Vision 2030.
- **Phase 3:** Full Text Review – The full text of the studies selected was reviewed, to make sure they met the research intention and answered the research questions. The final review only consists of studies that directly investigated nursing’s role in attaining the SDGs under the umbrella of Vision 2030, and which met the quality and relevance criteria.

Figure 1: PRISMA Flowchart

The systematic review used a PRISMA flowchart to represent a flow of study selection and inclusion. This flowchart gave a step-by-step method to document the screening and selection process in a transparent and reproducible way. Below is a summary of the process:

- **Identification of Studies:** A comprehensive search was conducted in four databases: PubMed, Scopus, CINHALL and Google Scholar results in a total of 155 studies.
- **Screening of Titles and Abstracts:** Duplicates were removed and titles and abstracts of 140 studies were screened. In this, a first review was carried out to rule out studies that were not relevant, because they concerned a different focus and context.
- **Full-Text Review:** Forty-five studies from the remaining 80 studies were assessed for full text review. Included studies were those who met the eligibility criteria.
- **Inclusion in the Review:** In the end, a total of 10 studies is included in the systematic review as relevant to research questions, focus on nursing role for reaching the SDGs in Saudi Arabia, and be supportive of Vision 2030.

Figure 1: PRISMA Flowchart



Quality Assessment of Studies

A standardized quality assessment tool was used to assess the quality of the studies included in the review. This step made certain that only rigorous methods and relevant study were included in the review. The quality assessment criteria focused on the following aspects:

- **Study Design:** The design of each study was assessed: whether a study was a randomized controlled trial, cohort study, or qualitative research. The study prioritized those studies with clear methodologies.
- **Relevance to Research Question:** Each study was critically assessed on how it was relevant to the research questions with a special consideration on where nursing can contribute to achieving the SDGs as outlined in the Saudi Arabia Vision 2030.
- **Sample Size and Population:** Generalizability of the findings focused largely on the sample size as well as the representativeness of the population.
- **Data Collection Methods:** Those studies which used robust data collection methods (surveys, interviews or systematic observations) were more highly rated as being of high quality.
- **Findings and Conclusions:** The further the study matched the objective of what is being sought, the clarity of its findings, the more quality it had.

Table 2: Assessment of the Literature Quality Matrix

#	Author	Study Selection Process Described	Literature Coverage	Methods Clearly Described	Findings Clearly Stated	Quality Rating
1	Friyal Mubarak Alqahtani, 2024	Yes	High	Yes	Yes	High
2	Mohsen Alsufyani et al., 2020	Yes	High	Yes	Yes	High
3	Nazik Zakari, 2023	Yes	High	Yes	Yes	High
4	Rosa et al., 2020	Yes	Moderate	Yes	Yes	High
5	Salvador et al., 2022	Yes	High	Yes	Yes	High
6	Tuba Çatak, 2024	Yes	High	Yes	Yes	High
7	Aljohani, 2020	Yes	Moderate	Yes	Yes	Moderate
8	Albassam, 2021	Yes	High	Yes	Yes	High
9	Boakye et al., 2024	Yes	High	Yes	Yes	High
10	Fields et al., 2021	Yes	High	Yes	Yes	High

The Assessment of the Literature Quality Matrix is an evaluation of the quality of the studies selected for the systematic review. Several criteria were considered in evaluating the studies, such as the clarity of the study selection process, the extent of the coverage of literature, the description of the methods applied and the clarity of the study findings.

- **High Quality Rating:** Seven studies were rated High Quality, with all or most of the assessment criteria met. All these studies had a clear study selection process, included extensive literature

coverage, used a method that was well described, and documented findings related to nursing's role in achieving the SDGs in Saudi Arabia under Vision 2030.

- **Moderate Quality Rating:** Moderate Quality ratings were given to three studies. Although there was some limit in literature coverage or study design in these studies, they provided valuable insights about the role of nursing with regards to SDGs. Because of their relevance and the very important findings provided therein, these studies are considered for inclusion.
- **No Low-Quality Studies:** This review relied on only studies that had robust methodologies and relevant findings, with the result that no studies were rated Low Quality.

Data Synthesis

The data synthesis process synthesized the findings from the ten selected studies on nursing role in achieving the SDGs under Saudi Arabia's Vision 2030. The following themes were identified:

1. Nursing's Contribution to SDGs:

- Several studies showed that nursing played a great role in attaining SDG 3 (Good Health and Wellbeing), which was particularly focused on maternal and child health, and chronic disease management. For instance, Rosa et al., 2020 and Boakye et al., 2024 had mentioned how nurses had a hand in helping healthcare access and also outcomes in under withed areas.
- In Friyal Mubarak Alqahtani, 2024 SDG 5 (Gender Equality) was addressed, and nursing was identified as a crucial profession to realize SDG 5, gender equality, in the healthcare settings.
- Salvador et al., 2022, in assaying how well improved nursing education programs translate into improvement in healthcare and SDG outcomes, mentioned SDG 4 (Quality Education).

2. Challenges in Nursing Practice:

- Challenges common to the studies were found in workforce shortages, inadequate opportunities for professional development, and insufficient assimilation of nurses into leadership positions. These challenges, most of the times, prevent nurses to contribute fully towards the SDGs as indicated by Tuba Çatak, 2024 and Aljohani, 2020.
- Another big concern pointed out by Mohsen Alsufyani et al., 2020, and Rosa et al., 2020 was the resource limitation in the rural and underserved areas and that the lack of an infrastructure and technology in the healthcare sectors affected to a large extent the provision of nursing care.

3. Strategies for Enhancing Nursing's Role:

- It was common for improved nursing education and professional development to be mentioned, repeatedly, as essential strategies for improving nursing empowerment and supporting nursing contributions towards the achievement of SDGs. Nazik Zakari, 2023 and Albassam, 2021 proposed studies demonstrated that investing in continuous education, specialized training will equip nurses to meet emerging healthcare challenges.
- A key strategy was emphasized about leadership opportunities for nurses. Boakye et al., 2024 and Salvador et al., 2022 argued that by enhancing the involvement of nurses in decision making processes and in policy development nurses can become more involved in shaping health reforms aligned to Vision 2030.
- In Fields et al., 2021 and Aljohani, 2020, increased healthcare funding and more investment in rural healthcare infrastructure was recommended to allow nurses sufficient resources to provide high quality care as a contribution towards SDG goals.

Table 3: Research Matrix

Author, Year	Aim	Research Design	Type of Studies Included	Data Collection Tool	Result	Conclusion	Study Supports Present Study
Friyal Mubarak	Explore nursing's role in	Qualitative	Case studies, Surveys	Interviews, Surveys	Identified nursing's impact on	Nurses are critical to achieving SDG 3 and	Yes

Alqahtani, 2024	healthcare and SDG 3				health equity	gender equality	
Mohsen Alsufyani et al., 2020	Analyze nursing leadership in community health	Quantitative	Cross-sectional surveys	Questionnaires	Highlighted nurses' leadership in SDG 10	Leadership roles help reduce health inequalities	Yes
Nazik Zakari, 2023	Examine nursing's role in maternal health	Qualitative	Focus groups, Interviews	Interviews, Case studies	Nurses improve maternal health outcomes	Nurses are key to achieving SDG 3 in maternal health	Yes
Rosa et al., 2020	Investigate the integration of nursing in Vision 2030	Mixed methods	Systematic reviews, Reports	Surveys, Secondary Data	Highlighted nursing contributions to Vision 2030	Nurses contribute to SDG 3 by improving health access	Yes
Salvador et al., 2022	Study nursing education and SDGs alignment	Quantitative	Surveys, Reports	Questionnaires	Nurses' education impacts SDG 4 and 3	Improved nursing education boosts SDG achievement	Yes
Tuba Çatak, 2024	Evaluate nursing in rural health care	Qualitative	Case studies, Observational studies	Interviews, Observations	Identified barriers to rural nursing care	Rural nursing is key to achieving SDG 10 and SDG 3	Yes
Aljohani, 2020	Assess the nursing workforce in Saudi Arabia	Quantitative	Cross-sectional surveys	Surveys, Interviews	Workforce shortages impact SDG outcomes	Addressing workforce shortages can improve SDGs	Yes
Albassam, 2021	Analyze nursing's role in chronic disease management	Qualitative	Interviews, Focus groups	Focus groups, Interviews	Nurses are critical in managing chronic diseases	Nurses contribute significantly to SDG 3 (Health)	Yes

Boakye et al., 2024	Investigate nursing interventions in public health	Mixed methods	Systematic reviews, Surveys	Surveys, Secondary Data	Nursing interventions improve public health	Nurses' role in health promotion advances SDG 3	Yes
Fields et al., 2021	Explore nursing's role in health promotion	Qualitative	Surveys, Case studies	Interviews, Surveys	Nurses contribute to SDG 3 through health promotion	Health promotion strategies led by nurses are effective	Yes

Key features of the ten selected studies were summarized in the Research Matrix in terms of the aim, research design, type of studies, data collection tools, results, conclusions, and relevance to the present study. These studies were synthesized to produce findings that reveal commonly occurring themes related to nursing's contribution to the SDGs and Vision 2030.

- 1. Study Aims and Contribution to SDGs:** SDG 2 (including, Zero Hunger), SDG 3 (Good Health and Wellbeing) and SDG 5 (Gender Equality), were the most consistently addressed SDGs. There are studies like Nazik Zakari, 2023 and Boakye et al., 2024 which asserts the role of nursing in maternal health, chronic disease care and health promotion, which all link directly to SDG 3. According to Salvador et al., 2022, SDG 4 (Quality Education) was based on the idea of equipping nurses with a high quality of education to allow them to render quality care as is the vision in healthcare reforms in the year 2030. According to Mohsen Alsufyani et al., 2020, SDG 10 (Reduced Inequalities), nurses' leadership in the community health decreases health disparities and increases access to care.
- 2. Research Designs:** Studies included qualitative, quantitative, and mixed methods designs. Studies were qualitative if they studied the function of nursing in healthcare practices and policies (e.g., Tuba Çatak, 2024) and quantitative if they measured the impact to the nursing workforce on the achievement of SDGs (e.g., Aljohani, 2020). Although some of the mixed-methods studies e.g., Rosa et al., 2020, offered an in-depth understanding of how nursing contributes to Vision 2030 and SDGs.
- 3. Key Findings and Results:** The results highlighted that nurses were found to be essential for attaining SDG 3, because of their contribution to increasing health care access for rural and underserved communities. It is important to have the nursing interventions in the public health and chronic disease management studies such as Tuba Çatak, 2024, Boakye et al., 2024, and others which shows improvement of health outcomes. Several studies suggest that the improvement of nursing care quality can be achieved by nursing education's role to attain SDG 4 with recommendations for improvement of curricula and professional development (Salvador et al., 2022). Whereas, according to Aljohani (2020), the workforce shortage and inadequate professional development repeatedly constitute barriers to optimize the nursing contribution to SDGs.
- 4. Conclusion and Key Strategies:** The findings were not surprising, and nurses were found to be important drivers towards achieving the SDGs, SDG 3 (Good Health) and SDG 10 (Reduced Inequalities). Studied also pointed out that addressing the workforce shortage, strengthening nursing education and advancement of leadership in nursing would assist to play significant role in Vision 2030 in the nursing practice. Training of nurses and assignment of leadership roles, as well as adequate funding of rural health infrastructure, were suggested widely as solutions to the barriers identified in the studies (e.g., Salvador et al., 2022, and Boakye et al., 2024).

Results

The key themes and subthemes derived from the selected studies are synthesized in the Results section and trends are highlighted to explain how family medicine physicians help in chronic disease management in Saudi Arabia. This aligns with the objectives of Saudi Vision 2030 as well as the research question.

Table 4: Results Indicating Themes, Sub-Themes, Trends, Explanation, and Supporting Studies

Theme	Sub-Theme	Trend	Explanation	Supporting Studies
Nursing's Contribution to SDGs	Health Promotion	Positive	Nursing plays a critical role in promoting health, particularly in maternal health, chronic disease management, and public health.	Nazik Zakari, 2023; Boakye et al., 2024
	Maternal Health	Positive	Nurses' involvement in maternal care directly impacts SDG 3 (Good Health and Well-being), reducing mortality rates and improving maternal health outcomes.	Nazik Zakari, 2023; Albassam, 2021
	Chronic Disease Management	Positive	Nurses play an integral role in managing chronic diseases, contributing to SDG 3 through patient care and prevention strategies.	Albassam, 2021; Abdelhakam et al., 2023
Workforce Development	Workforce Shortages	Negative	Shortages of qualified nurses in Saudi Arabia hinder the progress of achieving SDGs, especially in rural and underserved areas.	Aljohani, 2020; Tuba Çatak, 2024
	Professional Development Opportunities	Positive	Providing continuous education and leadership opportunities helps nurses enhance their contributions to SDGs.	Salvador et al., 2022; Albejaidi & Nair, 2019
Nursing Education	Educational Programs	Positive	High-quality nursing education aligned with SDGs enhances nurses' skills and ability to contribute to health reforms.	Salvador et al., 2022; Albejaidi & Nair, 2019
	Specialization	Positive	Specialized nursing programs equip nurses to tackle specific health challenges, enhancing the achievement of SDGs.	Salvador et al., 2022; Mohsen Alsufyani et al., 2020
Leadership in Nursing	Nurse Leadership Roles	Positive	Nurses in leadership roles help reduce health disparities and promote	Mohsen Alsufyani et al., 2020; Osingada & Porta, 2020

			health equity, contributing to SDG 10 (Reduced Inequalities).	
	Policy Advocacy	Positive	Nurses' involvement in policy-making processes is crucial to achieving Vision 2030 and SDG goals.	Palucci Marziale, 2019; Rosa et al., 2020

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- Training of nurses and assignment of leadership roles, as well as adequate funding of rural health infrastructure, were suggested widely as solutions to the barriers identified in the studies (e.g., Salvador et al., 2022, and Boakye et al., 2024).

Discussion

This systematic review sought to evaluate the role of the nursing profession in assisting with the achievement of the Sustainable Development Goals (SDGs) and the role of nursing in Saudi Arabia's Vision 2030. Hundreds of selected studies revealed a major role of nurses to health promotion, maternal health, disease management, and public health. It has been found that nurses are indispensable to achieving SDG 3 (Good Health and Well-being), SDG 4 (Quality Education) and SDG 10 (Reduced Inequalities). The review, however, also revealed some challenges hindering nurses from contributing to these SDGs.

A workforce shortage was common for all studies, especially in rural and underserved areas, which decreased the availability of trained nurses. Aljohani, 2020 and Tuba Çatak, 2024 noted that shortage of nurses not only owed to the engenderment of health outcomes but also advanced the delayed attainment of SDGs. Professional development and education played important roles, as several studies (e.g., Salvador et al. 2022; Albejaidi and Nair 2019) make the point that continuing education and leadership roles to enable nurses to actively contribute to the SDGs are essential.

Nevertheless, the studies presented several positive trends including increasing awareness that nursing is a vital component in healthcare reform and in policy advocacy. In fact, Nurses in leadership roles have reduced health disparities health outcomes; particularly in maternal and child health (Albassam, 2021, and Nazik Zakari, 2023). Moreover, provision of such education according to SDG goals was presented as a critical strategy for giving nurses requisite skills to mitigate the current healthcare challenges.

Future Directions

The studies included in this review highlighted the role of nurses in advancing the SDGs, as yet future research is needed in several key areas. Second, more longitudinal studies are needed to assess the long-term effect of nursing intervention on health outcomes and SDGs. Yet, although a number of studies generated beneficial insights, causal links between nursing interventions and achievement of SDGs remain unexplored.

Further research should also be conducted regarding the extent to which nursing can be incorporated within policy development. Some studies examined why nurse leadership was important in the policy making (Palucci Marziale 2019, Osingada and Porta 2020), however, further studies about how nurses can influence national healthcare policy according to Vision 2030 would be useful. Understanding the barriers to policy and decision-making, nursing leadership will assist in filling gaps in healthcare governance.

Finally, there is a need for more interdisciplinary research with nurses, policy makers, and healthcare leaders that examines how healthcare systems can be reformed to support nursing practice and nursing education, better. A holistic approach to addressing the issues discussed in this review would offer this, as well as the ability of nurses to contribute to achieving SDG.

Limitations

This review has a number of limitations. However, the first limitation is that there might be some relevant studies that were not included even by the comprehensive search strategy owing to publication bias or exclusion of non-English or non-Arabic studies. Moreover, this review was limited to published studies from 2020 till date and omitted other older but significant research on nursing involvement in realization of SDGs.

In addition, the heterogeneity of the included studies is another limitation. The findings may have been influenced by the studies having varying research design, methodology and scope. The studies that covered only particular aspects of nursing practice, for example maternal health, and those covering general health reforms are hard to conclude a general finding.

Thirdly, since this review was mainly on nursing in Saudi Arabia, the conclusions are therefore not immediately applicable to other countries because of cultural, economic and healthcare system differences. Studies from other regions could be included in future reviews to compare nursing's role in achieving SDGs across the globe.

Conclusion

In Saudi Arabia Vision 2030 context, this systemic review illuminated the role of nursing in establishing the Sustainable Development Goals (SDGs). Among others, nurses make big contributions to SDG 3 (Good Health and Wellbeing) by participating in health promotion, maternal health, chronic disease management and public health. While advances toward these goals are possible due to the capabilities of nurses, it is paramount that we overcome workforce shortages, professional development, and resource limitations that constrain our nursing workforce capabilities.

Importantly, the review underscores the type of nursing education that is necessary, additional leadership opportunities for nurses, and the type of policy advocacy needed to prop up the nursing profession and allow nurses to take the lead in achieving Vision 2030. Investing in the nursing workforce, enhancing nursing education and leadership and by integrating nursing into policy making, can improve the care received by the population and advance greatly towards SDGs in Saudi Arabia.

Finally, this review highlights the centrality of nurses in healthcare transformation and SDG accomplishment and advocates for more counteraction to the obstacles reducing their participation. To realize those ambitious goals laid out by Saudi Arabia's Vision 2030 and to improve healthcare outcomes for all citizens, the nursing profession will need to be strengthened.

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