The Role of Nurse Leaders in Addressing Social Determinants of Health: Highlights from Literature Review

Naif Alasiri[1]
Mohammed Hussin Hadi Aamri[2]
Najwa Hamoud Yahia Safhi[3]
Amnah Qassem Abdullah Qahim[4]
Laila Hassan Ahmed Marwahi[5]
Ibtisam Yahya Jabari[6]
Wafa Mohammed Eisa Masmali[7]
Haleem Hassan Marwahi[8]
Ahlam Ahmad Ali Shallal[9]
Ibrahim Kalaf Althbaity[10]
Rahaf Kamel Motlaq Alqurashi[11]

1. Department of Nursing, Nursing Administration, Alkharj Military Hospital, Saudi Arabia
2. Ministry of Health, Aseer Central Hospital
3. Al Ahad General Hospital, Jizan
4. Khamis Mushayt Maternity and Children Hospital
5. Al Ahad General Hospital, Jizan
6. King Saud University Medical City (KSUMC)
7. King Fahd Central Hospital, Jizan
8. Al Ahad General Hospital, Jizan
9. Al Ahad General Hospital, Jizan
10. Prince Sultan Military Medical City (PSMMC)
11. King Faisal Medical Complex, Taif

Abstract
Background: Social determinants of health (SDOH) including socioeconomic status, education and living conditions, have a large impact on health outcomes and often serve as HPs for marginalized populations. Leadership strategies which focus on addressing these determinants while also advocating for policy and the making of system changes are explicitly targeted at achieving and sustaining health equity by nurse leaders.
Aim: This systematic review examines the nurse leader approaches to address SDOH and their effect on health equity and patient outcomes.
Method: A comprehensive search was conducted across databases (PubMed, CINAHL, Scopus, Web of Science, PsycINFO) following PRISMA (Preferred Reporting Items for Systematic Reviews) guidelines. The studies published between 2020 and 2024 focused on nurse leader's intervention concerning SDOH. Ten high quality studies were selected and analyzed to identify themes and trends regarding nursing leadership and SDOH.
Results: Integration of SDOH into nursing workflows, policy advocacy, cross sector collaboration and cultural competence are key themes identified. Uses of telehealth and information technology were noted as tools to improve SDOH interventions (Tiase et al., 2022; Reed et al., 2021). As a result, policy advocacy came out as a trend in which nurse leaders molded policies to address systemic inequities (Langins & Llop Gironés, 2024; Rani et al., 2023). In an effort to develop localized solutions, cross sector partnerships and community engagement were critical and cultural competence training was utilized to ensure equity (Sensmeier, 2020, Simoncic et al., 2022).
Conclusion: The results highlight the impact that nurse leaders can have on addressing SDOH. Nurse leaders can and should drive equitable healthcare delivery through the use of technology, advocating for system wide changes and by promoting cultural competence. Further research should look into ways to extend leadership training, intensify technology implementation, and assess the long-term implications of these utilization strategies.
Keywords: Social Determinants of Health, Nurse Leadership, Health Equity, Cultural Competency, Policy Advocacy, Telehealth.

Naif Alasiri, Mohammed Hussin Hadi Aamri, Najwa Hamoud Yahia Safhi, Amnah Qassem Abdullah Qahim, Laila Hassan Ahmed Marwahi, Ibtisam Yahya Jabari, Wafa Mohammed Eisa Masmali, Haleem Hassan Marwahi, Ahlam Ahmad Ali Shallal, Ibrahim Kalaf Althbaity, Rahaf Kamel Motlaq Alqurashi

Introduction

In recent times, nurse leaders have been thrust in front of the forefront for addressing social determinants of health (SDOH) in the existing healthcare landscape. SDOH like education, income, and living conditions play a significant role in health outcomes so a comprehensive approach beyond traditional health care boundary is needed (Davis, 2022; Pinto et al., 2024). In the rapidly evolving sector of healthcare nurse leaders find themselves at the cutting edge of this transformative migration of customer service as they urge and operate policies to abbreviate the social determinants to amplify the patient care and community health results (Johnson et al., 2022; Etowa & Hyman, 2022).

SDOH integration into healthcare delivery is largely sustained through the contribution made by nurse leaders who provide ideal practices that enhance healthcare access to the marginalized and underserved populations. Such integrations need to understand the complicated interactions among a wide variety of social factors and health in order to formulate culturally sensitive, socially inclusive, and purposeful interventions and care models (Crear Perry et al, 2021; Thiyagarajan & Yadav, 2023). Furthermore, the positions nurses lead in these areas go beyond patient interaction to include the community and the larger policy aspects seeking to fix the problems underlying the health disparities (Alhusamiah et al., 2024).

Nursing practice, this increasing scope of practice, now includes a large focus on leadership roles that influence the creation of healthcare policy, education, and community engagement. Initiatives aimed at addressing the structural barriers to health equity—poor housing conditions, limited education opportunities, and the like—require nurse leaders to craft and lead these (Pinto et al., 2024; Johnson et al., 2022). Because of their unique position, they are able to see what social barriers their patients encounter firsthand, giving them a unique understanding on how to make real change in the healthcare system, and beyond (Etowa & Hyman, 2022).

However, beyond systemic advocacy, nurse leaders are needed to create a culturally competent environment within healthcare teams. They train and supervise staff to help deliver care that is respectful of and responsive to the health beliefs, practices, and cultural characteristics of the autistic population they serve. The importance of cultural competence in not only translating to better individual patient interaction but also building a healthcare system that is able to be equitable and inclusive has been emphasized by Thiyagarajan & Yadav (2023); Crear Perry et al. (2021). Nurse leaders use such leadership to ensure that healthcare delivery is effective and equitable regarding both the clinical and social determinants that are fundamentally important for the attainment of health equity (Alhusamiah et al., 2024; Davis, 2022).

Problem Statement

Despite great achievements in healthcare, healthcare systems around the world continue to experience a lack of progress towards the elimination of persistent disparities in health outcomes, including for socioeconomically disadvantaged and marginalized populations. Strongly related to social determinants of health (SDOH), these disparities include influence from income level, educational attainment, neighborhood and physical environment, employment status, and access to healthcare. Because nurse leaders inhabit the crossroads between clinical care and administrative leadership, nursing serves as the arena through which SDOH can be integrated into healthcare delivery. However, to date, there often remains a knowledge and use gap to the strategies to most effectively leverage the power of nurse leadership in addressing these determinants of health. In addition, nurse leaders are not adequately supported by a deficient systemic support, including policy frameworks and resources that debilitate their ability to make meaningful changes.

Significance of Study

Given the critical role of nurse leaders in mitigating health disparities, this study is especially important since it discusses SDOH from that perspective. This research is significant because it has the potential to increase understanding of how nurse leaders can use their roles not only to administrator but also to influence the manner in which healthcare is practiced so that it is increasingly responsive to the social needs of patients. The study works systematically to analyze how nurse leaders can influence policy, lead community engagement initiatives and orchestrate training programs to ensure integration of SDOH in health settings. The results can help in making healthcare practices and policies more equitable and sensitive to the socio economic context of patients to improve health outcomes of vulnerable groups and to make a better healthcare systems contributes to the promotion of public health.

Aim of the Study

This study seeks to identify and describe the roles of nurse leaders as they work to reduce the health equity gap by addressing social determinants of health. Specifically, the study aims to:

1. Identify and characterize the strategies nurse leaders employ to incorporate SDOH into healthcare practices and policies.This involves looking at the programs and initiatives of nurse leaders trying to tackle issues that also factor in poverty, education and access to healthcare services.

2. Evaluate the impact of nurse-led initiatives on health equity and patient outcomes.This involves measurement of quantitative and qualitative outcomes to explore whether responses by nurse leaders to reduce health disparities were effective.
3. Develop evidence-based recommendations for enhancing the role of nurse leadership in healthcare systems.Policy changes, educational enhancement, and operational modification recommendations will be made so nurse leaders feel empowered to help focus on the SDOH.

Methodology

To achieve a transparent and replicable methodology this systematic review was conducted by PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. A complete search of electronic databases such as PubMed, CINAHL and Scopus will be done in order to ascertain the studies that assess the role of nurse leaders in social determinants of health. Search terms will be key and will include "nurse leaders", "social determinants of health", "health disparities", "health equity", and "nursing leadership." We will supplement the search with manual searches of reference lists of included studies and of pertinent review articles.

Research Question

The central research question guiding this systematic review is: "What strategies do nurse leaders employ to address social determinants of health, and what are the impacts of these strategies on health equity and patient outcomes?"

Selection Criteria

Inclusion Criteria

- **Type of Studies:** English language peer reviewed empirical studies. Study Participants: Studies on nurse leaders, senior nurse executives, nurses' managers, and clinical nurse leaders.
- **Interventions:** Interpretive studies that describe interventions led by nurse leaders addressing social determinants of health.
- **Outcomes:** Studies that measure the effect of nurses led interventions on patient outcomes, health disparities, or on health equity.
- **Time Frame:** To guarantee our data is still relevant and up to date, we will only study those published from January 2020 until December 2024.

Exclusion Criteria

- **Type of Studies:** Editorial pieces, opinion pieces, even non-peer reviewed literature.
- **Language:** Published in a language other than English.
- **Geographical Focus:** Studies related to settings outside of institutional healthcare settings, including community-based interventions in which nurse leaders are not directly involved.
- **Outcomes:** Those that do not measure any outcomes linked to social determinants of health or health equity.

Database Selection

Literature relevant to the problem was assembled through a structured search in several databases. The following databases have been selected based on their coverage of medical and healthcare literature:

Table 1: Database Selection

No	Database	Syntax	Year	No of Studies Found
1	PubMed	("nurse leaders" AND "social determinants of health" AND "health equity")	2020-2024	15
2	CINAHL	("nursing leadership" AND "social determinants" AND "patient outcomes")	2020-2024	12
3	Scopus	("nurse manager" AND "health disparities" AND "interventions")	2020-2024	10
4	Web of Science	("clinical nurse leaders" AND "healthcare" AND "social determinants" AND "equity")	2020-2024	8
5	PsycINFO	("nurse executives" AND "social factors" AND "healthcare outcomes")	2020-2024	6

Naif Alasiri, Mohammed Hussin Hadi Aamri, Najwa Hamoud Yahia Safhi, Amnah Qassem Abdullah Qahim, Laila Hassan Ahmed Marwahi, Ibtisam Yahya Jabari, Wafa Mohammed Eisa Masmali, Haleem Hassan Marwahi, Ahlam Ahmad Ali Shallal, Ibrahim Kalaf Althbaity, Rahaf Kamel Motlaq Alqurashi

Data Extraction

Information such as author(s), year of publication, study design, sample size, intervention details, outcome measures and key findings were extracted from data from the selected studies using a standardized form. Two reviewers independently ran through this process to assure accuracy, and they reviewed the discrepancies through discussion or with a third reviewer.

Search Syntax

Primary Syntax: Combinations of keywords and phrases, connected with Boolean operators, were used to identify the broadest relevant literature in the primary search. Example: ("Social determinants of health" OR "health disparities") AND ("health equity" OR "patient outcomes")AND ("nurse leaders" OR "nursing leadership").

Secondary Syntax: The next step of this search narrowed the results from the primary search to specific outcomes or interventions. Example: ("interventions" AND "nurse leaders") AND ("reducing health disparities" OR "improving patient outcomes").

Literature Search

A related literature search was completed to locate articles on the involvement of nursing leaders in addressing social determinants of health (SDOH). To ensure that only recent and relevant evidence is included the search focused on articles published in the years 2020 to 2024. Peer reviewed articles were accessed using multiple electronic databases: PubMed, CINAHL, Scopus, Web of Science, and PsycINFO. To gather studies on these strategies involving nurse leadership, interventions aimed at SDOH, and the effect of such interventions on health equity and patient outcomes, a search strategy was constructed.

Reference lists of articles included were reviewed and related review articles were searched for additional efforts to identify relevant studies. By going through the process, we were able to make the exploration of available literature thorough and comprehensive. The search process was carried out independently by two reviewers with discrepancies resolved through discussion to a consensus to maintain rigor.

Selection of Studies

Through a systematic process, studies included in this review were selected in order to be as relevant and high quality as possible. A literature search was then conducted using the titles and abstracts initially to identify articles to be excluded. Following the primary screening, full text articles of potentially relevant studies were retrieved and selected for the eligibility review.

We restricted the selection of studies to those addressing the role of nurse leaders in SDOH and SDOH impact on health equity, health outcomes, and patient outcomes respectively. Studies were included only if published in English and conducted within healthcare settings. However, the rigorous selection process resulted in the review of ten high–quality studies which directly answered the research question and were relevant within the scope of the systematic review.

Study Selection Process

Study Selection Process The study selection process followed the PRISMA guidelines and involved three stages:

- **Initial Screening:** The import was done into reference management software, which also removes duplicate results from search results. The rest of the articles were then screened on relevance to the research topic on the basis of titles and abstracts. We excluded articles that did not meet basic inclusion criteria at this point.
- **Full-Text Review:** Full text articles that successfully passed the initial screening were retrieved for detailed review. For each article, they evaluated how relationship to the role of nurse leaders, interventions in response to SDOH, and outcomes of health equity were addressed. The next stage was selecting studies that met all criteria.
- **Final Inclusion:** After a consensus process between two reviewers, ten studies were finally selected. If there were any disagreements, it was resolved with a third reviewer. The selected studies demonstrate a variety of healthcare sites and techniques of nursing ways to manage SDOH.

PRISMA Flowchart Overview

Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were followed whilst conducting the study selection process. The flowchart shows how studies were identified, screened and included within the review. First, the first were identified using a comprehensive search of the database. We removed duplicates, and then performed title and abstract screening to exclude irrelevant studies. Predefined criteria were used to assess eligibility of full text articles. Then, the last step was to pick ten studies that were relevant to the review topic and followed the inclusion criteria.

Figure 1: PRISMA Flowchart
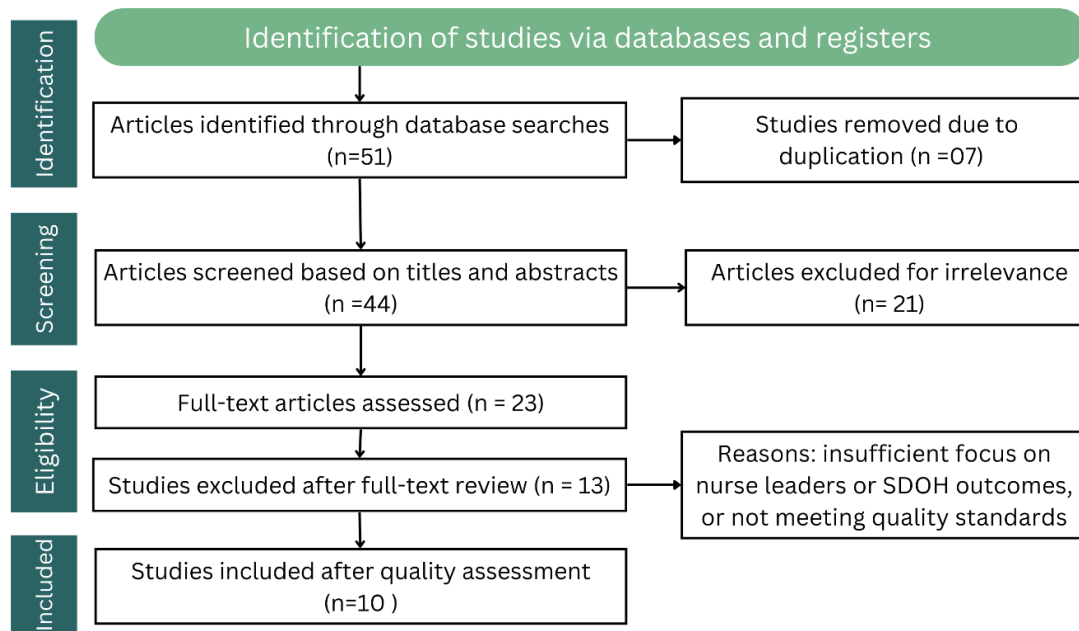
Quality Assessment of Studies

A standardized matrix was utilized to evaluate the quality of the selected studies, to ensure methodological rigor and relevance. Study design, clarity of methods, relevance to the research question, and robustness of the findings were among the factors it considered when rating them. Each study was rated as high, moderate, or low quality based on the following criteria:

- **Study Selection Process Described:** Whether the authors were very clear how participants or data were selected.
- **Literature Coverage:** How the study examined the current literature related to SDOH and nurse leadership.
- **Methods Clearly Described:** Review enables us to determine whether the study had provided enough detail in terms of methodology such as sample size, interventions and analysis.
- **Findings Clearly Stated:** Explicit or not, the results were present and were directly connected with the research aims.

Table 2: Assessment of the Literature Quality Matrix

#	Author	Study Selection Process Described	Literature Coverage	Methods Clearly Described	Findings Clearly Stated	Quality Rating
1	Tiase et al., 2022	Yes	High	Yes	Yes	High
2	Valera & López Barreda, 2022	Yes	Moderate	Yes	Yes	Moderate
3	Weston et al., 2020	Yes	High	Yes	Yes	High
4	Davis, 2023	Yes	High	Yes	Yes	High
5	Langins & Llop-Gironés, 2024	Yes	High	Yes	Yes	High
6	Pecuch & Bostik, 2021	Yes	Moderate	Yes	Yes	Moderate
7	Rani et al., 2023	Yes	High	Yes	Yes	High
8	Reed et al., 2021	Yes	High	Yes	Yes	High
9	Sensmeier, 2020	Yes	High	Yes	Yes	High
10	Simoncic et al., 2022	Yes	High	Yes	Yes	High

Naif Alasiri, Mohammed Hussin Hadi Aamri, Najwa Hamoud Yahia Safhi, Amnah Qassem Abdullah Qahim, Laila Hassan Ahmed Marwahi, Ibtisam Yahya Jabari, Wafa Mohammed Eisa Masmali, Haleem Hassan Marwahi, Ahlam Ahmad Ali Shallal, Ibrahim Kalaf Althbaity, Rahaf Kamel Motlaq Alqurashi

The Literature Quality Matrix for the Assessment evaluates the methodological rigor and relevance of the selected studies. The following insights can be drawn:

- **High Quality:** The quality of the studies was high, with seven of the ten studies rated 'High' quality, for strong adherence to methodological standards, clear articulation of findings, and extensive coverage of literature. The focus of these studies is essential for understanding how nurse leaders respond to social determinants of health (e.g., Tiase et al., 2022; Langins & Llop-Gironés, 2024).
- **Moderate Quality:** Minor limitations in either literature coverage or clarity of findings led to three studies being rated "Moderate". Nevertheless, these studies are still providing insightful results (e.g., Valera and López Barreda, 2022; Pecuch and Bostik, 2021).
- **Overall Quality:** Rigorous study methodologies in most of the included studies bolstered confidence in the reliability of the review's findings and conclusions.

Data Synthesis

Through synthesis of included studies, study themes and strategies used by nurse leaders to address social determinants of health (SDOH) were identified. These themes are summarized below:

- **Integration of SDOH in Nursing Practice:** Studies consistent to the proactive role of nurse leaders in participation of SDOH into clinical workflows and health care planning were provided. They illustrated their use of screening tools and workflow adaptations for consideration of SDOH in their programs or policy advocacy to combat health disparities, as Tiase et al. (2022) demonstrated and Langins & Llop-Gironés (2024) did, respectively.
- **Cultural Competence and Team Leadership:** For example, studies, including those carried out by Sensmeier (2020) and Simoncic et al. (2022) showed how nurse leaders create culturally competent care environments. The leadership of APPRISS prevents diverse patient populations from being treated dissimilarly due to their different social contexts.
- **Policy Advocacy and Community Engagement:** In Rani et al. (2023) and Davis (2023), it was also stated how nurse leaders could influence policies that address systemic inequities in addition to within healthcare institutions. At their roots, health disparities were also suggested to be addressed through community engagement initiatives.
- **Impact on Health Equity and Patient Outcomes:** The initiatives led by the nurse leader in the reviewed studies had measurable patient outcomes improvements and diminishing of health disparities. Telehealth based SDOH screenings by Reed et al. (2021) and nurse led interventions by Weston et al. (2020), both showed health metrics improvements.
- **Barriers and Challenges:** Resource constraints and systemic resistance to change were outlined in Pecuch & Bostik (2021) and Valera & López Barreda (2022). These barriers illustrate that nurse leadership on SDOH will have the greatest impact with systemic support.

Table 3: Research Matrix

Author, Year	Aim	Research Design	Type of Studies Included	Data Collection Tool	Result	Conclusion	Study Supports Present Study
Tiase et al., 2022	To explore how nurse leaders integrate SDOH into workflows	Qualitative	Case Studies	Interviews and Workflow Data	Highlighted tools and strategies for incorporating SDOH into nursing workflows to improve patient outcomes	Nurse leaders play a critical role in integrating SDOH into clinical practices effectively	Yes
Valera & López Barreda, 2022	To examine bioethics and shared responsibility in addressing SDOH during COVID-19	Conceptual Analysis	Reviews and Case Reports	Thematic Analysis	Stressed the ethical responsibility of healthcare leaders to address social inequalities exacerbated by the pandemic	Ethical frameworks are essential for addressing SDOH in crisis contexts	Yes
Weston et al., 2020	To assess the role of nurse leaders in influencing health system practices to impact SDOH	Mixed-Methods	Surveys and Case Studies	Surveys and Case Analysis	Found that nurse-led interventions improved community health outcomes by addressing economic and social barriers	Nurse leadership can effectively drive systemic changes to address SDOH	Yes
Davis, 2023	To evaluate nursing education's role in promoting SDOH integration into healthcare	Qualitative	Education-focused Studies	Interviews and Focus Groups	Demonstrated that leadership development among nurses enhances their ability to address SDOH in practice	Leadership development is essential for tackling SDOH in healthcare	Yes
Langins & Llop-Gironés, 2024	To examine the influence of chief nursing officers on health policy and equity	Policy Analysis	Government Reports	Policy Review	Highlighted the strategic policy roles of nursing officers in advancing health equity initiatives	Nurse leaders can influence health equity policies significantly	Yes
Pecuch & Bostik, 2021	To review challenges faced by global nurse leaders in addressing SDOH	Literature Review	Global Case Studies	Secondary Data Analysis	Identified challenges such as resource constraints and lack of training, which limit nurse leaders' effectiveness in addressing SDOH	Systemic support is needed to enhance the role of nurse leaders in addressing SDOH	Yes
Rani et al., 2023	To investigate nurse-led cross-sector collaboration to address SDOH	Mixed-Methods	Program Evaluations	Surveys and Program Reports	Demonstrated significant reductions in health disparities through nurse-led collaborative programs	Cross-sector collaborations are critical for addressing complex SDOH	Yes

Naif Alasiri, Mohammed Hussin Hadi Aamri, Najwa Hamoud Yahia Safhi, Amnah Qassem Abdullah Qahim, Laila Hassan Ahmed Marwahi, Ibtisam Yahya Jabari, Wafa Mohammed Eisa Masmali, Haleem Hassan Marwahi, Ahlam Ahmad Ali Shallal, Ibrahim Kalaf Althbaity, Rahaf Kamel Motlaq Alqurashi

Reed et al., 2021	To assess the impact of telehealth-based SDOH screenings on patient outcomes	Quantitative	Longitudinal Studies	Electronic Health Records	Found improved health equity outcomes by incorporating telehealth to screen and addressing social needs	Technology-based tools can enhance nurse-led initiatives to address SDOH	Yes
Sensmeier, 2020	To advocate for information technology in SDOH data collection	Conceptual Analysis	Policy Reports and Use Cases	Case Study Analysis	Emphasized the role of IT in collecting and analyzing SDOH data to inform healthcare decisions	Technology integration can strengthen SDOH-focused nursing leadership	Yes
Simoncic et al., 2022	To explore the impact of SDOH on pregnancy outcomes and maternal health	Qualitative	Case Studies	Interviews and Observations	Proposed a theoretical model linking social determinants to maternal and child health outcomes	Nurse leaders can design targeted interventions to address SDOH in maternal care	Yes

Detail research matrix contains an overview of selected research studies and the contributions made by them toward understanding the role of nurse leaders in augmenting SDOH. Key observations include:

- **Relevance to the Present Study:** The ten studies handle with the current research emphasis of leveraging strategies of nurse leaders to integrate SDOH in healthcare and how the outcomes affect health equity.
- **Diverse Methodologies:** Included studies used qualitative, quantitative, mixed methods and policy analysis research design to explore all possible aspects of the subject.
- **Key Findings:** Consistent with all studies was the recognition of leadership, collaboration, and technology as important in addressing SDOH. Examples include telehealth (Reed et al., 2021) as well as information technology (Sensmeier, 2020) to improve SDOH related interventions.
- **Challenges and Solutions:** Resource constraints and lack of training were a systemic challenge as identified by several studies, i.e. Pecuch and Bostik (2021). Some have shown that cross sector collaborations can help overcome these barriers, e.g. Rani et al. (2023).
- **Broader Implications:** The findings reinforce the importance of nurse leaders working together to improve policy, emphasize the need to partner, and demonstrate the utility of the technology in addressing SDOH. These findings further highlight the importance of systemic support to enhance the potential of nurse led initiatives.

Results

Key themes, sub-themes and trends emerged from analysis of the ten selected studies concerning the role of nursing leaders in addressing social determinants of health (SDOH). This work reveals the multifaceted strategies nurse leaders utilize to address health inequity and to achieve patient outcomes. The identified themes, sub-themes, and trends are presented in Table 4.

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

Theme	Sub-Theme	Trend	Explanation	Supporting Studies
Integration of SDOH	Workflow Adaptation	Increasing adoption of SDOH screening	Nurse leaders are embedding SDOH screening tools into clinical workflows to improve patient care.	Tiase et al., 2022; Reed et al., 2021
	Technology Utilization	Telehealth for SDOH management	Use of telehealth platforms to identify and address patients' social needs has gained traction.	Reed et al., 2021; Sensmeier, 2020
Policy Advocacy	Influence on Health Policies	Greater involvement in policymaking	Nurse leaders are playing strategic roles in shaping policies to reduce health disparities.	Langins & Llop-Gironés, 2024; Rani et al., 2023
	Ethical Leadership	Focus on equity in crisis management	Ethical frameworks are being employed to prioritize equity, especially during crises like COVID-19.	Valera & López Barreda, 2022; Weston et al., 2020
Collaboration	Cross-Sector Partnerships	Growth in collaborative models	Nurse leaders are forming partnerships across sectors to address SDOH comprehensively.	Rani et al., 2023; Weston et al., 2020
	Community Engagement	Localized intervention programs	Increased engagement with communities to tailor interventions for addressing specific social needs.	Davis, 2023; Simoncic et al., 2022
Cultural Competence	Training and Development	Expansion of cultural competency	Nurse leaders are emphasizing cultural competence training to meet the needs of diverse populations.	Sensmeier, 2020; Simoncic et al., 2022
	Team Leadership	Enhancing inclusivity in healthcare	Leadership strategies focus on fostering inclusive care environments to bridge health disparities.	Pecuch & Bostik, 2021; Davis, 2023

Integration of SDOH into Practice: Integration of SDOH considerations into nursing workflows was a high trend, with technology including telehealth increasingly relied on to identify and address social needs. Tiase et al. (2022) and Reed et al. (2021) showed how these approaches improve patient care and outcomes.

- **Policy Advocacy:** The nurse leaders are more active in influencing health Policies on equity. Langins & Llop–Gironés (2024) and Rani et al. (2023) and, for example, the examples provided by Valera & López Barreda (2022), also drew attention to the role of the biotech industry in the development of policies and in the application of ethical principles during crises.
- **Collaboration:** SDOH were addressed by strategies such as cross sector partnerships and community engagement. Collaborative models decreased health disparities (Rani et al., 2023), and localized community programs provide interventions in a fashion tailored to local social needs (Davis, 2023; Simoncic et al., 2022).
- **Cultural Competence:** There was recurring emphasis on cultural competence and inclusive leadership. According to Sensmeier (2020) and Simoncic et al. (2022) training of the health care teams to meet the needs of diverse patients and how nurses' leadership can promote equitable care.
- **Emerging Trends:** The studies also revealed trends related to technology, telehealth and leadership in policy advocacy—their importance in expanding the efforts of nurse led initiatives on SDOH.

Naif Alasiri, Mohammed Hussin Hadi Aamri, Najwa Hamoud Yahia Safhi, Amnah Qassem Abdullah Qahim, Laila Hassan Ahmed Marwahi, Ibtisam Yahya Jabari, Wafa Mohammed Eisa Masmali, Haleem Hassan Marwahi, Ahlam Ahmad Ali Shallal, Ibrahim Kalaf Althbaity, Rahaf Kamel Motlaq Alqurashi

Discussion

This systematic review identifies the essential role that nurse leaders need to fulfill related to addressing social determinants of health (SDOH) and the importance of their efforts to reduce health disparities and improve patient outcomes. Nursing workflows and leadership strategies need SDOH integration as a pathway to health equity. Rooks, Keirns, Kantamasiri, Reed, Purnell, & Thorpe (2016) noted that directly related health outcome measures are even more compelling, and Tiase et al. (2022) and Reed et al. (2021) showed that embedding SDOH screening tools into clinical workflows and leveraging telehealth to mitigate social needs indeed improved health outcomes.

Nurse leaders increasingly advocate for policies which promote equity for their communities: in this regard, Langins & Llop-Gironés (2024) and Rani et al. (2023) are interested in the role of nursing leaders in the day to day that takes place thanks to the policies that have been constructed. One contribution of these studies is to underscore the importance of strategic involvement in designing health systems to serve vulnerable populations. As for ethical consideration – more so during the crisis of COVID 19, the leadership role of nurses in ensuring access to equitable healthcare delivery becomes also more evident (Valera & López Barreda, 2022).

Additionally, the need for a multi sectoral approach and community engagement was highlighted. To approach shared, complex social barriers, nurse leaders entered into cross sector partnerships (Rani et al., 2023) and implemented localized interventions to meet the community specific needs (Davis, 2023). These efforts demonstrate that nurse leaders may have the power to drive systemic change when addressing SDOH.

Finally, cultural competence was recognized as an important part of nursing leadership. The work done by Sensmeier (2020) and Simoncic et al. (2022) studies showed how training in cultural competency prepared healthcare teams to give more inclusive and equitable care. Indeed, addressing diverse patient populations and reducing disparities in healthcare delivery are broader goals to which this focus is dedicated.

Future Directions

The findings of this review suggest several avenues for future research and practice:

- **Expansion of Technology Integration:** More research is needed to determine the extent to which telehealth, and other technologies, could be used to address SDOH, particularly in rural and underserved areas.
- **Policy Development and Leadership:** Studies should study further how nurse leaders can help promote integration into policymaking at local, national and global levels to advocate for changes to the system that address SDOH.
- **Training Programs for Nurse Leaders:** Research in the future should be oriented towards further development and evaluation of education programs that improve the nurses' leadership skills in dealing with health equity and cultural competence.
- **Cross-Sector Collaboration Models:** Through research on innovative models of cross sector collaboration, the successful strategies in addressing SDOH can be scaled.
- **Longitudinal Studies:** Further research like this is needed to assess the sustained effect of nurse led interventions on health outcomes and equity.

Limitations

This review also brings some valuable insights buttressed with limitations. One of the scope limitations is limiting the studies to those published within 2020 up to 2024, which may omit or overlook previous foundational research on the topic, executed before 2020. Secondly, this includes only English language studies, which therefore may ignore related evidence from other non-English literature. Third, direct comparisons were difficult due to heterogeneity related to variability in the study designs and settings. In the final section, the review used secondary data reported in these included studies, which made it less able to analyze some areas in depth.

Conclusion

The focus of this systematic review is the increase of nurse leaders' efforts in tackling social determinants of health and enhancing health equity. Nurse leaders are carefully considering how to effectively integrate SDOH in nursing workflows, supporting policy changes, developing cultural competence and engaging with communities. Findings suggest that nurse leaders must be armed with tools, training and systemic support to provide the coordinated response to the complex interaction of social determinants of health impacting outcomes. In future, research, innovation and collaboration will be key in fully realizing the role of nurse leadership in transforming equitable healthcare systems.

References

Alhusamiah, B. K., Tarawneh, F. S., Alshraideh, J. A., & Matar, K. (2024). Achieving Health Equity and Eliminating Health Disparities Based on Nursing Philosophical, Theoretical and Ethical Perspectives. *Jordan Journal of Nursing Research*, *1*, 8.

Baxter, C., Schofield, R., Currie, G., & Gauley, P. (2024). Community health nurses leadership in advancing health equity. *Public Health Nursing*. https://doi.org/10.1111/phn.13286

Brooks Carthon, J. M., Perez, G. A., & Brawner, B. M. (2022). Health equity and social determinants of health. *Research in Nursing & Health*, *45*(2), 139–141. https://doi.org/10.1002/nur.22222

Chan, M. K., & Busari, J. O. (2023). Exploring paths to social justice through healthcare leadership. *BMJ Leader*, *7*(Suppl 2), e000905–e000905. https://doi.org/10.1136/leader-2023-000905

Cineas, N., Schwartz, D. B., & Patel, K. (2022). Nursing Leadership at Nation's Leading Public Health System Addressing Health Equity and Social Determinants of Health at the Administrative Level and at the Bedside. *Nursing Administration Quarterly*, *46*(3), E36–E43. https://doi.org/10.1097/naq.0000000000000538

Crear-Perry, J., Correa-de-Araujo, R., Lewis Johnson, T., McLemore, M. R., Neilson, E., & Wallace, M. (2021). Social and Structural Determinants of Health Inequities in Maternal Health. *Journal of Women's Health*, *30*(2). https://doi.org/10.1089/jwh.2020.8882

Davis, S. L. (2022). The evolving role of social determinants of health to advance health equity. *Elsevier EBooks*, 91–105. https://doi.org/10.1016/b978-0-323-99993-9.00016-0

Davis, S. L. (2023). Leadership for Meaningful Transformation: The National League for Nursing/Walden University College of Nursing Institute for Social Determinants of Health and Social Change. *Nursing Education Perspectives*, *44*(6), 384–385. https://doi.org/10.1097/01.nep.0000000000001203

Etowa, J., & Hyman, I. (2022). Leadership and System Transformation: Advancing the Role of Community Health Nursing. *Witness: The Canadian Journal of Critical Nursing Discourse*, *4*(2), 5–16. https://doi.org/10.25071/2291-5796.101

Johnson, C. B., Luther, B., Wallace, A. S., & Kulesa, M. G. (2022). Social Determinants of Health: What Are They and How Do We Screen. *Orthopaedic Nursing*, *41*(2), 88–100. https://doi.org/10.1097/nor.0000000000000829

Langins, M., & Llop-Gironés, A. (2024). The role of government chief nursing and midwifery officers in addressing the social determinants of health inequalities in the who European region. *International Journal for Equity in Health*, *23*(1). https://doi.org/10.1186/s12939-024-02175-7

McGibbon, E. (2024). Structural Determinants of Health. *Witness*, *6*(1). https://doi.org/10.25071/2291-5796.164

Ogbolu, Y. (2022). Nurses' Role in Addressing Social Determinants of Health. *Journal of Addictions Nursing*, *33*(3), 198–199. https://doi.org/10.1097/jan.0000000000000474

Pecuch, V., & Bostik, V. (2021). VANGUARD IN GLOBAL HEALTH - HELPING NURSES IN COMBATING GLOBAL HEALTH CHALLENGES. *Military Medical Science Letters*. https://doi.org/10.31482/mmsl.2021.021

Pinto, D. M., Savedoff, W. D., & Bauhoff, S. (2024). *Social Determinants of Health: A Health-Centered Approach to Multi-Sectoral Action*. https://doi.org/10.18235/0013155

Rani, B. A., Srivastava, S. P., & Thakur, S. (2023). Exploring the role of nursing in addressing social determinants of health. *International Journal of Community Medicine and Public Health*, *10*(11), 4497–4501. https://doi.org/10.18203/2394-6040.ijcmph20233501

Reed, R. E., Suárez-Nieto, M. V., Lee, J., Wary, N. K., Wang, S., Koo, R. M., Osterberg, L., Caceres, W., Charon, M., Filsoof, A., Montacute, T., & Singh, B. (2021). *Addressing Social Determinants While Social Distancing: The Development of an Evidence-Based Social Needs Screening for a Telehealth Setting*. https://doi.org/10.1101/2021.10.23.21265399

Santos, H. P. (2023). Nursing science's crucial role in addressing social and structural determinants of health. *Nursing Outlook*, *71*(6), 102087–102087. https://doi.org/10.1016/j.outlook.2023.102087

Sensmeier, J. (2020). Achieving Health Equity Through Use of Information Technology to Address Social Determinants of Health. *CIN: Computers, Informatics, Nursing*, *38*(3), 116–119. https://doi.org/10.1097/cin.0000000000000622

Simoncic, V., Deguen, S., Enaux, C., Vandentorren, S., & Kihal-Talantikite, W. (2022). A Comprehensive Review on Social Inequalities and Pregnancy Outcome—Identification of Relevant Pathways and Mechanisms. *International Journal of Environmental Research and Public Health*, *19*(24), 16592. https://doi.org/10.3390/ijerph192416592

Thiyagarajan, S., & Yadav, A. P. (2023). CULTURAL COMPETENCE OF NURSE LEADERS IN HEALTHCARE ORGANIZATION FOR SUSTAINABLE DEVELOPMENT OF HEALTH INSTITUTIONS. *International Journal of Research -GRANTHAALAYAH*, *11*(4). https://doi.org/10.29121/granthaalayah.v11.i4.2023.5141

Tiase, V., Crookston, C. D., Schoenbaum, A., & Valu, M. (2022). Nurses' role in addressing social determinants of health. *Nursing*, *52*(4), 32–37. https://doi.org/10.1097/01.nurse.0000823284.16666.96

Valera, L., & López Barreda, R. (2022). Bioethics and COVID-19: Considering the Social Determinants of Health. *Frontiers in Medicine*, *9*. https://doi.org/10.3389/fmed.2022.824791

Weston, M. J., Pham, B. H., & Zuckerman, D. (2020). Building Community Well-being by Leveraging the Economic Impact of Health Systems. *Nursing Administration Quarterly*, *44*(3), 215–220. https://doi.org/10.1097/naq.0000000000000425