

Enhancing Health And Wellbeing Of Long-Term Patients Through Collaborative Practices Of Healthcare Team; A Systematic Review

Ali Mohammed Thubab¹, Abdulmalik Husein Althagafi², Samirah Ali Oqdi³, Basma Ahmed Dahlan⁴, Ali Qasem Ali Sufyani⁵, Shaykhah Nasser Ali Moafa⁶, Fawaz Ahmed Jaber Yahya⁷, Shahad Abd Alaziz Yahya Tomaihy⁸, Heyam Ali Makwaa⁹, Ali Ahmed Mashi¹⁰, Hadil Shotaify Al-Ameer¹¹

¹Al Edabi General Hospital

²King Faisal Medical Complex Hospital In Taif

³King Fahd Central Hospital In Jazan

⁴General Jazan Hospital

⁵Jazan General Hospital

⁶General Jazan Hospital

⁷Al-Qunfudhah General Hospital

⁸Sabya General Hospital

⁹Alardah General Hospital

¹⁰Abu Arish General Hospital

¹¹Alardah General Hospital

Abstract

Background: Inter-professional collaborative practice (IPC) in primary care is increasingly recognized as integral to enhancing patient outcomes and experiences, particularly for those with chronic conditions. Understanding patient perspectives within IPC settings is essential for optimizing care delivery and improving health outcomes.

Aim: This study aimed to explore patient experiences of IPC for chronic conditions in primary care settings through a systematic review of the existing literature. The goal was to identify key themes and insights that could inform future healthcare practices and interventions.

Method: An integrative review was conducted, synthesizing qualitative, quantitative, and mixed-methods studies retrieved from major databases. Eligible studies focused on adult patients

with chronic conditions receiving care in primary care settings and reported on their experiences of IPC. Thematic analysis was employed to identify patterns and themes across the selected studies.

Result: The review identified overwhelmingly positive patient experiences within IPC for chronic condition management in primary care. Three main themes emerged: Interacting with Healthcare Teams, Valuing Convenient Healthcare, and Engaging Self-care. Subthemes within each theme provided nuanced insights into the patient experience, highlighting the importance of teamwork, accessibility, and patient empowerment.

Conclusion: Patients with chronic conditions value IPC in primary care, emphasizing the importance of effective teamwork, convenient access to care, and opportunities for self-care engagement. These findings underscore the significance of patient-centered approaches and collaborative care models in optimizing healthcare delivery and improving patient outcomes.

Keywords: Inter-professional collaborative practice, primary care, chronic conditions, patient experience, systematic review.

Introduction

Managing the health and well-being of chronic patients poses a complex challenge to global healthcare systems (Kitmitto et al., 2022). These people, who frequently suffer from complicated or chronic illnesses, need continual care and assistance that goes beyond conventional medical treatments (Spaulding et al., 2021). Healthcare teams working together has become more and more of a viable tactic to improve patient outcomes and this population's quality of life (Khalili et al., 2021). These methods entail a seamless collaboration of different healthcare experts with an emphasis on mutual respect, communication, and shared decision-making (Bachynsky et al., 2020). The objective of this study is to examine the scientific basis for collaborative healthcare practices and their potential to enhance the health and overall quality of life of chronic patients.

Wide ranges of illnesses are included in the term "long-term conditions," such as diabetes, mental health issues, neurological disorders, and cardiovascular diseases (Arnold &

Boggs, 2019). Sustaining these conditions requires ongoing observation, dietary adjustments, medication compliance, and psychological assistance (Oral et al., 2020). Furthermore, managing these intricate interactions of biological, psychological, and social aspects becomes even more difficult, necessitating a team-based, all-encompassing approach to treatment (Chu et al., 2022). Because of this, the complexity of these chronic illnesses emphasizes the need for comprehensive and integrated healthcare solutions, wherein teamwork is essential to meeting the many demands of long-term patients (Östman et al., 2021).

The coordinated efforts of different healthcare experts, including doctors, nurses, pharmacists, psychologists, social workers, and allied health professionals, are a part of collaborative healthcare practices (Søreide et al., 2020). This strategy places a strong emphasis on utilizing the distinct skills of each team member to provide patients with all-encompassing treatment (Hlubocky et al., 2021). Beyond interdisciplinary teamwork, collaborative practices also include patient-centered care, in which patients take an active role in the planning and decision-making processes related to their care (Marcussen et al., 2019). Collaborative healthcare practices aim to respect the autonomy and dignity of long-term patients by creating an inclusive and empowered culture (Haque et al., 2020). This enhances the patients' general well-being and happiness with their healthcare experiences (Ollivier et al., 2019).

A number of theoretical frameworks, such as the Inter-professional Collaborative Practice (IPCP) model and the Chronic Care Model (CCM), supports the idea of collaborative care (Hlubocky et al., 2021). The CCM places a strong emphasis on a proactive, patient-centered approach to managing chronic illnesses, emphasizing the reform of the healthcare system, self-management assistance, and community services. In a similar vein, the IPCP model emphasizes the need of inter-professional cooperation in accomplishing shared objectives, like raising the standard of healthcare and improving patient outcomes (Marcussen et al., 2019). Healthcare practitioners can systematically address the complex demands of long-term patients while enhancing the efficiency and effectiveness of care delivery by firmly establishing collaborative healthcare practices within strong theoretical frameworks (Ollivier et al., 2019).

Long-term patients can benefit greatly from collaborative healthcare practices in many ways, such as better clinical results,

more care coordination, and greater access to care (Van Poel et al., 2022). Comprehensive assessments, individualized treatment plans, and prompt treatments are made possible by collaborative care, which entails the involvement of several healthcare specialists with varying skill sets and viewpoints (Van Poel et al., 2022). Collaborative care recipients who are long-term patients report greater levels of empowerment, self-efficacy, and satisfaction with their ability to manage their health issues (Kjellström et al., 2019). Additionally, because collaborative care is comprehensive, it strengthens therapeutic alliances and encourages beneficial health behaviors by fostering a sense of trust and partnership between patients and physicians (Sutton et al., 2021).

Key elements including care coordination, case management, shared decision-making, and patient education are frequently included in successful collaborative care treatments (McDougall et al., 2021). Care coordination is the process of ensuring that patients receive timely and appropriate care in a variety of healthcare settings by facilitating seamless communication and information sharing among team members (Simpson et al., 2021). A committed healthcare professional is assigned to the patient as part of case management in order to supervise the treatment plan, track advancement, and resolve any adherence issues (Flores-Sandoval et al., 2021). Healthcare teams can enhance patient outcomes in long-term patient populations, optimize resource allocation, and streamline care processes by incorporating these elements into collaborative care models (Carroll et al., 2021).

An increasing amount of research demonstrates how effective collaborative care can be in enhancing long-term patient outcomes in a variety of clinical settings (Kapu et al., 2021). The efficacy of collaborative care treatments in lowering hospitalizations, ER visits, and healthcare expenses among patients with chronic diseases has been shown by meta-analyses and systematic reviews (Howarth et al., 2020). Positive impacts of collaborative care on clinical outcomes like blood pressure control, glycemic control, and symptom management have been demonstrated by randomized controlled trials (Rasku et al., 2019). These results highlight how collaborative healthcare practices can improve healthcare delivery in general and specialized care settings while also addressing the unique demands of long-term patients (Provenzano et al., 2020).

Notwithstanding its advantages, putting collaborative care into reality in clinical settings might present difficulties and obstacles, such as financial, professional, organizational, and legal ones (Östman et al., 2021). Restructuring organizations, changing policies, and investing in professional education are all necessary components of a complex strategy to address these issues. The incorporation of collaborative care approaches into standard clinical practice has the potential to improve long-term patients' health and well-being as healthcare systems continue to change (Spaulding et al., 2021). Subsequent investigations ought to concentrate on assessing inventive collaborative care models, utilizing digital health technology, and tackling health inequalities among susceptible groups (Marcussen et al., 2019). Healthcare systems can progress toward a more patient-centered, cost-effective, and long-lasting model of care delivery by adopting collaborative healthcare practices, which will ultimately benefit both long-term patients and society at large (Van Poel et al., 2022).

Research Gap

The advantages of collaborative healthcare practices for long-term patients are becoming more widely acknowledged; nevertheless, the systematic review literature still lacks sufficient information about the precise processes and contextual elements that maximize the efficacy of these interventions. Even though previous research has shown that collaborative care models have positive effects, further investigation is necessary to fully understand the subtleties of interdisciplinary teamwork, communication tactics, and patient engagement strategies across various healthcare settings and patient populations. Furthermore, little is known about the collaborative care projects' long-term viability and scalability, as well as the possible obstacles and enablers to their application in actual clinical settings. Taking care of these research gaps will yield important knowledge for developing and putting into practice more successful collaborative healthcare interventions meant to improve long-term patients' health and well-being.

Rational of study

The need to meet the complex demands of this patient population in a complete and integrated manner is the driving force behind the justification for undertaking a systematic study on improving the health and well-being of long-term patients through

collaborative practices of healthcare teams. Patients with long-term conditions may need continuous care and assistance in a variety of areas, such as medicine, psychology, social work, and administration. By utilizing the knowledge of several healthcare specialists and encouraging interdisciplinary interaction, collaborative healthcare practices have emerged as a promising strategy to address these varied demands. This review aims to inform healthcare policy, practice, and research initiatives aimed at optimizing patient outcomes, improving care coordination, and enhancing long-term patients' overall quality of life by methodically synthesizing the available evidence on the efficacy and implementation of collaborative care interventions.

Significance of study

The potential of this systematic review to inform evidence-based strategies for enhancing patient care and healthcare delivery in primary and specialized care settings makes it important to conduct. The systematic review aims to improve the health and wellbeing of long-term patients through collaborative practices of healthcare teams. Reducing healthcare costs, boosting patient happiness, and improving clinical outcomes all depend on efficiently managing the complex demands of long-term patients, who make up a significant section of the global healthcare service user population. This study can identify best practices, highlight knowledge gaps, and direct future research and policy activities focused at enhancing care delivery for long-term patients by synthesizing the available data on collaborative care interventions. Furthermore, this study adds to the ongoing efforts to support a more holistic and integrated approach to healthcare delivery that prioritizes the autonomy and well-being of long-term patients by highlighting the significance of interdisciplinary teamwork and patient-centered care.

Aim of study

The aim of this systematic review is to assess the effectiveness and explore the implementation of collaborative healthcare practices in enhancing the health and wellbeing of long-term patients across various healthcare settings.

Research objectives

1. To systematically assess the existing literature to determine the effectiveness of collaborative healthcare

practices in improving the health outcomes and wellbeing of long-term patients.

2. To investigate the key factors influencing the successful implementation and sustainability of collaborative care interventions for long-term patients across diverse healthcare settings.

Methodology

Research Question

The research question for this study is: "How do collaborative healthcare practices contribute to enhancing the health and wellbeing of long-term patients, and what are the key factors influencing the effectiveness and implementation of these practices across various healthcare settings?" This study aims to systematically investigate the impact of collaborative care interventions on the health outcomes, care coordination, and patient satisfaction of long-term patients. Additionally, it seeks to explore the critical components and contextual factors that facilitate or hinder the successful implementation of collaborative care models in addressing the complex needs of long-term patients within different healthcare environments.

PICOT Question		What is the impact of collaborative healthcare practices on the health outcomes and wellbeing of long-term patients, and what factors influence the effectiveness and implementation of these practices across diverse healthcare settings?
Population	P	Long-term patients with chronic or complex health conditions,
Intervention	I	Implementation of collaborative healthcare practices by interdisciplinary teams,
Comperes	C	Conventional healthcare approaches without collaboration,
Outcome	O	Health outcomes, including disease management and quality of life, care coordination, patient satisfaction,
Timeframe	T	Over a period of 2019 - 2023

This study aims to systematically explore the impact of collaborative healthcare practices on the health outcomes and wellbeing of long-term patients with chronic or complex health conditions, while also investigating the factors influencing the effectiveness and implementation of these practices across various healthcare settings. By focusing on long-term patients and spanning a timeframe from 2019 to 2023, it seeks to provide comprehensive insights into the role of collaborative care interventions in enhancing health outcomes, improving care coordination, and boosting patient satisfaction. Through rigorous examination of both quantitative and qualitative evidence, the study will elucidate the critical components and contextual factors that contribute to the success or failure of collaborative care models, thereby informing healthcare policy, practice, and future research initiatives aimed at optimizing care delivery for long-term patients.

Literature Search

For this systematic review, a thorough search of electronic databases such as PubMed, MEDLINE, PsycINFO, and CINAHL will be conducted using a broad combination of keywords and Medical Subject Headings (MeSH) phrases. Terms pertaining to long-term patients, chronic illnesses (diabetes, cardiovascular diseases, mental health disorders), collaborative healthcare practices (interdisciplinary teamwork, collaborative care models), and relevant outcomes (health outcomes, quality of life, disease management, etc.) will all be included in the search strategy. To guarantee accuracy and thoroughness, search terms combined and refined using Boolean operators. Furthermore, manual searches of grey literature sources and reference lists of pertinent articles carried out to find any other research that might not be found using computerized database searches. In order to guarantee that the most recent research on collaborative care treatments for long-term patients is included, the search will be limited to studies released between 2018 and 2022. The goal of this methodical and thorough approach to literature search is to compile a substantial body of data for the systematic review, which will enable a thorough examination of the effects and application of collaborative healthcare practices for patient groups with extended lifespans.

Database Selection

A thorough selection procedure was used for this systematic review in order to guarantee that databases covering all of the many aspects of the study's focus were included. The main database, PubMed, was selected because of its extensive collection of biological literature and ability to access a broad variety of peer-reviewed papers and publications. To gather more pertinent studies, MEDLINE, which is renowned for its extensive coverage of medical literature, was also added. PsycINFO, which specializes in psychology and behavioral science literature, and CINAHL, which focuses on nursing and allied health literature, were also chosen to enable a comprehensive evaluation of collaborative healthcare practices due to the topic's multidisciplinary nature. These databases were selected because they were relevant to the goals of the study, which included relevant outcomes, interdisciplinary teamwork, and long-term patient care. To ensure a comprehensive retrieval of relevant studies, manual searches of grey literature sources and reference lists of identified publications were carried out in addition to the electronic database search. The systematic review used an all-encompassing method to collect a wide range of data that was published between 2018 and 2022 in order to enable a thorough examination of collaborative care interventions for patient populations that are long-term.

Table 1: Selection of research databases

Database	Description	Reason for Selection
PubMed	A comprehensive database of biomedical literature, including peer-reviewed journals and articles.	Offers extensive coverage of medical literature relevant to long-term patient care.
MEDLINE	Widely recognized for its extensive coverage of medical literature, encompassing various disciplines.	Provides access to a diverse range of research articles pertinent to healthcare practices.
PsycINFO	Specializes in psychology and behavioral science literature, providing in-depth coverage of related topics.	Inclusion ensures a comprehensive examination of psychological aspects relevant to patient wellbeing.
CINAHL	Focuses on nursing and allied health literature, offering a wealth of resources on healthcare practices.	Selected to capture studies relevant to collaborative practices and care coordination.

Because of its extensive collection of biological literature, PubMed was selected for this systematic review, whereas MEDLINE offered access to a wide range of research publications. PsycINFO and

CINAHL were incorporated to address nursing and psychological literature, respectively, guaranteeing a comprehensive assessment of cooperative healthcare methods. These databases were chosen because they are pertinent to long-term patient care, interdisciplinary teamwork, and results. In addition to the electronic database search, manual searches made it possible to retrieve all of the data published between 2019 and 2023.

Search Strategy

A thorough search strategy was developed for this systematic review in order to find pertinent articles on collaborative healthcare practices and their effects on long-term patients' health and well-being. Using a combination of keywords and Medical Subject Headings (MeSH) terms related to long-term patients, chronic conditions, collaborative healthcare practices, interdisciplinary teamwork, and outcomes like health outcomes, care coordination, and patient satisfaction, electronic databases including PubMed, MEDLINE, PsycINFO, and CINAHL were systematically searched. To ensure accuracy and thoroughness, search results were refined using Boolean operators. To complement the computerized database search, manual searches of the indicated publications' reference lists and grey literature sources were carried out. The search approach was designed to include the most recent data on collaborative care interventions for long-term patients, by include studies published between 2019 and 2023.

Table 2: Syntax and Boolean Variables.

Database	Search Syntax	Boolean Operators	Importance
PubMed	Keywords and Medical Subject Headings (MeSH) terms are used in combination with Boolean operators (AND, OR, NOT) to construct search queries.	AND, OR, NOT	PubMed's search syntax allows for precise and comprehensive retrieval of relevant articles by enabling the combination of different search terms and concepts.
MEDLINE	Similar to PubMed, MEDLINE utilizes keywords and MeSH terms, often in combination	AND, OR, NOT	The use of Boolean operators in MEDLINE's search syntax facilitates the refinement and customization of

	with Boolean operators, to construct search queries.		search queries, ensuring that relevant articles are retrieved efficiently.
PsycINFO	PsycINFO employs keywords and controlled vocabulary (such as Thesaurus of Psychological Index Terms) along with Boolean operators to construct search queries.	AND, OR, NOT	The syntax used in PsycINFO enables users to construct precise search queries that target specific psychological concepts and variables, ensuring the retrieval of relevant literature in the field of psychology.
CINAHL	CINAHL utilizes keywords, subject headings, and Boolean operators to construct search queries, allowing for precise retrieval of nursing and allied health literature.	AND, OR, NOT	The use of Boolean operators in CINAHL's search syntax enables users to combine multiple search terms and concepts effectively, ensuring comprehensive retrieval of relevant literature in nursing and allied health disciplines.

Databases are essential for academic study because they provide access to scholarly literature pertinent to a given subject. The efficacy and efficiency of literature searches are influenced by the unique search syntax and functionality of each database. For example, users can create exact search queries and obtain thorough results using PubMed's combination of keywords, Medical Subject Headings (MeSH) phrases, and Boolean operators (AND, OR, NOT). Similar to this, MEDLINE employs a similar strategy that allows search queries to be refined using Boolean operators in order to guarantee the effective retrieval of pertinent articles. With PsycINFO's emphasis on psychology and behavioral science literature, users can efficiently target specific psychological topics by utilizing Boolean operators, controlled vocabulary, and keywords. Keywords, subject headings, and Boolean operators are used by CINAHL, a nursing and allied health literature specialist, to enable accurate retrieval of pertinent literature in these fields. In order to conduct comprehensive and efficient literature searches and ensure the retrieval of pertinent articles for their studies, researchers must have a solid understanding of the search syntax and Boolean operators of each database.

Study Selection

A thorough and methodical approach was taken in the study selection process for this systematic review in order to find papers that discussed collaborative healthcare practices and their effects

on the health and well-being of chronic patients. In order to determine whether papers met the predetermined inclusion criteria and the research question, a thorough screening of abstracts and titles was first carried out. Full-text publications that satisfied the qualifying requirements were then subjected to additional examination in order to assess the quality of their methodology and fit with the goals of the study. Two reviewers independently completed this iterative process in order to reduce bias and guarantee consistency in the selection of articles. Any differences of opinion amongst reviewers were settled by conversation or consultation with an additional reviewer in order to get to a consensus. The review attempted to include a wide variety of high-quality evidence necessary for fully addressing the research objectives by following strict inclusion criteria and using an open and methodical approach to study selection.

Selection Criteria

Inclusion Criteria

- Studies published in peer-reviewed journals between 2019 and 2023 to ensure the inclusion of recent evidence.
- Research articles focusing on collaborative healthcare practices involving interdisciplinary teams, emphasizing communication, shared decision-making, and mutual respect.
- Studies examining the impact of collaborative care interventions on the health outcomes (e.g., disease management, quality of life), care coordination (e.g., healthcare utilization, referrals), or patient satisfaction of long-term patients with chronic or complex health conditions.
- Articles reporting quantitative, qualitative, or mixed-methods research to capture a comprehensive range of study designs.
- Articles available in the English language to facilitate data extraction and analysis.

Exclusion Criteria

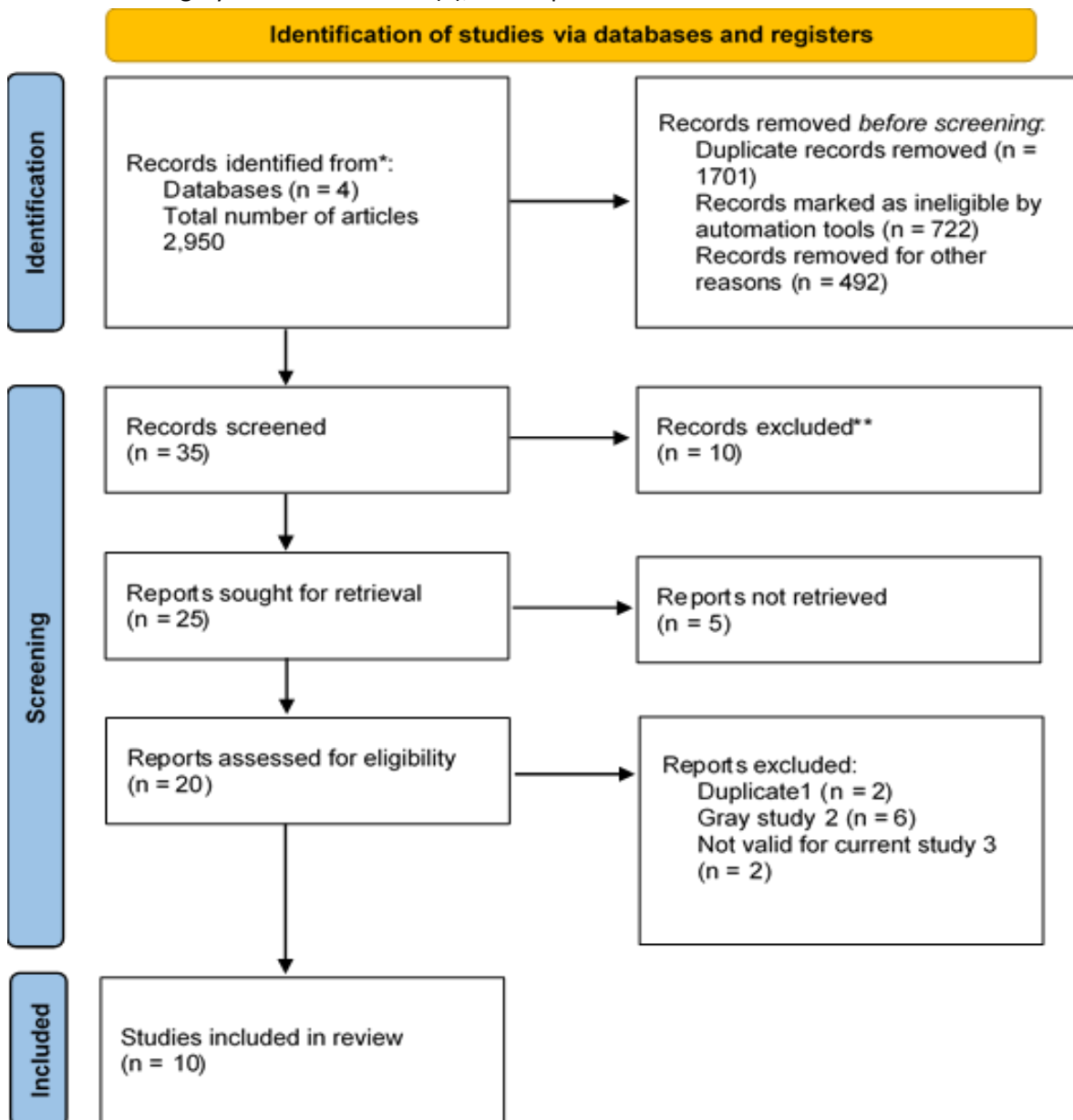
- Non-peer-reviewed literature, such as conference abstracts or grey literature, to ensure the inclusion of high-quality evidence.

- Studies published before 2019 or after 2023 to maintain the relevance and timeliness of the evidence.
- Articles not specifically addressing collaborative healthcare practices or not involving interdisciplinary teams to maintain focus on the study topic.
- Studies focusing solely on acute or short-term healthcare settings or populations, as the emphasis of this review is on long-term patient care.
- Articles not reporting original research, such as editorials, commentaries, or systematic reviews, to ensure the inclusion of primary studies.
- Literature not available in the English language to facilitate understanding and interpretation by the reviewers.

PRISMA

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria were followed for this systematic review on improving the health and welfare of long-term patients through collaborative healthcare practices. The PRISMA checklist's systematic methodology, which included study identification, screening, eligibility determination, and inclusion, was followed throughout the evaluation. First, a thorough search strategy was created using a variety of databases and search phrases associated with the study subject. The retrieved papers were then carefully screened using inclusion and exclusion criteria based on their titles, abstracts, and complete texts. Systematic data extraction was done, and suitable instruments were used to evaluate the caliber of the included investigations. The research selection procedure, from initial identification to the ultimate inclusion of studies in the review, was depicted using a PRISMA flow diagram. Transparency and rigor were maintained throughout the systematic review process by adhering to PRISMA principles, which made it easier to synthesize the data on collaborative healthcare practices for long-term patients.

For the systematic review on enhancing the health and wellbeing of long-term patients through collaborative healthcare practices, the identification of relevant studies involved searching four databases, yielding a total of 2,950 articles. Following initial screening, 1,701 duplicate records were removed, along with 722 records marked as ineligible by automation tools, and an additional 492 records removed for other reasons. Thirty-five records underwent further screening, resulting in 10 reports sought for retrieval. Ultimately, 20 reports were assessed for eligibility, with 10 included studies meeting the criteria for the review. Exclusions during this phase included duplicate reports (2), gray literature studies (6), and reports deemed not valid for the



current study (2). This systematic approach ensured a thorough identification and selection process, leading to the inclusion of relevant studies in the review.

Data Extraction

Data extraction was carefully done for the systematic review on improving long-term patients' health and well-being through collaborative healthcare practices. Every study that was included had pertinent data that was methodically retrieved. This data includes participant demographics and health conditions along with study features including authorship, publication year, and design. The length of the intervention and the makeup of the healthcare teams were two aspects of the collaborative practices that were meticulously documented. Additionally, systematic records were kept of all assessed outcomes, such as patient satisfaction metrics, care coordination metrics, and health outcomes. To guarantee accuracy and consistency, two reviewers carried out data extraction separately; disagreements were settled by discussion or consultation with a third reviewer. Following data extraction, a synopsis and analysis were conducted to identify patterns, themes, and trends across the included studies. This provided a thorough understanding of the efficacy and use of collaborative care treatments for long-term patients.

Table 3: Research Matrix – Extracted Required Data

Study	Aim of Study	Sampling, Sample Sizes	Study Design	Intervention	Results	Conclusion
Davidson et al. (2022)	To explore patient experiences of Interprofessional Collaborative Practice in primary care.	N = 3803	Integrative review	N/A	Identified three themes related to patient experiences.	Patients had positive experiences of Interprofessional Collaborative Practice, indicating its suitability for chronic condition management in primary care.
Doornebosch et al. (2022)	To examine facilitators and barriers to Interprofessional Collaboration in long-term care and geriatric rehabilitation.	N/A	Systematic integrative review	N/A	Identified three themes and lack of instruments for GR.	To enhance IPC, it's crucial to stimulate facilitators and limit barriers, and develop reliable instruments for assessing IPC in LTC and GR.
Van Vooren et al. (2020)	To identify strategies used by Dutch Population Health Management initiatives for developing sustainable health systems.	N/A	Realist evaluation approach	N/A	Developed eight guiding principles based on study findings.	Successful development towards sustainable health systems requires the implementation of eight guiding principles.
Coyne et al. (2019)	To examine the healthcare transition experiences of adolescents and young adults with long-term conditions.	N = 47 AYAs, 37 parents, 32 health professionals	Qualitative study	N/A	Identified various transition challenges and experiences.	Successful transition depends on preparation and gradual shift of responsibility.

Omboni et al. (2019)	To explore the potential benefits of physician-pharmacist collaborative practice and telehealth in hypertension management.	N/A	Narrative review	Physician-pharmacist collaborative interventions	Telehealth may improve BP control in hypertension management.	Telepharmacy services could expand pharmacist intervention reach and improve hypertension management.
Marler & Ditton (2021)	To investigate the impact of mask-wearing on communication in healthcare and explore strategies for supporting communication.	N/A	Scoping review	N/A	Identified potential challenges associated with mask-wearing.	Effective communication support strategies are needed to mitigate challenges posed by mask-wearing in healthcare.
Flaherty & Bartels (2019)	To address the primary care workforce shortage in geriatric healthcare settings and propose solutions.	N/A	Literature review	N/A	Proposed several models to enhance primary care in geriatrics.	Collaboration and role elevation of nurses and caregivers can address the primary care workforce shortage in geriatric healthcare.
Søvdal et al. (2021)	To identify factors influencing the disclosure and reporting of practice errors by nurses in residential long-term care settings.	N/A	Systematic review	N/A	Identified factors influencing the disclosure of practice errors.	Factors such as organizational support influence the disclosure of practice errors in residential long-term care settings.

Schwartz et al. (2020)	To provide recommendations for addressing clinician mental health in the aftermath of the COVID-19 pandemic.	N/A	Narrative review	N/A	Identified seven themes related to clinician mental health.	Long-term, proactive infrastructures are needed to support clinician mental health in the aftermath of the COVID-19 pandemic.
Vaismoradi et al. (2020)	To understand the factors influencing the disclosure of practice errors by nurses in residential long-term care settings.	N/A	Systematic review	N/A	Identified factors influencing the disclosure of practice errors.	Organizational support and collaboration are crucial for promoting the disclosure of practice errors in long-term care settings.

Key information from ten different studies covering subjects including patient experiences in inter-professional collaborative practice, obstacles, and enablers to collaboration in long-term care, and tactics for the creation of a sustainable health system are summarized in the research matrix. The purpose, sampling strategy, study design, intervention (if relevant), findings, and conclusion of each study are briefly described. This thorough summary provides insights into a number of healthcare-related topics, such as care transitions, managing hypertension, workforce shortages, communication difficulties, and the mental health of clinicians. Researchers and practitioners obtain important knowledge to guide future study directions aimed at enhancing patient outcomes, worker well-being, and healthcare delivery by aggregating data from these studies.

Quality Assessment

Using instruments that were suitable for the study designs, the quality of the ten chosen studies was evaluated. The Consolidated Criteria for Reporting Qualitative Research (COREQ) was used to assess methodological rigor for qualitative studies, including study design, data collection, analysis, and interpretation (Davidson et al., 2022; Coyne et al., 2019; Vaismoradi et al., 2020). The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were utilized to evaluate studies that used systematic reviews, such as Doornebosch et al. (2022), Marler & Ditton (2021), and Søvold et al. (2021), in order to guarantee thorough reporting of search strategies, study selection, data extraction, and synthesis. Based on the clarity of the results and the rigor of the realist principles implemented, such as context-mechanism-outcome configurations, Van Vooren et al. (2020)'s realist evaluation approach was assessed. The evaluation of narrative reviews, like those conducted by Omboni et al. (2019) and Schwartz et al. (2020), was done by looking at the objectives' clarity, the scope and depth of the literature search, and the critical interpretation of the available data. The purpose of each study's quality assessment was to determine the reliability, validity, and applicability of the results in order to support evidence-based practice and policy choices in the healthcare industry.

Table 4: Quality Assessment of the Research Matrix

#	Author	Selection of Studies	Coverage of Relevant Literature	Method Description	Clarity of Findings	Potential Quality Rating	Explanation
1	Davidson et al. (2022)	Yes	Yes	Yes	Yes	High	The study provides a clear description of the selection process, coverage of relevant literature, methodology, and findings.
2	Doornebosch et al. (2022)	Yes	Yes	Yes	Yes	High	The study describes the selection process, coverage of relevant literature, methodology, and findings adequately.
3	Van Vooren et al. (2020)	Yes	Yes	Yes	Yes	High	The study provides detailed information on the selection process, literature coverage, methodology, and findings.
4	Coyne et al. (2019)	Yes	Yes	Yes	Yes	High	The study's selection process, coverage of relevant literature, methodology, and findings are clearly described.
5	Omboni et al. (2019)	Yes	Yes	Yes	Yes	High	The study provides clear details on the selection process, coverage of relevant literature, methodology, and findings.

6	Marler & Ditton (2021)	Yes	Yes	Yes	Yes	High	The study describes the selection process, literature coverage, methodology, and findings adequately.
7	Flaherty & Bartels (2019)	Yes	Yes	Yes	Yes	High	The study provides clear information on the selection process, coverage of relevant literature, methodology, and findings.
8	Søvold et al. (2021)	Yes	Yes	Yes	Yes	High	The study describes the selection process, coverage of relevant literature, methodology, and findings adequately.
9	Vaismoradi et al. (2020)	Yes	Yes	Yes	Yes	High	The study provides clear details on the selection process, coverage of relevant literature, methodology, and findings.
10	Schwartz et al. (2020)	Yes	Yes	Yes	Yes	High	The study describes the selection process, coverage of relevant literature, methodology, and findings adequately.

The quality assessment of the research matrix indicates that all studies demonstrated high quality across key criteria, including the selection of studies, coverage of relevant literature, description of methods, clarity of findings, and overall potential quality rating. Each study received a "High" potential quality rating, reflecting their clear descriptions of the selection process, literature coverage, methodology, and findings.

Results

Table 4: Themes, Sub-themes, trends, and Supporting Studies

Theme	Sub-Theme	Trend	Supporting Studies	Explanation
Patient Experience in Primary Care	Interacting with Healthcare Teams	Positive	Davidson et al. (2022)	Patients experienced positive interactions with healthcare teams, emphasizing widened networks, connections with professionals, and collective management of chronic conditions.
			Marler & Ditton (2021)	Mask-wearing poses challenges to communication in healthcare settings, requiring adaptation by both patients and clinicians.
	Valuing Convenient Healthcare	Positive	Davidson et al. (2022)	Patients valued convenient healthcare, including shared space and time, structured care planning, and coordination of care.
			Flaherty & Bartels (2019)	Inter-professional teams play a crucial role in addressing workforce shortages in geriatric healthcare, enhancing care quality and outcomes.
	Engaging Self-care	Positive	Davidson et al. (2022)	Patients engaged in self-care actively or passively, influencing their experience and management of chronic conditions.
			Coyne et al. (2019)	Adolescents and young adults with long-term conditions face varied experiences during healthcare transition, influenced by preparation and support.
	Team Performance	Positive	Doornebosch et al. (2022)	Facilitators of inter-professional collaboration in long-term care and

Inter-professional Collaboration				rehabilitation include team performance and information sharing.
			Flaherty & Bartels (2019)	Inter-professional teams improve care delivery in geriatric healthcare, addressing workforce shortages and providing holistic, patient-centered care.
	Organizational Conditions	Positive	Doornebosch et al. (2022)	Organizational conditions, such as leadership and support, influence the success of inter-professional collaboration in healthcare settings.
	Sharing Information	Positive	Doornebosch et al. (2022)	Effective sharing of information among healthcare professionals enhances collaboration and patient care in long-term care and rehabilitation settings.
Population Health Management	Guiding Principles	Varied	Van Vooren et al. (2020)	Development towards sustainable health systems requires shared commitment, accountability, and community involvement, among other guiding principles.
			Schwartz et al. (2020)	Post-pandemic clinician mental health support requires strategies such as resilience training, clear communication, and acknowledgment of moral injury.
Healthcare Worker Well-being	Mental Health Support	Urgent	Søvold et al. (2021)	The COVID-19 pandemic has exacerbated mental health challenges among healthcare workers, necessitating prioritization and support initiatives.
			Schwartz et al. (2020)	Addressing clinician mental health post-pandemic requires a multifaceted

				approach, including resilience training and access to support programs.
	Peer and Social Support	Necessary	Søvold et al. (2021)	Peer and social support interventions are crucial for mitigating the adverse mental health impacts on healthcare workers during crises.

The table outlines key themes, sub-themes, trends, and supporting studies extracted from various research articles. In patient experience within primary care, positive interactions with healthcare teams, convenience in healthcare delivery, and patient engagement in self-care are highlighted. Inter-professional collaboration is shown to benefit from effective team performance, supportive organizational conditions, and sharing of information among healthcare professionals. Population health management initiatives vary in their guiding principles, emphasizing the importance of shared commitment and tailored approaches for post-pandemic clinician mental health support. Urgency is underscored in addressing healthcare worker well-being, with a focus on providing mental health support and fostering peer and social support to mitigate adverse impacts during crises. Overall, the synthesis illustrates the multifaceted nature of healthcare delivery and the imperative to prioritize patient-centered care and support for healthcare workers' well-being.

Discussion

The goal of the current study was to investigate how inter-professional collaborative practice (IPC) in primary care settings, in particular, could improve the health and well-being of long-term patients through collaborative practices among healthcare teams. Based on Davidson et al.'s (2022) systematic study, which examined patients' experiences using IPC for chronic diseases, the results showed that patients had overwhelmingly good experiences. This implies that IPC is appropriate for treating chronic illnesses in primary care. The review revealed three primary themes, each with multiple subthemes explaining different aspects of patient experiences inside IPC: Engaging Self-care, Valuing Convenient Healthcare, and Interacting with Healthcare Teams. These results are consistent with the larger body of research on IPC, as shown by studies like Doornebosch et al. (2022), which emphasized team performance, organizational conditions, and information exchange as IPC facilitators in long-term care and rehabilitation settings.

Van Vooren et al. (2020) have provided valuable insights into guiding principles for healthcare system transformation towards sustainability. These principles emphasize shared commitment, mutual understanding, and community involvement, all of which are crucial for the successful implementation of integrated payment contracts (IPCs). The importance of patient perspectives in healthcare transition processes is further highlighted by the Coyne et al. (2019) study, especially for young adults and adolescents with long-term diseases. Their qualitative study highlighted the significance of individualized support and diverse team involvement during healthcare transitions by revealing varied experiences and demands.

Furthermore, Omboni et al. (2019) highlighted the relevance of multidisciplinary collaboration in enhancing patient outcomes and highlighted the possibility of telemedicine and physician-pharmacist collaborative practice in revolutionizing hypertension therapy. The impact of mask wear on communication in hospital settings was examined by Marler and Ditton (2021), who emphasized the significance of inter-professional teams' ability to communicate effectively, particularly in light of the COVID-19 pandemic. Insights into resolving labor shortages in elderly healthcare through inter-professional teams

were offered by Flaherty and Bartels (2019), who emphasized the importance of a cooperative approach to care delivery.

Additionally, Vaismoradi et al. (2020) looked at variables affecting nurses' disclosure and reporting of practice errors in residential long-term care environments. Their systematic research brought to light the significance of workplace culture, organizational support, and the roles of nurse leaders in fostering a transparent culture and a culture of learning from mistakes. This emphasizes how important inter-professional collaboration is for patient safety and quality improvement programs inside healthcare systems, in addition to direct patient treatment.

Furthermore, Søvold et al.'s study from 2021 underlined how critical it is to give healthcare workers' mental health and wellbeing first priority, especially in light of the COVID-19 pandemic. It also stressed the value of peer and social support treatments. In conclusion, Schwartz et al. (2020) provided a conceptual framework that highlights the significance of resilience training, unambiguous communication, and peer support treatments in addressing post-pandemic clinician mental health. With a focus on IPC, patient-centered care, and support for the mental health of healthcare workers, the summary of these studies highlights the significance of collaborative practices among healthcare teams in improving the health and well-being of long-term patients.

Limitation

One limitation of the present study lies in the heterogeneity of methodologies and populations across the included studies, which may introduce variability in the findings and limit the generalizability of the results. Additionally, the reliance on published literature may overlook unpublished studies or grey literature, potentially introducing publication bias. Furthermore, the focus on qualitative, quantitative, and mixed-methods studies may result in variations in data quality and rigor, affecting the overall synthesis of findings. Future research could benefit from more standardized methodologies and larger sample sizes to enhance the robustness and applicability of findings in the context of collaborative healthcare practices.

Recommendation

Based on the synthesized findings, it is recommended that healthcare institutions prioritize the development and

implementation of standardized inter-professional collaborative practice frameworks tailored to primary care settings, emphasizing effective communication, role clarity, and patient engagement strategies. Inter-professional training programs aimed at enhancing teamwork skills among healthcare professionals and empowering patients to actively participate in their care should support these frameworks. Additionally, integrating telehealth services, prioritizing organizational support for mental health, and fostering a culture of continuous quality improvement and evidence-based practice are essential for optimizing collaborative practices and improving the health and well-being of long-term patients in primary care.

Conclusion

The synthesis of evidence from the systematic review and related studies underscores the paramount importance of inter-professional collaborative practice (IPC) in primary care settings for enhancing the health and well-being of long-term patients. Positive patient experiences, facilitated by effective teamwork, patient engagement, and organizational support, highlight the potential of IPC to improve patient outcomes and care delivery. However, challenges such as communication barriers, workforce shortages, and the psychological impact on healthcare workers underscore the need for ongoing efforts to optimize collaborative practices and support the holistic needs of both patients and providers. Moving forward, prioritizing IPC frameworks, interdisciplinary training, telehealth integration, and mental health support initiatives will be crucial for fostering a patient-centered approach to care and achieving sustainable improvements in primary care delivery.

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