



SUPPORTING AND INHIBITING FACTORS IN THE IMPLEMENTATION OF INTER-PROFESSIONAL COLLABORATION IN NURSING

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ABSTRACT

Inter-professional collaboration has a positive impact on patient outcomes and enhances job satisfaction. However, its implementation faces numerous challenges. To date, no literature review has systematically summarized the factors influencing nurses' participation in collaborative practice. This literature review aims to systematically summarize the factors affecting the implementation of inter-professional collaboration (IPC) among nurses. This scoping review adopts the PCC (Population, Content, Context) approach, where the population consists of nurses, the content focuses on inter-professional collaboration, and the context is hospital settings. Article searches were conducted in two databases, PubMed and Science Direct, covering the period from 2020 to 2025, using keywords: "inter-professional collaboration" AND "nurse" AND "hospital" AND "factor." The search yielded 727 articles, with 15 included in the review. Eligible full text articles underwent critical appraisal, followed by data extraction, including details such as author names, publication year, country, title, objectives, research methods, findings, and research gaps. The supporting factors for IPC implementation by nurses include effective communication practices, enhanced collaborative competencies, and the implementation of inter-professional education. Conversely, the barriers to IPC implementation by nurses involve unclear role definitions, poor organizational management, weak leadership, as well as high stress and workload. These findings highlight the numerous challenges in IPC implementation among nurses. The development and implementation of policies that support IPC are crucial.

Keywords: hospital; inter-professional collaboration; nursing

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INTRODUCTION

Over the past few decades, there has been increasing fragmentation and complexity in healthcare services. This is driven by the global rise in the elderly population, the growing incidence of chronic diseases, and the rapid advancements in science and technology (Stangt, 2009). The negative impacts of healthcare fragmentation and increasing complexity include poor service quality, high costs, and low patient outcomes (Cohen-Mekelburg et al., 2019). The higher the fragmentation of healthcare services, the greater the risk of medication errors and increased mortality rates (Prior et al., 2023).

Interprofessional collaboration (IPC) facilitates the delivery of integrated healthcare services with a strong focus on patient safety. IPC encourages patient and family involvement while fostering collaboration among various healthcare professionals to achieve optimal health outcomes. The implementation of IPC enables improved communication and coordination among healthcare team members, resulting in more efficient and well-organized patient care (Gittell et al., 2013; Li et al., 2018). Additionally, IPC fosters a culture of mutual respect and understanding among professionals, ultimately enhancing job satisfaction and reducing fatigue (Hoxha et al., 2024).

IPC is implemented across various healthcare facilities, including hospitals. Hospitals provide advanced healthcare services, accommodating diverse professional roles, specialized equipment, and complex patient conditions (WHO, 2025). IPC serves as a strategy to integrate different

services, enhance patient outcomes, and prioritize patient safety (D'Amour et al., 2005). A literature review by Pomare et al. (2020) revealed that IPC effectively improves patient outcomes, healthcare worker satisfaction, and organizational performance.

Although IPC implementation has brought numerous positive impacts, several challenges still hinder effective interprofessional collaboration. Various literature reviews have summarized the factors influencing IPC success in primary healthcare settings. Most barriers and facilitators are reported at the organizational and individual levels. The primary obstacles include limited time and training, unclear role definitions, concerns about professional identity, and poor communication. On the other hand, key facilitators include tools that enhance communication, close workplace proximity, and recognition of professional skills and contributions (Rawlinson et al., 2021). Literature review by L. Gleeson et al. (2023) Summarizing the factors influencing communication in IPC implementation, existing studies do not comprehensively examine the factors affecting IPC practices. Moreover, no literature review specifically explores the factors influencing IPC implementation from the perspective of healthcare professionals, particularly nurses.

Nurses are essential members of the interprofessional collaboration (IPC) team. They interact with patients continuously, providing care 24 hours a day in healthcare facilities. A study by (Yusra et al., 2019) found that nurses experience more barriers in practicing interprofessional collaborative care compared to other healthcare professionals. Additionally, younger nurses with shorter work experience face more challenges than older nurses with longer tenure. However, the study does not specifically identify the factors influencing IPC implementation among nurses. From the background above, a research gap has been identified—no literature review specifically examines the factors influencing IPC implementation in hospitals from the perspective of nurses. The objective of this literature review is to systematically summarize how the factors affecting IPC implementation by nurses.

METHOD

Study Design

This study employs a scoping review design guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework.

Identify The Research Question

The research question investigated in this scoping review was: What is known in the systematically summarize the factors affecting the implementation of inter-professional collaboration (IPC) among nurses? This research question was intentionally broad to align with the purpose of the literature review, which aimed to include multiple concepts and provide researchers with a deeper understanding of factors affecting the implementation of inter-professional collaboration (IPC) among nurses. Furthermore, the research questions guiding this review are 1) what are the supporting factors influencing IPC implementation by nurses in hospitals? 2) what are the inhibiting factors affecting IPC implementation by nurses in hospitals?

Identify Relevant Studies

Articles were searched across multiple databases, including PubMed and ScienceDirect, as well as other sources, covering the period 2020 to 2025 using the Boolean operator keywords: “interprofessional collaboration” AND “nurse” AND “hospital” AND “factor.”

Study Selection

Eligibility determination followed the Population, Content, and Context (PCC) framework, where population is nurses, content is inter-professional collaboration (IPC), context is IPC implementation in hospital settings. Inclusion criteria for article selection articles in English or Indonesian, published between 2020 and 2025, primary studies with quantitative or qualitative

designs, full-text availability. Exclusion criteria Scoping reviews, systematic reviews, and meta analyses.

Data Extraction

All retrieved articles were imported into Endnote X9, where duplicate entries were removed. Two independent reviewers screened articles based on inclusion and exclusion criteria. Eligible full text articles underwent critical appraisal, followed by data extraction, including details such as author names, publication year, country, title, objectives, research methods, findings, and research gaps (Table 1). Selected articles were assessed for quality, validity, and methodological relevance before inclusion in the review.

RESULT

Overview of Search Results

The search process identified a total of 727 articles from PubMed and ScienceDirect. After screening for duplicates, 21 articles were removed, leaving 706 articles eligible for further assessment. Researchers then filtered articles based on titles and abstracts, aligning them with the PCC framework and narrowing the selection to 21 articles for full evaluation. After a thorough review, 15 articles were included in the final analysis—12 from PubMed and 3 from ScienceDirect. The research designs of the selected articles consisted of 7 qualitative studies, 3 mixed-method studies, and 5 quantitative studies. The findings, presented in Table 1, categorize the factors influencing the implementation of interprofessional collaboration (IPC) among nurses into supporting and inhibiting factors.

1. Factors Influencing the Implementation of IPC by Nurses

All the articles discuss factors influencing the implementation of interprofessional collaboration (IPC), but none specifically explore nurses' perspectives on IPC practice. The researchers conducted an in depth analysis of 15 studies to gain a clearer understanding of nurses' viewpoints regarding IPC implementation. These factors are categorized into supporting and hindering factors from the perspective of nurses.

a. Supporting Factors for the Implementation of IPC by Nurses

Nurses experience a wide range of factors influencing their practice of interprofessional collaboration (IPC). Among the 15 articles reviewed, 7 studies identified effective communication as the most frequently cited factor affecting successful collaborative practice (Cheng et al., 2021a; Coolen et al., 2020; Djaharuddin et al., 2023; Gilbert & Kerridge, 2022; Jepkosgei et al., 2022; Kurniasih et al., 2022; Saeed et al., 2024). Various aspects of communication impact IPC success, including communication skills (Gilbert & Kerridge, 2022; Saeed et al., 2024), structured communication patterns (Coolen et al., 2020), and the use of technology to facilitate communication with other professionals (Coolen et al., 2020).

Another key factor that nurses consider essential for successful IPC implementation is competency in collaborative practice. Among the 15 articles, 10 studies highlighted that knowledge, skills, and attitudes significantly support effective IPC (Baumgarten et al., 2023; Cheng et al., 2021b; Degu et al., 2023; Djaharuddin et al., 2023; Gilbert & Kerridge, 2022; Kurniasih et al., 2022; Mäki-Asiala et al., 2022; Ohta & Maejima, 2021; Osman et al., 2025; Saeed et al., 2024). The findings also emphasize the importance of interprofessional education (IPE) in fostering awareness of collaborative practice (Baumgarten et al., 2023; Degu et al., 2023; Gilbert & Kerridge, 2022; Ohta & Maejima, 2021; Osman et al., 2025; Saeed et al., 2024).

Additional supporting factors for successful IPC practice among nurses include strong interpersonal relationships with other professionals (Degu et al., 2023; Kurniasih et al., 2022), organizational support (Degu et al., 2023; Djaharuddin et al., 2023; Vatn & Dahl,

2022a), recognition of the nursing profession (Osman et al., 2025; Vatn & Dahl, 2022b), work experience, and job satisfaction (González-López et al., 2024).

b. Factors Inhibiting the Implementation of IPC by Nurses

Based on the article review, nurses face various challenges in maintaining the implementation of interprofessional collaboration (IPC). Among the 15 articles, 5 studies identified unclear role definitions as a major barrier frequently experienced by nurses in collaborative practice. Nurses reported role overlap and excessive dependence of other professions on nursing staff (Baumgarten et al., 2023; Coolen et al., 2020; Degu et al., 2023; Ohta & Maejima, 2021; Vatn & Dahl, 2022a). Organizational factors also hinder collaborative practice. Six articles highlighted policy inconsistencies as a significant obstacle to IPC implementation (Coolen et al., 2020; Degu et al., 2023; Djaharuddin et al., 2023; Gilbert & Kerridge, 2022; Osman et al., 2025; Pawłowicz-Szlarska et al., 2022). Additionally, three studies found that ineffective leadership poses a challenge to achieving optimal IPC (Djaharuddin et al., 2023; Jepkosgei et al., 2022; Kurniasih et al., 2022).

Several other factors also impede IPC implementation. Three articles identified interprofessional inequality and professional stereotypes as challenges for nurses in IPC (Baumgarten et al., 2023; Gilbert & Kerridge, 2022; Osman et al., 2025). Stress and workload were also cited as barriers in three studies (Jepkosgei et al., 2022; Pawłowicz-Szlarska et al., 2022; Saeed et al., 2024). Furthermore, two articles revealed an interesting finding—there is a negative correlation between work experience and age with the level of collaborative practice among nurses (Cheng et al., 2021a; González-López et al., 2024).

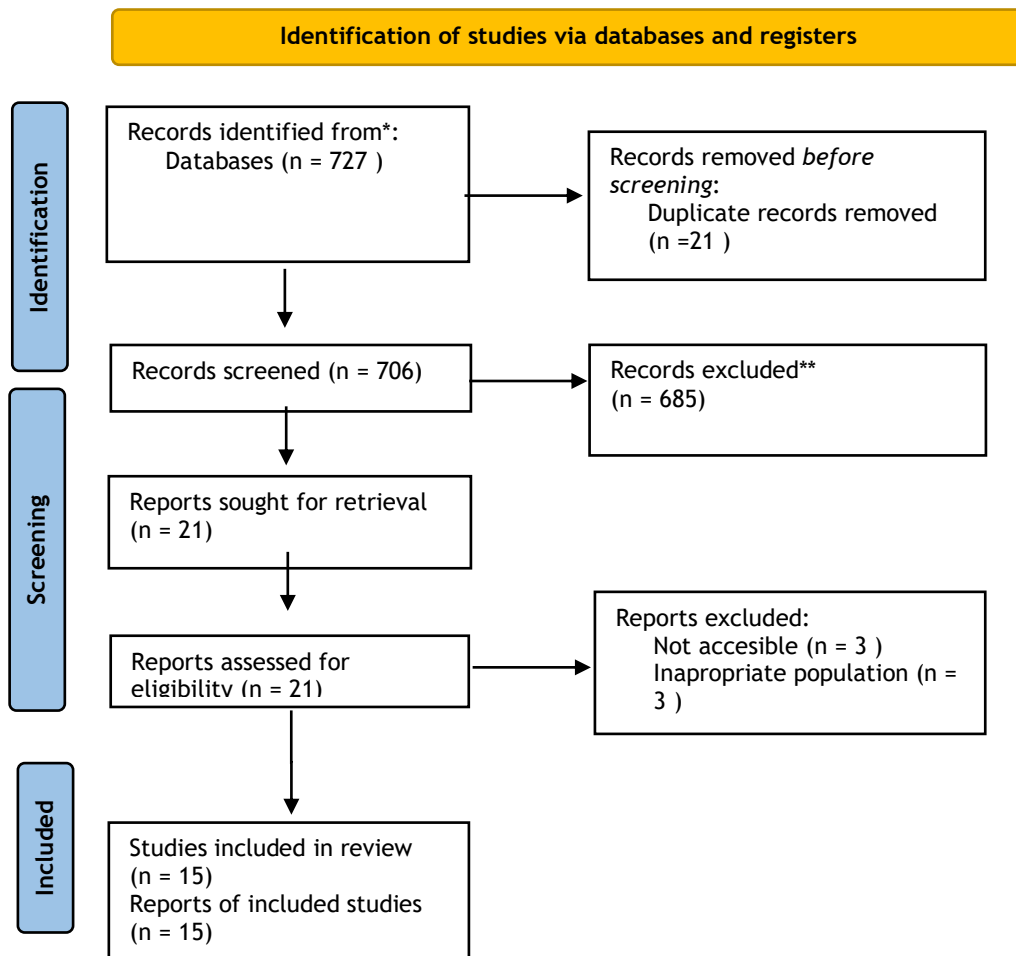


Figure 1: Conceptual Framework for Sampling and Data Collection

Table 1.
Analysis of article

No	Researcher, Year	Research Objectives	Method	Result	Differences With Thesis Plans
1	(Gilbert & Kerridge, 2022) Australia	Investigate the attitudes and practices of infection prevention and control (IPC) carried out by doctors, how they differ from nurses, and their impact on interprofessional relationships.	Research Design: This research is a qualitative study with a case study approach. Samples: Total: 26 senior clinicians (16 doctors and 10 nurses). Sample selection by Purposive sampling, with selection based on professional roles and experience to provide a broad perspective. Research Variables: attitudes and practices of infection prevention and control (IPC) carried out by physicians Instrument: Semi-structured interviews: The researcher used a number of open-ended questions designed to guide the discussion, such as participants' opinions on HAIs and their views on IPC policy. Data Analysis: Approach: Reflective thematic analysis.	Inhibiting factors: Differences in attitudes: Doctors are often considered to pay less attention to IPC rules and prioritize autonomy. Meanwhile, nurses are considered rigid in following the rules without considering further evidence. Profession Stereotypes: Doctors tend to view IPC as an 'additional burden', while nurses are more disciplined but often considered excessive. Power Relations (Doctor-Nurse Game): Doctors are reluctant to accept reminders or corrections from nurses. Inconsistency of Organizational Policies: The implementation of IPC policies is uneven between units. Supporting factors: COVID-19 Pandemic: To trigger awareness of the importance of IPC and to provide examples of effective collaborative implementation in several units. Good Communication: Units with strong interprofessional relationships have better IPC practices. Education: A deep understanding of IPC can improve adherence, especially among physicians.	Narrow focus: This study was conducted in only one Australian tertiary hospital so generalizations of results are limited. Minimal Quantitative Analysis: This study is entirely qualitative and does not include quantitative data to strengthen the results.
2	(Coolen et al., 2020) Netherlands	To understand the factors influencing the application of SBAR (Situation, Background, Assessment, Recommendation) structured communication tools in non-acute care settings in pediatrics, particularly in improving interprofessional collaboration between nurses and other health professionals	Research Design: Qualitative, using focused discussion groups. Sample: Pediatric nurse and pediatric resident (5 groups, 5-12 participants). Research Variables: Strategic, contextual, cultural, and individual factors in the use of SBAR. Instruments: Semi-structured interviews; thematic analysis using Atlas.ti software. Data Analysis: Independent thematic coding; iterative analysis until theme saturation is achieved.	Inhibiting Factors: SBAR Format Rigidity: SBAR is considered too formal for routine daily communication, making it use less flexible. Lack of Feedback: Interprofessional feedback is rarely provided, thus hindering learning and increasing use of SBAR. Inconsistency of Use: Supervisors are inconsistent in using SBARs, making it difficult for other medical personnel to make them role models. Role Perception: Nurses are reluctant to give recommendations because they feel it is not their responsibility, and are afraid of getting a negative response from the doctor. Supporting Factors: Clear Structure: SBAR helps provide a structured information framework and makes it easier to convey information in emergency situations. High Motivation: Users are	Only discuss the factors that affect the elements of communication and the use of communication aids in collaboration practices. It does not specifically discuss the factors that affect the implementation of IPC by nurses

				<p>motivated because SBAR improves information organization and the effectiveness of collaboration between professionals.</p> <p>Integration with Electronic Systems: SBAR has been integrated into electronic patient files, making it more commonly used.</p> <p>Role Modeling: The presence of new students or nurses encourages the use of SBAR to set an example for the new generation.</p>	
3	(Jepkosgei et al., 2022) Kenya	Explore the dynamics of intra- and interprofessional collaboration in neonatal care units (NBUs) in three hospitals in Kenya, as well as how professional and contextual factors shape interactions among health workers.	<p>Desain Penelitian: Studi eksploratif kualitatif dengan pendekatan etnografis.</p> <p>Sampel: 17 wawancara mendalam dan 250 jam observasi non-partisipan dari 20 partisipan (perawat, mahasiswa keperawatan, dokter, dll.).</p> <p>Variabel Penelitian: Faktor yang memengaruhi kolaborasi interprofesional di unit perawatan neonatal.</p> <p>Instrumen: Panduan wawancara semi-terstruktur, observasi, dan pengkodean data dengan NVivo 12.</p> <p>Analisis Data: Analisis tematik berbasis teori dengan pendekatan kerangka kerja tim efektif oleh Cohen dan Bailey.</p>	<p>1. Faktor Penghambat yang Teridentifikasi: Seperti tingginya rasio pasien terhadap staf dan kurangnya kepemimpinan tim yang efektif, merupakan tantangan umum yang dirasakan oleh semua profesi dalam tim, termasuk perawat.</p> <p>2. Faktor Pendukung yang Teridentifikasi: Pengakuan terhadap pentingnya komunikasi antarprofesi, yang juga dirasakan positif oleh perawat dan anggota tim lainnya.</p>	<p>1. Hasil penelitian ini sepenuhnya kualitatif, tidak menyertakan hasil kuantitatif.</p> <p>Tidak membahas faktor yang khusus dirasakan perawat dalam praktik kolaboratif</p>
4	(Jabbar et al., 2023) Pakistan	Evaluate the effectiveness of simulation-based training in developing crisis resource management (CRM) skills in pediatric interprofessional teams, including nurses, to improve patient collaboration and outcomes.	<p>Research Design: Mixed-methods with simulation-based training. Sample: 39 participants (medical students, residents, nurses). Research Variables: The effect of simulation on Crisis Resource Management (CRM) skills.</p> <p>Instruments: CSACD, CTS, Ottawa GRS, and focus group discussions. Data Analysis: Paired <i>t-test</i> for quantitative data; thematic analysis for qualitative data using NVivo.</p>	<p>Supporting factors: Influencing factors include improved communication skills, decision-making, and situational awareness after simulation-based training. Nurses reported increased confidence in carrying out their roles, as well as satisfaction with the team collaboration process. Inhibiting factors: In addition, obstacles such as physical fatigue during training are also identified as challenges that need to be considered in the implementation of the training program. If you want to dig deeper, I'm here to help.</p>	<p>It does not specifically explore the factors that affect the implementation of IPC by nurses, but can provide an idea that IPE can affect the implementation of IPC</p>
5	(Pawłowicz-Szlarska et al., 2022) Poland	To assess interprofessional collaboration (IPC) in renal care settings during the COVID-19 pandemic	<p>Research Design: Quantitative research with surveys using the AITCS-II (Assessment of Interprofessional Team Collaboration Scale II) scale.</p> <p>Sample: 127 participants, consisting of 87 nurses, 34 doctors, and 6 other staff in 8 renal care units in Poland.</p> <p>Research Variables: Interprofessional collaboration (partnership, cooperation,</p>	<p>Inhibitory factors: Studies identified several significant factors, including increased stress levels, rapid changes in procedures, and fear of SARS-CoV-2 infection as an inhibitor of IPC. In addition, nurses rated communication and collaboration with doctors significantly worse during the pandemic than before.</p>	<p>Not specifically looking for factors that affect the implementation of IPC by nurses</p>

			<p>coordination) and factors influencing collaboration during the COVID-19 pandemic. Instruments: Questionnaire with 41 items, including the AITCS-II scale and questions about working conditions during the pandemic.</p> <p>Data Analysis: Statistical analysis using Statistica v.13.1 PL software, with Mann-Whitney U, Kruskal-Wallis, and Spearman correlation tests.</p>		
6	(Kumiasih et al., 2022) Indonesia	Assessing the perspective of health workers on interprofessional collaboration in breast cancer units at national referral hospitals in West Java.	<p>Research Design: Qualitative study with in-depth interviews and focus group discussions. Sample: 15 health workers (10 nurses, 3 oncologists, 2 pharmacists).</p> <p>Research Variables: Factors that inhibit and support interprofessional collaboration. Instruments: Semi-structured interview guide and field notes. Data Analysis: Thematic analysis with open coding.</p>	<p>Supporting factors: The most significant outcomes affecting interprofessional collaboration (IPC) by nurses in this article were the effectiveness of communication and teamwork. This factor is considered a key element in ensuring good coordination between professions, especially in providing patient-centered care. Inhibiting factors: In addition, clarity of task descriptions and positive interpersonal relationships also contribute greatly to supporting effective collaboration practices.</p> <p>However, obstacles such as lack of strong leadership and seniority in the work environment are major challenges that need to be overcome to improve the IPC.</p>	Does not specifically explore the factors that affect the implementation of IPC by nurses
7	(Vatn & Dahl, 2022a) Norway	To understand the experience of nurses and physicians in interprofessional collaboration (IPC) in patient observation and care in the surgical ward.	<p>Research Design: Qualitatively exploratory, using semi-structured focus group interviews. Sample: 18 participants (11 nurses, 7 doctors) from three surgical wards in Norway.</p> <p>Research Variables: Factors that affect interprofessional collaboration, such as organization, communication, and trust. Instrument: Semi-structured focus group interview guide. Data Analysis: Systematic condensation of text to identify key themes.</p>	<p>Results: The study identified three main categories that affect the IPC:</p> <p>Organization and Culture: Lack of interprofessional meeting places, Experience-based hierarchy that hinders collaboration.</p> <p>Communication: Limited use of communication tools, Lack of space for professional discussion.</p> <p>Trust and Respect: Interprofessional dependency and recognition, Unclear distribution of responsibilities.</p>	It does not specifically explore the factors that nurses feel in carrying out IPC
8	(González-López et al., 2024) Spain	Determining the intensity of interprofessional collaboration in the intensive care unit (ICU) of a level three hospital	<p>Research Design: Cross-sectional descriptive research with an analytical approach. Sample: 102 healthcare professionals (91 nurses, 11 doctors) from 6 intensive care units in third-level hospitals.</p> <p>Research Variables: The intensity of interprofessional collaboration, including sociodemographic, economic,</p>	<p>Supporting Factors:</p> <p>≤10 Years Experience: Professionals with less work experience show a higher intensity of collaboration.</p> <p>Professional Satisfaction: A high level of satisfaction with the profession increases collaboration.</p> <p>Participation in Research:</p>	This study specifically only describes the factors that affect the intensity of the implementation of IPC by nurses and not the implementation of IPC which is comprehensively.

			<p>motivational, and professional satisfaction factors. Instrument: Intensity Scale of Interprofessional Collaboration in Health. Data Analysis: Statistical analysis using the Mann-Whitney U test, Spearman correlation, and multivariate model.</p>	<p>Involvement in research activities contributes to better collaboration.</p> <p>Inhibiting Factors: Low Perception of Collaboration: Nurses have a lower perception of collaboration than doctors. Negative Relationship with Age: Older age shows a negative relationship with the intensity of collaboration. Lack of Engagement in Joint Activities: Professionals with longer experience tend to have a lower perception of collaboration.</p>	
9	(Djharuddin et al., 2023) Indonesia	Determine the factors that affect the implementation of interprofessional collaboration practices in teaching hospitals.	<p>Desain Penelitian: Mixed-method explanatory sequential design. Sample: 152 health workers (doctors, nurses, pharmacists, nutritionists, medical rehabilitation specialists). Research Variables: Factors that affect interprofessional collaboration. Instruments: CPAT (Collaborative Practice Assessment Tool) questionnaire and FGD. Data Analysis: Kruskal-Wallis for quantitative, thematic analysis for qualitative.</p>	<p>Factors that affect interprofessional collaboration include:</p> <p>Supporting Factors: Effective communication, clear role distribution, and supportive organizational systems.</p> <p>Inhibiting Factors: Less effective leadership, inflexible rule systems, and personal characteristics such as lack of openness.</p>	It does not specifically explore the factors that affect the implementation of IPC by nurses
10	(Osman et al., 2025) Somalia	Assess nurse and physician attitudes towards interprofessional collaboration (IPC) in tertiary hospitals, as well as identify challenges and opportunities to improve patient cooperation and care.	<p>Research Design: Cross-sectional descriptive research. Sample: 250 participants (113 nurses, 137 doctors) in tertiary hospitals in Somalia. Research Variables: Attitudes towards interprofessional collaboration, including co-education, collaborative training, and hierarchical perceptions. Instrument: Validated questionnaire, using the Jefferson Scale of Attitudes Toward Nurse-Physician Collaboration (JSAPNC). Data Analysis: Descriptive and inferential statistical analysis using independent t-tests, ANOVA, and Spearman correlation.</p>	<p>Supporting Factors: Shared Education: Most participants (88.8%) believe that co-education between doctors and nurses helps understand each other's roles. Collaborative Training: 87.6% of participants rated collaborative training as important for improving interprofessional relationships. Recognition of Collaborative Roles: 73.6% of participants see nurses as collaborators and colleagues, not assistants.</p> <p>Inhibiting Factors: Traditional Hierarchy: Higher perceptions of physician authority were a major barrier to collaboration, with significant differences between doctor's and nurse's views ($p = 0.039$). Lack of Nurse Autonomy: Despite the recognition of nurse autonomy, the hierarchy still limits independent decision-making. Policy Limitations: There is no clear policy to support shared decision-making</p>	It does not specifically explore the factors that affect the implementation of IPC by nurses
11	(Mäki-Asiala	Describe	Research Design: Descriptive	Supporting Factors: Partnership,	It does not

et al., 2022) Finland	interprofessional collaboration in neonatal pain management in intensive care units based on the perception of the health team.	study with cross-sectional survey design. Sample: 132 healthcare workers from various professions at 4 university hospitals in Finland. Research Variables: Interprofessional collaboration in neonatal pain management (partnership, cooperation, coordination). Instrument: <i>Assessment of Interprofessional Team Collaboration Scale (AITCS-II)</i> . Data Analysis: Descriptive statistics and nonparametric tests (Mann-Whitney, Kruskal-Wallis).	cooperation, and good coordination among the healthcare team. Participants appreciate other professionals and are willing to cooperate. Inhibiting Factors: Differences in perceptions about parental involvement in collaboration, which inhibits the effectiveness of IPC.	specifically explore the factors that affect the implementation of IPC by nurses
12 (Baumgarten et al., 2023) Denmark	Meexplores nurse and physician experiences related to the six dimensions of interprofessional collaboration (IPC) when using Goal-Directed Therapy (GDT) and how the GDT protocol supports such collaboration.	Desain Research: Qualitative design with semi-structured interviews and participant observations. Sample: 35 healthcare workers (23 nurses, 12 doctors) from three anesthesiology departments in Denmark. Research Variables: Dimensions of interprofessional collaboration (commitment, role, responsibility, interdependence, integration of work practices). Instruments: InterPACT framework-based interview guide and field observation notes. Data Analysis: Analysis of deductive qualitative content using a categorization matrix.	Supporting Factors: Physician involvement in decision-making and education at the patient's bedside. Inhibiting Factors: Hierarchical boundaries, traditional doctor-nurse relationships, unclear responsibilities, and lack of shared knowledge.	It does not specifically explore the factors that affect the implementation of IPC by nurses
13 (Degu et al., 2023) Ethiopia	Investigate interprofessional collaboration and influencing factors between nurses and doctors in referral and teaching hospitals in the northwestern region of Ethiopia.	Research Design: Mixed design (quantitative cross-sectional and qualitative phenomenological). Sample: 366 health workers (279 nurses, 87 doctors) from three referral hospitals in the northwestern region of Ethiopia. Research Variables: Factors influencing interprofessional collaboration (organizational, professional, and interpersonal support). Instruments: Nurse-physician collaboration scale questionnaires and semi-structured in-depth interviews. Data Analysis: Binary logistic regression for quantitative, thematic analysis using ATLAS.ti software for qualitative.	Inhibiting Factors: Inadequate Organizational Support: Lack of support from hospital management, such as the provision of facilities and recognition of interprofessional collaboration. Poor Communication: Lack of effective communication between nurses and doctors, which hinders coordination in patient care. Lack of Professionalism: Lack of fulfillment of professional responsibilities, such as unclear roles and duties. Lack of Resources: Limited medical supplies and tools needed to support collaboration. Supporting Factors: Adequate Organizational Support: Provision of a conducive and safe work environment, as well as ongoing training to enhance collaboration. Professional Development: Training and career development that supports the improvement of collaboration skills. Good Interpersonal Relationships: Trust and mutual	Tidak secara spesifik memngkplorasi faktor yang mempengaruhi pelaksanaan IPC oleh perawat

				respect between nurses and doctors, which strengthens teamwork.	
14	(Cheng et al., 2021a) China	Investigate the collaboration between doctors and nurses in truth disclosure from the perspective of the nurse, as well as explore the factors that influence the collaboration.	Research Design: Cross-sectional survey. Sample: 279 nurses attending an oncology nursing conference in Hunan, China. Research Variable: Doctor-nurse collaboration in truth disclosure. Instrument: Chinese version of the Nurse-Physician Collaboration Scale (NPCS) modified for the context of truth disclosure. Data Analysis: Descriptive statistics, univariate analysis, and multiple linear regression.	Supporting Factors: Frequency of Disclosure: The more often the nurse is involved in the disclosure of the truth, the better the collaboration with the doctor. Effective Communication: Sharing patient information openly and participating together in decision-making. Cooperation: A high level of cooperation between nurses and doctors. Inhibiting Factors: Seniority: Nurses with lower levels of seniority show better collaboration than more seniors. Emotional Constraints: Fear of a patient's negative reaction or risk of suicide after the disclosure of the truth. Time and Space Limitations: Lack of adequate time and space for effective communication.	This study explores the factors that affect the implementation of nurse collaboration with other professions in the context of one specific action only.
15	(Ohta & Maejima, 2021) Japan	ME Explain the process of implementing advanced practice nurses (<i>nurse practitioners</i>) in rural community hospitals and how it affects interprofessional collaboration.	Research Design: A qualitative approach with <i>grounded theory</i> . Sample: 20 registered nurses (RNs), 5 advanced practice nurses (APRNs), 5 doctors, and 1 <i>nurse practitioner</i> at Unnan City Hospital, Japan. Research Variables: Factors that affect interprofessional collaboration between nurses and other health workers. Instruments: Semi-structured interviews and participatory observations. Data Analysis: A basic theoretical approach with open, axial, and selective coding to identify key themes in interprofessional collaboration	Inhibiting Factors: Differences in nursing culture and work environment that lead to misunderstandings between NPs and nurses. The lack of understanding of the role of NPs is also an obstacle. Supporting Factors: The active participation of NPs in nursing work helps to build a mutual understanding and clarify each other's roles. Effective collaboration between NPs and nurses improves consultation with physicians and supports nursing education.	This study only uses qualitative methods so that the results cannot be generalized to the wider population

DISCUSSION

The objective of this literature review is to systematically summarize the factors affecting IPC implementation by nurses. Furthermore, the research questions guiding this review are 1) what are the supporting factors influencing IPC implementation by nurses in hospitals? 2) what are the inhibiting factors affecting IPC implementation by nurses in hospitals?

1. Supporting Factors for the Implementation of IPC by Nurses

The literature review identifies three key factors that support the implementation of interprofessional collaboration (IPC) among nurses. The supporting factors for IPC implementation by nurses include effective communication practices, enhanced collaborative competencies, and the implementation of interprofessional education. Among the 15 articles reviewed, 7 studies highlight that effective communication plays a crucial role in ensuring successful IPC practice. Communication is an essential element for achieving effective interprofessional collaboration. This

finding is supported by Foronda et al. (2016) who emphasize the importance of interprofessional communication in IPC implementation. A clear communication structure and technology integration are increasingly vital in the modern era. The use of structured communication tools such as SBAR (Situation, Background, Assessment, Recommendation) and technology integration can enhance communication among healthcare professionals and improve overall patient outcomes (Aceto et al., 2018; Müller et al., 2018).

Ten out of the 15 articles reviewed indicate that competency is a crucial factor supporting the implementation of interprofessional collaboration (IPC) among nurses. Nurses require specific competencies as IPC team members. The competencies emphasized in this literature review include role comprehension, conflict management, communication skills, decision-making abilities, and the application of ethics and collaborative values. These findings align with a scoping review by Vaseghi et al. (2022) which highlights the importance of healthcare professionals' competencies in collaborative practice. Competency represents the minimum skill set nurses must possess to effectively engage in IPC. The primary focus of competency development is to enhance teamwork among professionals from diverse backgrounds, ensuring they work toward a shared goal (McLaney et al., 2022). However, a key challenge remains—there is no standardized framework defining the specific competencies nurses must acquire for effective IPC practice.

Additionally, another crucial factor supporting the successful implementation of interprofessional collaboration (IPC) among nurses in hospitals is interprofessional education (IPE). Among the 15 articles reviewed, 6 studies highlight that nurses consider IPE essential for enhancing their competencies. Nurses require collaborative learning methods alongside other healthcare professionals to develop interprofessional skills, particularly in role comprehension. These findings align with a scoping review by Patel et al. (2025) which emphasizes the critical role of IPE in fostering collaborative practice competencies. Nurses believe that IPE increases awareness of the value of collaborative practice, leading to greater recognition of their significant role in patient recovery. However, IPE implementation faces several challenges, including tight schedules and limited resources (Osman et al., 2025). Nurses report insufficient discussion spaces and lack of time for interprofessional learning (Saeed et al., 2024; Vatn & Dahl, 2022a). Given these challenges, it is crucial to develop policies and systems that support interprofessional education, facilitating the enhancement of nurses' competencies in collaborative practice.

2. Inhibiting Factor for the Implementation of IPC by Nurses

The literature review identifies four key factors that hinder the implementation of interprofessional collaboration (IPC) among nurses. The barriers to IPC implementation by nurses involve unclear role definitions, poor organizational management, weak leadership, as well as high stress and workload. The first factor is role comprehension between nurses and other healthcare professionals, which significantly impacts collaborative practice success. Five out of 15 studies indicate overlapping responsibilities between nurses and other professions (Baumgarten et al., 2023; Coolen et al., 2020; Degu et al., 2023; Ohta & Maejima, 2021; Vatn & Dahl, 2022a). Additionally, some studies suggest that other professions rely heavily on nurses without fully recognizing their contributions (Vatn & Dahl, 2022a). In contrast, Baumgarten et al. (2023), describe nurses as more passive than other professionals, often following plans set by others rather than executing their core nursing duties. However Osman et al. (2025) found no significant difference in autonomy between nurses and doctors, though doctors hold greater authority in decision-making. Another major issue is interprofessional inequality, which continues to affect collaborative nursing practice. Three studies highlight that nurses are often excluded from patient care decision-making processes (Baumgarten et al., 2023; Gilbert & Kerridge, 2022; Osman et al., 2025). Since all these findings are based on qualitative studies, there is a research gap further quantitative research is needed to determine the extent to which nurses' role comprehension influences IPC practices.

Six out of the 15 articles reviewed indicate that organizational factors hinder the implementation of interprofessional collaboration (IPC), particularly due to policy inconsistencies (Coolen et al., 2020; Degu et al., 2023; Djaharuddin et al., 2023; Gilbert & Kerridge, 2022; Osman et al., 2025; Pawłowicz-Szlarska et al., 2022). These studies consistently highlight that existing work systems do not adequately support collaborative practice. Furthermore, policy inconsistencies lead to non-compliance with regulations, obstructing IPC implementation (Gilbert & Kerridge, 2022). Furthermore, the study by Vatn & Dahl (2022a) revealed that unclear regulations create confusion among nurses when communicating with doctors. Based on these findings, it is crucial to develop organizational systems that foster a collaborative culture among healthcare professionals.

Furthermore, nurses identified ineffective leadership as a barrier to achieving optimal interprofessional collaboration (IPC) (Djaharuddin et al., 2023; Jepkosgei et al., 2022; Kurniasih et al., 2022). Leadership in the literature is examined from two aspects: leadership style and leadership function execution. Studies indicate that inappropriate leadership styles can hinder collaborative practice, but they do not specify which leadership styles are most effective (Jepkosgei et al., 2022). Additionally, failure to fulfill leadership responsibilities leads to communication breakdowns, coordination issues, and conflict resolution challenges within healthcare teams (Kurniasih et al., 2022). Currently, no studies have specifically explored which leadership styles are most effective in fostering a collaborative nursing culture.

Nurses' stress and workload significantly hinder the effective implementation of interprofessional collaboration (IPC). Three studies indicate that time constraints and high stress levels negatively impact coordination and communication among healthcare professionals (Jepkosgei et al., 2022; Pawłowicz-Szlarska et al., 2022; Saeed et al., 2024). These findings align with a narrative review by Sorensen et al. (2024) which highlights that stress, limited time, and environmental distractions obstruct healthcare coordination and communication. Nurses experience intense job pressure due to staff shortages, forcing them to prioritize tasks, often leaving little time for interaction with other healthcare team members (Jepkosgei et al., 2022). Additionally, sudden situational changes, such as a pandemic, further increase stress levels, negatively affecting IPC effectiveness (Pawłowicz-Szlarska et al., 2022).

Limitation

None of the articles in this literature review specifically explore the factors experienced by nurses in implementing interprofessional collaboration (IPC). These studies include other healthcare professions in identifying factors influencing IPC, meaning the literature review findings are still influenced by elements beyond the nursing profession. Another limitation is Research tends to focus on IPC within healthcare teams, with limited attention to the nursing profession as a distinct profession. IPC specifications for clinical situations have not been clearly defined based on work settings, such as emergency departments or ICUs. What are the key differences?

CONCLUSION

Interprofessional collaboration (IPC) in nursing is a crucial aspect of delivering high-quality healthcare services. The implementation of IPC by nurses is supported by effective communication, enhanced collaborative practice competencies, and interprofessional education (IPE). However, nurses still face barriers in collaborative practice, including unclear role definitions, poor organizational management, weak leadership, and high levels of stress and workload.

Based on the findings of this literature review, policy development and hospital work systems that support collaborative practice are highly recommended. Additionally, consistent policy implementation should be emphasized at both the managerial and operational levels, particularly for nurses involved in IPC. Furthermore, research on the impact of leadership styles and nurses' roles in IPC implementation is essential to address the existing research gap identified in this review.

Research on the implementation of IPC by nurses in specific clinical settings is also important to enrich the body of knowledge on collaborative practice in more complex situations.

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