

Literature Review: Effect of Interprofessional Collaboration Implementation of Patient Services

Kajian Pustaka: Pengaruh Pelaksanaan Kolaborasi Interprofesional Terhadap Pelayanan Pasien

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ABSTRACT

Introduction: At present progress in the health, the sector requires health workers to provide professional services. The patient's problem is also increasingly complex. Health workers are required to work in an integrated manner, therefore good collaboration and collaboration between healthcare professionals is needed in realizing patient satisfaction. Health services in hospitals are carried out by various health professionals. Effective interprofessional collaboration practices are key to providing health services. The management of the patient's health and all actions must be patient-focused. The model of providing care with interprofessional collaboration is very important so that all services are coordinated and there is good communication between caregivers. This study aims to find out about the effect of implementing interprofessional collaboration on patients. **Methods:** This research is a literature review. The research source was taken from several databases, with the keywords "Interprofessional collaboration, patient safety, health services". The Google Scholar database was found in 15,455 journals, EBSCO found 32, NCBI found 98, MEDLINE 23, and ProQuest 61. From the total database, only 11 met the inclusion criteria. **Results:** This meta-analysis shows that interprofessional collaboration has a positive impact. There are several benefits obtained from the application of interprofessional collaboration, namely affecting patient safety, patient quality of life, reducing the risk of falls, preventing medication errors, increasing the patient's functional status. elderly patients. **Conclusion:** Interprofessional collaboration or Interprofessional Collaboration (IPC) is collaboration between people with different professional backgrounds and working together to solve patient health problems and realize professional health services that focus on patients.

Keywords: health services, interprofessional collaboration (ipc), patient safety

ABSTRAK

Pendahuluan: Saat ini kemajuan dalam bidang kesehatan menuntut para tenaga kesehatan memberikan pelayanan yang profesional. Permasalahan pasien pun juga semakin kompleks. Tenaga kesehatan dituntut untuk bekerja secara terintegrasi oleh karena itu kerjasama dan kolaborasi yang baik antar profesi kesehatan sangat dibutuhkan dalam mewujudkan kepuasan pasien. Pelayanan kesehatan di rumah sakit dilakukan oleh berbagai profesi tenaga kesehatan. Praktik interprofesional kolaborasi yang efektif merupakan kunci dalam memberikan pelayanan kesehatan. Penatalaksanaan kesehatan pasien dan semua tindakan harus berfokus pada pasien. Model pemberian asuhan dengan Interprofesional kolaborasi sangat penting supaya semua layanan terkoordinasikan dan terjalin komunikasi yang baik antar pemberi asuhan. Penelitian ini bertujuan untuk mengetahui tentang pengaruh implementasi interprofesional kolaborasi terhadap pasien. **Metode:** Penelitian ini merupakan litetature review. Penelusuran artikel menggunakan beberapa database dengan kata kunci "Interprofesional kolaborasi, keselamatan pasien, pelayanan kesehatan". Data base yang dipakai adalah Google Scholar ditemukan jurnal sejumlah 15.455, EBSCO ditemukan 32, NCBI ditemukan 98, MEDLINE 23 dan ProQuest 61. Dari keseluruhan database hanya 11 yang memenuhi kriteria inklusi. **Hasil:** Meta-analisis ini menunjukkan bahwa kolaborasi interprofesional berdampak positif. Ada beberapa manfaat yang didapat dari penerapan kolaborasi interprofesional yaitu mempengaruhi keselamatan pasien, kualitas hidup pasien, mengurangi risiko terjatuh, mencegah kesalahan pengobatan, meningkatkan kualitas hidup, dan meningkatkan status fungsional pasien. pasien lanjut usia. **Simpulan:** Kolaborasi interprofesional adalah kolaborasi atau kerjasama antara orang dengan latar belakang profesi yang berbeda dan bekerja sama untuk memecahkan masalah kesehatan pasien dan mewujudkan pelayanan kesehatan yang profesional berfokus pada pasien yang dilakukan di rumah sakit.

Kata kunci: interprofessional collaboration (ipc), keselamatan pasien, pelayanan kesehatan

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INTRODUCTION

Interprofessional Collaboration is a collaboration between various health professions in the form of a team that aims to improve patient health within the boundaries or authority of each profession. In producing effective collaboration, a learning technique is needed, namely Interprofessional Education (IPE), which studies collaborative competencies so that they can be applied in actual work practices. Effective interprofessional collaborative practice is key to providing patient-focused health care. The health care system of the future depends on how health care professionals redefine the way to work together (Lestari, Saleh and Pasinringi, 2017).

Interdisciplinary practice or interprofessional collaboration of health teams involving healthcare professionals and patients aims to make joint decisions about patient health issues (Hustoft *et al.*, 2018). Good communication and collaboration between caregivers will determine the goals of care and improve the quality of life of patients (Rezapor *et al.*, 2017). The main purpose of this literature review is to provide a systematic research review of the effects of implementing interprofessional collaboration for patients. Cooperation within the health team aims to provide the right service, be carried out by the right profession, and done in the right place.. Building and maintaining health team collaboration is very much needed to provide optimal and professional health services to patients and to improve patient safety (Hustoft *et al.*, 2018)

The interdisciplinary service team emphasizes using a holistic approach, working interdependently, using communication effectively to ensure that the various needs of patients for health care are addressed and served in an integrated manner (Brown *et al.*, 2018). Interprofessional collaboration is a basic competency for caregivers (doctors, nurses, pharmacy, nutrition, physiotherapy, and other health workers) in providing patient care.

The main key that can increase good interprofessional collaboration in providing health services to patients and the community is effective communication. With effective communication good

collaboration will be established between the care giver professions

One form of communication that can be done in a hospital is the Situation, Background, Assessment, Recommendation (SBAR) communication. This method involves all professions to communicate the care provided. The patient doctor will review all treatment documentation provided via the SBAR communication. SBAR communication can be carried out with a collaborative approach from doctors, nurses, midwives, nutritionists, pharmacists, physiotherapists, and other professions related to health services for patients. In this SBAR communication, what is meant by situation is a description of the patient's actual condition, a description of the condition of the disease and changes that occur in the patient's body, including vital signs and supporting physical examinations. SBAR communication background indicates a previous history of disease. Assessment is to provide an assessment of the patient's condition, while the recommendation is to provide recommendations related to the patient's health condition. This form of SBAR communication can play an important role in transferring information from one profession to another, resulting in interaction and collaboration between professions. The main factor for improving the quality of professional patient care services, reducing errors in medication and medication errors (Irajpour *et al.*, 2019). Collaboration with nutritionists can improve the accuracy of meeting nutritional needs according to the patient's medical condition so that the patient's nutritional problems can be handled appropriately.

Interprofessional collaboration can also prevent patients from falling into the elderly (Brown *et al.*, 2018). Falling patients can be prevented because when the patient begins to be treated has received a comprehensive assessment so that the patient's condition can be handled immediately, medic therapists can immediately know the patient's condition and immediately take steps to prevent falling patients. Fall re-assessment was done by nurses. This study aims to find out about the effect of implementing interprofessional collaboration on patients.

METHODS

This study aims to explore the effect of interprofessional collaboration implementation of patient services. Literature Search was conducted

in December 2019. Researchers searched for data sources using several databases namely Google Scholar, EBSCO, NCBI, MEDLINE, and ProQuest were searched by connecting MeSH-major topic terms of “interprofessional collaboration, healthcare professionals, multi professional, hospital, effectiveness, Collaborative practice. Researchers provide limitations for searching related journals, namely between 2015-2019, to find valid sources that are not out of date and in accordance with the times.

Inclusion Criteria: The inclusion criteria included in the selection of this literature review study are: Journals must be related to Interprofessional Collaboration, this study must provide information about the benefits of Interprofessional Collaboration for patients, the complete text of the journal must be available in English and Indonesian. **Exclusion Criteria:** Not related to interprofessional collaboration, non-original articles such as letters to editors, abstracts only, and editorials.

Data Selection and Analysis: the journals were selected by researchers independently. Each database is searched by using the same keywords, "Interprofessional collaboration, patient safety, health

services". During data synthesis, 15,669 articles via database search ProQuest, Google Scholar, NCBI, EBSCO, MEDLINE. 1,444 studies were excluded after reviewing titles, 8,550 were excluded after reading abstracts. 5,675 studies were found relevant because they empirically explored the effectiveness of IPC in the health care system. During the full-text analysis of 5,675 studies, other 4,525 articles were excluded because the data did not meet the inclusion criteria and were conducted outside the hospital. This systematic review ultimately selected 11 relevant studies that fit the established criteria.

Figure 1 describes the process of selecting articles according to the guidelines from the Preferred Reporting Literature Reviews and Meta-analysis (PRISMA) (Moher *et al.*, 2009). The initial search resulted in a total of 15,669 articles showing high relevance to the topics reviewed between 2015 - 2020. After duplicating articles and filtering titles and abstracts, 1150 articles entered the next stage, namely full text review and eligibility based on inclusion and exclusion criteria. has been determined by the researcher. The 11 research articles that met the requirements were then reviewed for quality and synthesized in this final literature review report.

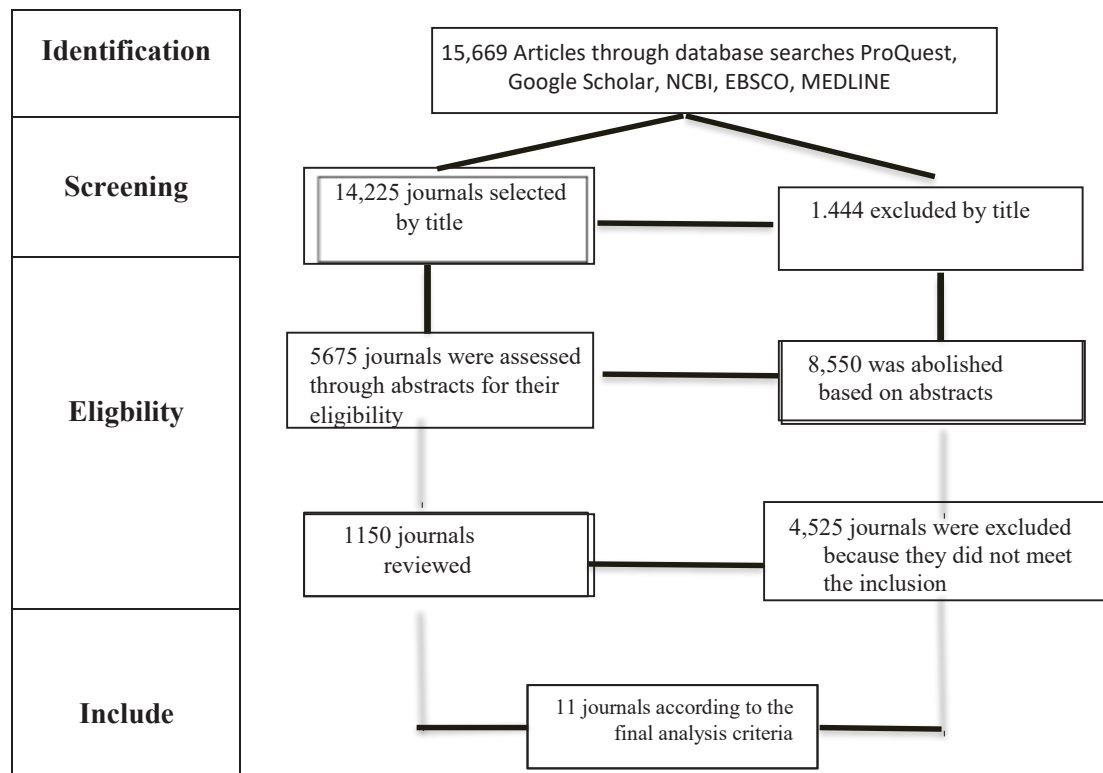


Figure 1. PRISMA Flow Diagram of Literature Review Process for Studies of Effects of Interprofessional Collaboration Implementation

RESULT

The result of this study is that the application of interprofessional collaboration is needed to support the improvement of patient safety. In communicating between doctors, nurses, pharmacists, it can be done by discussing the patient's condition, by recording the patient's status so that the patient's needs are like medication, prescription drugs and other medical actions according to patient needs by checking again and ensuring the patient's identity. One of the benefits of interprofessional collaboration is preventing medication errors. Irajpour *et al* (2019), in their research with a quasi-experimental study method (single group, before and after) in 2017. The study was conducted in the ICU room of a teaching hospital in collaboration with the Isfahan University of Medical Sciences located in Central Iran with a total of 23 beds. Participants include 50 members of the health care team (doctors, nurses, and clinical pharmacists) with at least 1 year of work experience in the ICU. Participants were selected using the census sampling method. Data were collected using a self-made two-part questionnaire. Data were analyzed using descriptive, statistical analytic, and version 16 of the SPSS software ($P < 0.05$). The results showed that the incidence of medication errors was significantly lower after the implementation of interprofessional collaboration ($P < 0.001$) between doctors, nurses, and clinical pharmacists.

The implementation of interdisciplinary team provides benefits in improving the functional status of patients (Hustoft *et al.*, 2019). Rezapoor *et al* (2017), in his research, there was an increase in the quality of life of patients from all physical, mental, and social dimensions as an effect of implementing interprofessional collaboration in the hospital. Another benefit that comes from interprofessional collaboration is improved patient care (Wietholter *et al.*, 2017). The application of interprofessional collaboration can also improve communication between health professionals through SBAR communication and integrated patient progress recording so that the function of team collaboration is to be able to provide continuous service and after rehabilitation treatment can increase the Activity Daily Living (ADL) score. (Lestari, Saleh and Pasinringi, (2017);Hustoft *et al.*, 2019).

After the researcher selects and extracts the data for each article obtained, a detailed description of the name of the researcher, title, research design,

respondent characteristics, research strengths and results, and research limitations are summarized in Table 1.

DISCUSSION

Several studies have been conducted to find out the benefits of interprofessional collaboration in health services, a total of 11 studies reviewed said that interprofessional education helps improve collaboration between care professional professionals compared to a single profession in providing services. One of the benefits of interprofessional collaboration is preventing medication errors. Irajpour *et al.* (2019), in their research with a quasi-experimental study method (single group, before and after) in 2017. The study was conducted in the ICU room of a teaching hospital in collaboration with the Isfahan University of Medical Sciences located in Central Iran with a total of 23 beds. Participants include 50 members of the health care team (doctors, nurses, and clinical pharmacists) with at least 1 year of work experience in the ICU. Participants were selected using the census sampling method. Data were collected using a self-made two-part questionnaire. Data were analyzed using descriptive, statistical analytic, and version 16 of the SPSS software ($P < 0.05$). The results showed that the incidence of medication errors was significantly lower after the implementation of interprofessional collaboration ($P < 0.001$) between doctors, nurses, and clinical pharmacists. It is consistent with research Öztekin and Yüksel, 2013, that interprofessional collaboration increases the safety of treatment. Working in a multidisciplinary manner allows the reduction of drug-related problems. Köberlein-Neu *et al.* (2016) interprofessional collaboration is very much needed in supporting the care and healing needs of patients in the hospital, besides that interprofessional collaboration also functions to improve patient safety more accurately, by joining all health professions can keep patient safety rates increasing

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Table 1. Study of the Effects of Implementing Interprofessional Collaboration on Patients

Author	Aim	Design	Sample	Result
Irajpour <i>et al.</i> , 2019	The purpose of this study was to determine the effect of interprofessional education programs on the safety of medication on medication errors by doctors and nurses in the ICU.	Quasi-experimental method (single group, before and after the implementation of interprofessional education programs).	50	The results of the study after 1 month of inter-professional education for doctors, nurses, and clinical pharmacists showed that the safety error of drugs was much lower than that before the implementation (P <0.001).
Hustoft <i>et al.</i> , 2019	The purpose of this study was to analyze how changes in patient-rated health and disability from baseline to after rehabilitation were related to communication and collaboration in the rehabilitation team and continuity of services	Cohort	701 patients	The results of the study revealed that a good rehabilitation program, including team, personal and interdisciplinary team rehabilitation care would have a better patient health impact after 1 year of follow-up.
Rezapor <i>et al.</i> , 2017	The purpose of this study was to determine the effect of interprofessional collaborative implementation on the quality of life of patients after coronary angioplasty.	Randomized controlled clinical trial	50 samples	The results of the independent t-test showed a significant difference between the two groups regarding the mean changes in quality of life scores and their dimensions in patients who underwent coronary angioplasty 3 months after the intervention (P <0.001).
Asakawa <i>et al.</i> , 2017	The purpose of this study was to investigate how to build interdisciplinary collaboration in multidisciplinary teams.	A qualitative analysis; Semi-structured interviews	Total of 26 participants	The results showed that there were three categories needed in building interprofessional collaboration: meetings, good communication and effective leadership
Lestari <i>et al.</i> , 2017	The purpose of this study was to analyze the relationship of interprofessional collaboration towards the implementation of integrated patient development records of patient progress in the patient rooms of Prof. Dr. H.M. Anwar Makkatutu Local Public Hospital in Bantaeng	Quantitative analysis with cross sectional study approach	81 people with various professions	There was a good relationship between interprofessional collaboration with the integrated implementation of patient development records.
Brown <i>et al.</i> , 2018	The purpose of this study was to describe the stages of development, documentation, and outcomes of educational programs to teach the elderly the principles of interprofessional collaborative care in the context of fall prevention.	Mixed method; one-group pretest and post-test experimental design	12 different professions	There were no effective methods for teaching fall prevention and interprofessional collaborative practices. This interprofessional educational model teaches about the competence of interprofessional cooperation in the prevention of falls and other geriatric syndromes.
Astuti <i>et al.</i> , 2019	The purpose of this study was to analyze the effect of implementing SBAR (Situation, Background, Assessment, Recommendation) in interprofessional collaboration between doctors and nurses on patient safety.	Quantitative	The profession of doctors and nurses	The results showed that the average value of specialist doctors before the intervention was in the low category, while nurses were in the high effectiveness interpersonal communication category.
Wietholter <i>et al.</i> , 2017	The purpose of this study was to observe nurses, doctors, and pharmacists who carried out interprofessional practice in completing simulations in the Nurses' interprofessional socialization, assessment round and valuing scale	Practicing nurses who completed the pre-ISVS survey prior to a centered simulation	62 nurses, 10 pharmacists and 9 physicians	Experience-based interprofessional collaboration changed nurses' perceptions of interprofessional care and the role of each discipline for the improvement of patient care.

Advanced Table 1

Author	Aim	Design	Sample	Result
Hustoft <i>et al.</i> , 2018	The purpose of this study was to measure Relational Coordination (RC) scores in an interprofessional team at seven rehabilitation centers in West Norway, to assess patient-reported benefits and continuity of rehabilitation care, and to know the relationship between the RC score and the patient's perceived benefits and ongoing care.	Prospective cohort study	Data from two surveys of patients at seven somatic rehabilitation centers in West Norway.	Continuous improvement of care services and improvement in ADL scores were associated with working as a team.
Susilaningsih, 2016	The purpose of this study was to introduce the interprofessional health service collaboration models, model components, and processes to be implemented in the inpatient room setting.	A mixed method	Stakeholders in hospitals	The average score of collective culture greater than average score of expert culture in two components of model namely integrated care pathway and team based patient care. In the other two components, integrated patient care documentation and interdisciplinary case conference the average score of expert culture greater than average score of collective culture, this is as important notes for the next preparation in implementation plan
Hustoft <i>et al.</i> , 2019	The purpose of this study was to determine changes in the patient's health status and disability, which were assessed from the start to after rehabilitation and to know the relationship within the rehabilitation team and the continuity of care for patients.	Linear models	701 patients	After 1 year of follow-up treatment by the rehabilitation care team, there were better results for the patient's health.

patient care (Wietholter *et al.*, 2017). Improved communication between health professionals through SBAR communication in integrated patient progress recording is another benefit of implementing interprofessional collaboration so as to create sustainable patient care and increase ADL scores. Rokhmah and Anggorowati (2017) in his literature review says, that professionals working together in an interprofessional team determine good service quality. The interprofessional communication used is SBAR (Situation-Background Assessment-Recommendation). From the literature search results Rokhmah and Anggorowati (2017), that good service quality depends on professionals working together in an interprofessional team.

According to research Köberlein-Neu *et al.*, 2016, interprofessional collaboration can increase the safety of the treatment. By working in a multidisciplinary team, you can reduce problems related to the provision of services by several professions. This interprofessional collaboration can also improve the ability of functional status in meeting daily needs or Activity Daily Living

(ADL) in rehabilitation patients. Rezapoor *et al.* (2017); Karina (2019) said that the intervention group with patient care using the interdisciplinary team model had a better quality of life scores in all physical, mental, and social dimensions than the control group. Analyze that build good collaboration between professions are determined by three things: regular meetings, effective communication between professions, and support from leaders. Regular meetings and good communication and effective leadership can promote good collaboration practices and will increase patient satisfaction. Lestari, Saleh and Pasinringi (2017) said that the implementation of interprofessional communication can be seen in the Integrated Patient Development Record. In his research, the results showed that documentary evidence had been well written on the CPPT. CPPT can be a means or means of collaborative practice among health workers to further optimize the implementation of interprofessional collaboration. CPPT documentation will be carried out optimally if it is equipped with adequate infrastructure, the right motivation, and is transparent, sustainable

as well as a continuous monitoring and evaluation and feedback system, as well as the role of a case manager who can facilitate and become a collaborator for all health professionals. The application of this interprofessional collaboration also has a geriatric preventative effect on patients and improves the functional status of patients who have limitations (Brown *et al.*, 2018).

Brown *et al.* (2018) said that the implementation of interprofessional inter-collaboration in the field is still difficult but his research illustrates that in the clinical flow model of patient management and patient management as a team, the mean of collective culture scores is greater than the average score of individuals, this means that practitioners tend to work cohesively by emphasizing the importance of sharing large expertise so that to build effective teamwork on interprofessional collaboration in these two components. Low *et al* (2017), efforts to increase collaboration between professionals can also be virtually multidisciplinary and proven to reduce re-hospitalization budgets. Xia, Wu and Cheng (2016) say to achieve a collaborative level of clinical practice and provide more considerate healthcare to patients. need to introduce a multidisciplinary team approach to health care professionals will improve their performance in clinical practice and meet the demands for high-quality health care required interprofessional education, practice, and team building that facilitate health care providers. Bauw (2019) said socialization and assistance to health professionals in the implementation of interprofessional collaboration is needed.

The question that arises is how do we improve the application of the interprofessional collaboration model given the many benefits that can be obtained to create professional services. This question can be the basis for further research to explore deeper the obstacles faced in the field in the application of interprofessional collaboration.

CONCLUSION

A literature review on this study found that the application of interprofessional collaboration affects patient safety, patient quality of life reduces the risk of falls, prevents medication errors, improves the quality of life, and improves patient functional status. With interprofessional collaboration, it can also improve communication between health workers through SBAR communication and integrated patient progress notes as evidence of effective

communication between professions regarding the status of patient development in realizing collaboration between professions. Effective communication in providing services to patients will improve patient safety. However, implementation in the field did not match expectations.

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