

Implementation of Nurse Doctor Collaboration in Surgical Cases for Children Patients at the Central Surgery Installation (IBS) Arjawinangun Hospital Cirebon

Ito wardin^{1,*}, Ernawati¹, Agil Putra Tri Kartika¹, Dzakiyatul Fahmi Mumtaz¹

¹ Faculty of Health Science, Universitas Muhammadiyah Cirebon, Indonesia

Abstract

The increasingly complex health needs of children require treatment from various scientific disciplines, especially when faced with surgery. Children who are hospitalized and undergo surgery for the first time will be at risk of experiencing physiological and psychological problems that affect the length of stay in hospital. It is hoped that collaboration can be a solution in pediatric surgical cases in the operating room to reduce medical errors and maintain the stability of the health status of pediatric patients until the operation is completed. The objective to describe the application of nurse-doctor collaboration in surgical cases for pediatric patients at the Central Surgery Installation (IBS) of Arjawinangun Regional Hospital, Cirebon. This research is a quantitative study with a cross sectional design. The instrument used is the CPAT consisting of 53 assessment items divided into 8 domains. The number of samples used was 41 people from the nursing and doctor professions. Data analysis used univariate and bivariate analysis using the Kruskal Walls test to see the significance of the difference in CPAT scores between nurses and doctors. The results of the study showed that there was a significant difference in perception between nurses and doctors in pediatric surgical cases in the IBS room at Arjawinangun Hospital Cirebon in domain 4 Coordination and division of roles ($p=0.000$), domain 5 Decision making and conflict management ($p=0.000$), domain 6 Leadership ($p=0.010$) and domain 8 Patient involvement ($p=0.040$). There is a significant difference in perception between the medical profession and the medical profession regarding collaboration on pediatric surgical cases on IBS wards. Given the differences between surgery and the medical profession, it is necessary to conduct another perception regarding interprofessional collaboration to improve health services for children.

Keyword: Pediatric Surgical Patients; CPAT; Hospitalization; IPCP

Article info: Sending on February 28, 2024; Revision on May 13, 2023; Accepted on May 25, 2024

*) Corresponding author: Ito wardin
E-mail: ito@umc.ac.id

1. Introduction

In today's modern era, increasingly complex health needs require treatment from various scientific disciplines (Mumtaz, 2021; Robben et al., 2012). Collaboration, communication and care coordination are very limited in traditional health systems in health services (Kenaszchuk et al, 2011; Mumtaz, 2021). According to Chan & Wood (Chan & Wood, 2010) in Van Dongen et al (2016) stated that this condition is exacerbated by the reality that human resources are decreasing, health care costs are increasing and patient safety issues are becoming a major issue. This problem has given rise to new innovations in the field of health services through interprofessional care to improve the quality of health services (Kenaszchuk et al, 2011; Mumtaz, 2021). Interprofessional collaborative practice is a process when several different professional health

workers provide comprehensive health services, working together with patients, patient families, nurses (caregivers) and the community to provide excellent quality care (World Health Organization, 2010).

Collaborative practice or Interprofessional Collaboration Practice (IPC) when various health professions join forces with at least 2 professions, such as nurses and doctors, then the treatment results will be better (McNair et al, 2005; Mumtaz, 2021). This innovation has given rise to professionalism practices that are associated with inter-professional collaboration, patient-centered and team-based care to provide coordinated health services (Ketcherside et al., 2017). This collaboration and mutual communication will provide different perspectives in the health team regarding health problems and ultimately be able to offer more holistic patient

health solutions (Chan & Wood, 2010; Mumtaz, 2021). Most nurses work as members of clinical health care teams in health services by providing and coordinating health care and education for patients and families and creating medication and follow-up care plans (Bureau of Labor Statistics, 2016).

According to Hogg et al (Hogg et al., 2009) in Mumtaz (Mumtaz, 2021) that interprofessional practice carried out collaboratively or Interprofessional Collaboration Practice (IPCP) can improve the patient's health status. Various literature also shows that effective interprofessional teams can help reduce unnecessary services and interventions, reduce health costs, improve patient health outcomes, increase retention and recruitment of human resources in health services, increase clinical effectiveness and provide effective integrated care for patients in various forms of service including in the operating room (Barrett et al, 2007; Chan & Wood, 2010; Hall & Weaver, 2001).

Collaboration between health professionals is needed because in any treatment, including pediatric surgical cases, their needs can be met not only by one single health profession (Rahma, 2020). Health workers who are usually associated with pediatric surgical cases are called surgical teams consisting of surgical nurses, specialist surgeons, and a team of anesthesiologists appointed to assist with operations (Agustina et al, 2020; Nurhayati & Suwandi, 2019). It's sad that there is a difference in understanding between health workers such as nurses and doctors regarding interprofessional collaboration, even though if an apperception is carried out regarding interprofessional collaboration it will increase better output considering that the two professions have different experiences that have been experienced/observed in the field. Research conducted in Denmark states that if collaborative practices are not applied to surgical patients, one of which is pediatric surgery, it can increase the length of stay by almost 50% (Irawati et al, 2022). The application of this interprofessional collaboration in practice in the surgical field, for example the use of surgical prophylaxis antibiotics, if collaboration is not optimal, it will increase the inaccuracy of administering antibiotics, thereby increasing the risk of surgical site infections (SSI) and drug resistance (Irawati et al, 2022). The incidence of SSI in Indonesia occurs around 2-5% of the 27 million patients operated on every year, contributing 25% of the total incidence of nosocomial infections in hospitals (Irawati et al, 2022; World Health Organization, 2010). Based on the results of a preliminary study at Arjawinangun Cirebon Regional Hospital in the Central Surgical Installation (IBS) section on August 7 2023, it was found that the incidence of Surgical Site Infections (SSI) in 2022 was 4 cases with the number of surgical patients under SSI surveillance amounting

to 2,472 surgical cases. This form of collaboration is not only related to structures, services or work flows between professions but also focuses on increasing the synchronization of services in the operating room (Bendaoud & Callens, 2017; WHO, 2016).

In the United States, 5 million children receive hospital treatment due to surgery and more than 50% experience anxiety and stress (Ekasaputri & Arniyanti, 2022; Kaluas et al, 2015). In Indonesia, based on the results of the National Economic Survey (SUSENAS), 30.82% of the total population of Indonesia are children aged 3-5 years, with a prevalence of 35% of children experiencing anxiety when undergoing treatment in hospital, one of which is due to surgery. So collaboration between nurses and doctors is expected to be able to reduce medication errors and maintain the stability of the patient's health status until the operation is completed, especially in pediatric patients (Alini, 2017; Jayasuriya-Illesinghe et al, 2016; Mumtaz, 2021).

2. Method

The research design is non-experimental research with an analytical cross-sectional research design. The location of the research was the Central Surgical Installation (IBS) of Arjawinangun Hospital, Cirebon, West Java Province. The number of samples used was 41 people from the nursing and doctor professions. The details are 22 surgical nurses, 7 anesthesia nurses, 9 surgical specialist doctors and 3 anesthesia specialist doctors who work at the Central Surgical Installation (IBS) at Arjawinangun Hospital, Cirebon. The sample met the inclusion criteria, namely being willing to be research respondents, nursing and medical staff who worked at the Central Surgical Installation (IBS) of Arjawinangun Regional Hospital, Cirebon, and had handled surgical cases for pediatric patients more than once. The exclusion criteria are obstetrics and gynecology specialist doctors, midwives, nursing and medical personnel who work at the Central Surgical Installation (IBS) of Arjawinangun Hospital, Cirebon, who are involved in legal issues. Collaboration was measured using the Indonesian version of the CPAT (Collaboration Practice Assessment Tool) questionnaire to measure the implementation of collaboration and obstacles when implementing interprofessional collaboration between nurses and doctors which consists of 8 domains with 53 statements.

3. Results

Table 1 shows that the majority of respondents are in the age range 46-66 years (>50%) with an average age of 47.12 years. Meanwhile, the majority of professions are nurses (70.7%), consisting of surgical nurses and anesthesia nurses who handle pediatric surgical cases at IBS,

Arjawinangun Regional Hospital, Cirebon and are research respondents. Table 2 shows that the average value of the CPAT score is that there are differences in perception between the nursing and medical professions in domain 4 (coordination and division of roles), domain 5 (decision making and conflict management), domain 6 (leadership) and domain 8 (patient involvement) with significance value <0.05.

Table 3 shows variations in 5-point Likert scale scores for the nursing and doctor professions with differences that are not too large (difference range < 1). Table 4 shows that the nursing profession has a lower total CPAT score than the medical profession with an average difference of 2.86 between the two professions, but the range between the two professions is not too far (<5 points).

Table 1. Characteristics of Nursing and Medical Personnel (n=41)

Respondent Characteristics	Profession				Mean±SD
	Doctor		Nurse		
Age (years)	f	%	f	%	
26-35	0	0	4	13,8	47,12±9,152
36-45	4	33,3	8	27,6	
46-66	8	66,7	17	58,6	
TOTAL	12	100	29	100	

Table 2. Distribution of average CPAT scores based on Nursing and Medical professions at IBS RSUD Arjawinangun Cirebon, 2023 (n=41)

Domain	EnglishNilai Maks	Profession		P Value*
		Doctor	Nurse	
		Mean±SD		
Relationships between members	45	38.58±1.240	38.96±1.267	0.409
Team barriers to collaboration	25	22±0.00	22±0.00	1.000
Team relationships with the community	20	14.58±0.668	15.06±0.752	0.051
Coordination and division of roles	70	58.08±1.564	54.96±1.267	0.000*
Decision making and conflict management	10	3.83±0.389	4.68±0.470	0.000*
Leadership				
Decision making and conflict management	25	21.08±0.288	20.03±0.944	0.001*
Leadership				
Mission, goals and objectives	45	37.41±0.792	37.82±1.136	0.284
Patient involvement	25	21.25±0.866	20.41±1.452	0.040*

*Significance 0.05 (Kruskal-Wallis)

Table 3. Distribution of 5-point Likert scale scores based on nursing and medical professions at IBS RSUD Arjawinangun Cirebon, 2023 (n=41)

Domain	Profesi	
	Doctor	Nurse
Relationships between members	4.28	4.32
Team barriers to collaboration	4.40	4.40
Team relationships with the community	3.64	3.76
Coordination and division of roles	4.14	3.92
Decision making and conflict management	1.91	2.34
Leadership Mission, goals and objectives	4.21	4.00
Leadership Mission, goals and objectives	4.15	4.20
Patient involvement	4.25	4.08

Table 4. Distribution of total CPAT scores for the Nursing and Medical Profession at IBS RSUD Arjawinangun Cirebon, 2023 (n=41)

Profession	Skor Total CPAT		Total Respondent	Mean±SD
	211-215	216-220		
Doctor	3	9	12	216.83±2.290
Nurse	22	7	29	213.97±2.307

4. Discussion

Based on the research results in table 1, it was found that 25 respondents from nursing staff and medical staff who worked on pediatric surgical cases at IBS, Arjawinangun Hospital, Cirebon, were aged between 46-66 years (61%). This age range is the elderly (Hakim, 2020). The elderly age enters a transition period where according to Erikson's social psychology development stages the developmental task is the stage of integrity versus despair (Cherry, 2018). Integrity relates to honest behavior, sincerity and credibility. The concept of active aging, which refers to elderly people who are still able to work, especially in health clinical areas, will be able to improve the quality of life of these elderly people because they participate in society with full integrity according to their profession (Ayuningtyas et al, 2018; Hakim, 2020). The health profession aims to provide good and optimal health services because health is one of the human rights that is exercised in health services such as hospitals (Kusuma et al, 2021). Hospitals are a form of multidisciplinary service because the majority of services there are carried out by various fields of health professions such as medical and nursing personnel which have the potential to cause interprofessional conflicts and slow down services for patients (Kusuma et al, 2021; Siokal, 2021). Based on table 1, it is found that the ratio of respondents between nursing staff and medical staff in pediatric surgical cases at IBS, Arjawinangun Hospital, Cirebon, is 2.4:1, which means the number of nurses is 2-3 times the number of doctors. Nursing services are a profession that dominates in a hospital because they are a reflection of the success of health services (Kusuma et al, 2021). This ratio is usually based on the number of beds available in the hospital so that the nursing profession is the majority profession in hospitals. This is related to patient safety and reduced hospital mortality. So, following the ratio of increasing the number of nursing staff can reduce concerns about the incidence of patient deaths in hospitals (Fagerstrom et al, 2018). Based on table 2, the results of the CPAT scores between nurses and doctors in the IBS room were obtained with details of scores in 8 domains including: (1) relationships between members, (2) team obstacles in collaboration, (3) team relationships with the community, (4) coordination and division of roles, (5) decision making and conflict management, (6) leadership, (7) mission, goals and objectives, and (8) patient involvement. Table 2 shows significant differences in 4 domains, namely domain 4 (coordination and division of roles), domain 5 (decision making and conflict management), domain 6 (leadership), and domain 8 (patient involvement). This shows that the nursing and medical professions have different perceptions about collaboration in the operating room (Kusuma et al, 2021). In domain 4

regarding coordination and division of roles, there are differences in perceptions between nurses and doctors among respondents in this study. Even though coordination is important considering the need to achieve common goals in improving patient health and safety, especially in the operating room, so it is necessary to share knowledge and respect each other between professions (Kusuma et al, 2021; Mumtaz, 2021). Patient safety by reducing the incidence of medical errors is achieved if the entire team works together comfortably, cooperatively, and coordinated to avoid gaps in quality assurance of health services (Morley & Cashell, 2017).

In research by Orchard et al (2018) in the Assessment of Interprofessional Team Collaboration Scale (AITACS) grouped the implementation of interprofessional collaboration into 4 dimensions, namely (1) partnerships, (2) cooperation, (3) shared decision making, and (4) coordination. Partnerships will be effective if open and respectful relationships are created to achieve common goals. The shared decision making aspect is taking responsibility with joint decisions based on the practitioner's educational background and abilities. Meanwhile, the coordination aspect is providing information to each other in an interprofessional manner. So if one aspect is damaged then the collaboration will not run optimally. Sometimes professional backgrounds do not understand their own roles and responsibilities towards other health workers, resulting in chaotic coordination and power in a collaborative team (Husna, 2022; Kusuma et al, 2021; Orchard et al., 2018). In table 2 it is also found that there is a significant difference in perception between the nursing and doctor professions in domain 5 (decision making and conflict management) among research respondents at IBS RSUD Arjawinangun Cirebon. Role conflict can occur in any situation where collaborative teams work together. Role conflict arises if individuals carry out roles that are contradictory or not according to their wishes. Conflicts like this can affect interprofessional collaboration (Maha, 2019). Conflict can have an impact on reducing the performance of nurses and doctors, especially when handling pediatric surgical cases at IBS, Arjawinangun Hospital, Cirebon. So different ways are needed to handle conflict, one of which is conflict management to increase good work productivity (Saputra & Alkhusari., 2021). If there are other health workers who dominate too much, then the role of decision making and conflict management is to mediate when colleagues and between professionals have conflicts (Kusuma et al, 2021; Saputra & Alkhusari., 2021).

Resolving conflicts through collaboration has a positive impact on team performance (Rusdiana, 2015). When several members of an interprofessional team have differences in collaboration perspectives and result in conflict, this

condition will bring each other down between professions, as a result, the performance that was originally intended to achieve what was expected becomes inversely proportional to the initial goal (Saputra & Alkhusari., 2021). This is contrary to Doekhie's (2017) research that backgrounds with different scientific disciplines have a high level of coordination because they tend to see professions as part of the same team. In fact, dividing roles according to each scientific discipline will increase mutual understanding and harmonize coordination between the nursing and medical professions (Homeyer et al, 2018). The research results show that the nursing profession has a lower average score than the medical profession in the domain of coordination and division of roles. The nursing profession needs to better understand the role of itself and other health workers and the importance of coordination in interprofessional collaboration. The nursing profession still believes that collaborative practices and consultations are only carried out when necessary (Kusuma et al, 2021). In table 2, domain 6 (leadership) also has different perceptions about collaboration among research respondents, namely nursing and medical staff at IBS RSUD Arjawinangun Cirebon. The concept of power is closely related to leadership. Leadership qualities act as an initiator who is able to move many things under him, including the collaborative team. In a collaboration, participation is required from each collaboration team so that the common goal can be achieved (Utami et al, 2019). The current model of interprofessional collaborative practice in Indonesia is still a traditional hierarchy, namely that the final decision on patient care is in the hands of the doctor (Kusuma et al, 2021). This is in accordance with the results of this study that the highest score in the leadership domain is the medical profession. The medical profession or doctors still feel they have authority and lead in decision making on all patient health issues (Kusuma et al, 2021; Utami et al, 2017). This is also related to the results of this study which state that the nursing profession is low in the domain of coordination and division of roles. So when doctors stand out too much and "lead" service actions, nurses don't really understand the actual role of other health workers who are also "equal" in making decisions and providing care to patients (Kusuma et al, 2021; Mumtaz, 2021).

In table 2 there are also significant differences in perceptions between the nursing and doctor professions in domain 8 (patient involvement). Research et al (Ita et al., 2021) reports that the quality of services provided by hospitals tends to be assessed by patients in the form of services provided by doctors and nurses, especially in the context of hospital services. Patients will feel satisfied if doctors and nurses are involved in patient care and build good relationships or partnerships

because the better the service provided, the more patient satisfaction will increase. The research results in table 4 show that there are differences in CPAT scores between the nursing profession and the medical profession. There is a difference in score of 2.86 between the two professions with the nursing profession having a lower score. This proves that the nursing profession needs to better understand its own role, demonstrate its own qualities and increase collaboration with other health workers. The Indonesian version of the CPAT questionnaire is used to identify obstacles in interprofessional collaboration (Kusuma et al, 2021). The recommended hierarchy of interprofessional collaborative practice should be patient-centered while still understanding the roles and responsibilities according to each profession (Mumtaz, 2021; Supper et al, 2015). Yusra's research (2019) reports that a complementary model in interprofessional collaboration practice is the absence of a dominant profession for other professions. Collaboration between health workers with different backgrounds should form a collaborative solution to patient health problems (Morgan et al, 2015; Yusra et al, 2019). The dominance of one profession and differences in perspectives between nursing staff and medical staff will automatically affect the quality of health services (Kusuma et al, 2021). So it is necessary to restructure the perspective between health workers in interpreting interprofessional collaboration in order to improve the quality of health services in hospitals.

5. Conclusions and Suggestions

Based on the research results, there are different perceptions regarding the implementation of nurse-doctor collaboration in surgical cases for pediatric patients at the Central Surgical Installation (IBS) of Arjawinangun Hospital, Cirebon, which are still not the same ($p < 0.05$) in domain 4 (coordination and division of roles), domain 5 (decision making and conflict management), domain 6 (leadership) and domain 8 (patient involvement). This is due to the dominance and differences in perspectives between the nurse-doctor profession in interpreting interprofessional collaboration. Therefore, it is hoped that hospitals can restructure the concept of collaboration for all health workers in various service lines, especially in operating rooms for pediatric patients to improve the quality of health services produced.

6. References

- Agustina, Else., Viera Wardhani., Asti Melani Astari. (2020). Asesmen Praanestesi : Bukan Sekedar Kepatuhan. *Journal of Hospital Accreditation*, 02(4), 32–40.
- Alini, A. (2017). Pengaruh Terapi Bermain Plastisin

- (Playdough) terhadap Kecemasan Anak Usia Prasekolah (3-6 tahun) yang mengalami Hospitalisasi di Ruang Perawatan Anak RSUD Bangkinang Tahun 2017. *Jurnal Ners Universitas Pahlawan Tuanku Tambusai*, 1(2), 1–10.
- Ayuningtyas, Dumilah., Parinduri, Siti Khodijah., Susanti, Fitria Aryani. (2018). Integritas kepemimpinan antikorupsi di sektor kesehatan. *Jurnal Antikorupsi*, 4(1).
- Barrett, J., Curran, V., Glynn, L., & Godwin, M. (2007). CHRSF synthesis: Interprofessional collaboration and quality primary healthcare. *Canadian Health Services Research Foundation*, December, 1–48. <https://doi.org/10.1002/14651858.CD010823.pub2>. Copyright
- Bendaoud, M. L., & Callens, S. (2017). *Introduction: New Healthcare Systems BT - New Health Systems* (pp. xi–xxvii). Elsevier. <https://doi.org/https://doi.org/10.1016/B978-1-78548-165-9.50010-1>
- Bureau of Labor Statistics, U. S. D. of L. (2016). *Occupational Outlook Handbook, Health Educators and Community Health Workers*. U.S. Bureau of Labor Statistics.
- Chan, A., & Wood, V. (2010). Preparing Tomorrow's Healthcare Providers for Interprofessional Collaborative Patient-Centred Practice Today. *University of British Columbia Medical Journal*, 1(2), 22–24.
- Cherry, K. (2018). *Erik Erikson's stages of psychosocial development*. Verywell Mind.
- Doekhie, KD., Buljac- Samardzic, M., Strating, MMH, Paauwe, J. (2017). Who is on the primary care team? Professionals' perceptions of the conceptualization of teams and the underlying factors: a mixed-methods study. *BMC Family Practice*, 18(111).
- Ekasaputri, Sri., A. Arniyanti. (2022). Efektifitas Terapi Audio Visual (Film Kartun) Terhadap Kecemasan Pada Anak Usia Pra Sekolah. *Jurnal Ilmiah Kesehatan Sandi Husada*, 11(1), 57–63. <https://doi.org/10.35816/jiskh.v11i1.699>
- Fagerstrom, L., Kinnunen, M., Saarela, J. (2018). Nursing workload, patient safety incidents and mortality: an observational study from Finland. *BMJ Open*, 8(4).
- Hakim, L. N. (2020). Urgensi Revisi Undang-Undang tentang Kesejahteraan Lanjut Usia. *Aspirasi: Jurnal Masalah-Masalah Sosial*, 11(1), 43–55. <https://doi.org/10.22212/aspirasi.v11i1.1589>
- Hall, P., & Weaver, L. (2001). *Interdisciplinary education and teamwork: a long and winding road*. PG - 867-75 (Issues 0308-0110 (Print), pp. 867–875).
- Hatimah, Sanah Hatul., Ningsih, Rastia., Syahleman, Rukmini. (2022). Hubungan Pengetahuan dengan Kecemasan pada Pasien Pre Operasi di Ruang Meranti RSUD Sultan Imanuddin Pangkalan Bun. *Jurnal Borneo Cendekia*, 6(1).
- Hogg, W., Lemelin, J., Dahrouge, S., Liddy, C., Armstrong, C. D., Legault, F., Dalziel, B., & Zhang, W. (2009). Randomized controlled trial of Anticipatory and Preventive multidisciplinary Team Care: For complex patients in a community-based primary care setting. *Canadian Family Physician*, 55(12). <https://doi.org/55/12/e76> [pii]
- Homeyer, S., Hoffmann, W., Hingst, P., Oppermann, RF., Dreier-Wolfgramm, A. (2018). Effect of interprofessional education for medical and nursing student: enablers, barriers and expectations for optimizing future interprofessional collaboration-a qualitative study. *BMC Nurs*, 17(13).
- Husna, Nur Indah Gusnari Fithratul. (2022). *Persepsi Tenaga Kesehatan terhadap Implementasi Kolaborasi Interprofesi di Rumah Sakit Pendidikan Universitas Andalas*. Universitas Andalas.
- Irawati, Adinda Dessi., Herawati, Fauna., Wiyono, Heru., Yulia, R. (2022). Optimalisasi Clinical Pathway “ Penggunaan Antibiotik ” dalam Praktik Kolaborasi Interprofesional Manajemen Perawatan Pasien Bedah Ortopedi di Surabaya. *Media Pharmaceutica Indonesiana*, 4(1), 75–83.
- Ita, K., Pramana, Y., & Righo, A. (2021). Implementasi interprofessional collaboration antar tenaga kesehatan yang ada di rumah sakit Indonesia : Literature review. *Jurnal ProNers*, 6(1), 1–6.
- Jayasuriya-Illesinghe, V., Guruge, S., Gamage, B., & Espin, S. (2016). Interprofessional work in operating rooms: A qualitative study from Sri Lanka. *BMC Surgery*, 16(1). <https://doi.org/10.1186/s12893-016-0177-7>
- Kaluas, I., Ismanto, A. Y., Kundre, R.M. (2015). Perbedaan Terapi Bermain Puzzle dan Ber cerita Terhadap Kecemasan Anak Usia Prasekolah (3-5 tahun) selama Hospitalisasi di Ruang Anak RS TK. III RW Monginsidi Manado. *Jurnal Keperawatan*, 3(2).
- Kenaszchuk, C., MacMillan, K., van Soeren, M., & Reeves, S. (2011). Interprofessional simulated learning: short-term associations between simulation and interprofessional collaboration. *BMC Medicine*, 9(1), 29. <https://doi.org/10.1186/1741-7015-9-29>
- Ketcherside, M., Rhodes, D., Powelson, S., Cox, C., & Parker, J. (2017). Journal of Professional Nursing Translating interprofessional theory to interprofessional practice. *Journal of Professional Nursing*, 33(5), 370–377.

- <https://doi.org/10.1016/j.profnurs.2017.03.002>
- Kusuma, Meradiana Widya., Herawati, Fauna., Setiasih., Yulia, Rika. (2021). Persepsi Tenaga Kesehatan dalam Praktik Kolaborasi Interprofesional di Rumah Sakit di Banyuwangi. *Media Kesehatan Masyarakat Indonesia*, 20(2), 106–113.
- Maha, Nadila. (2019). *Hambatan kolaborasi antarprofesi di rumah sakit*. INA-Rxiv Papers.
- McNair, R., Stone, N., Sims, J., & Curtis, C. (2005). Australian evidence for interprofessional education contributing to effective teamwork preparation and interest in rural practice. *Journal of Interprofessional Care*, 19(6), 579–594.
<https://doi.org/10.1080/13561820500412452>
- Morgan, S., Pullon, S., McKinlay, E. (2015). Observation of interprofessional collaborative practice in primary care teams: an integrative literature review. *International Journal of Nursing Studies*, 52(7), 1217–1230.
- Morley, L., Cashell, A. (2017). Collaboration in Health Care. *Journal of Medical Imaging and Radiation Sciences*, 48(2), 207–216.
- Mumtaz, D. F. (2021). THE EFFECTIVENESS OF INTERPROFESSIONAL COLLABORATION PRACTICE IN OPERATING ROOM. *Jurnal Keperawatan Respati Yogyakarta*, 8(3), 208–214.
- Nurhayati, S., Suwandi, S. (2019). Kepatuhan perawat dalam implementasi Surgical Safety Checklist terhadap insiden keselamatan pasien Ponak di Rumah Sakit Semarang. *Jurnal Smart Keperawatan*, 6(1).
- Orchard, C., Pederson, L. L., Read, E., Mahler, C., & Laschinger, H. (2018). Assessment of Interprofessional Team Collaboration Scale (AITCS): Further Testing and Instrument Revision. *The Journal of Continuing Education in the Health Professions*, 38(1), 11–18.
<https://doi.org/10.1097/CEH.0000000000000193>
- Rahma, Asyahrria Nur. (2020). *Peran rekam medis dalam meningkatkan komunikasi efektif pada pelaksanaan kolaborasi interprofesional di rumah sakit*. STIKES Panakkukang Makassar.
- Robben, S., Perry M FAU - van Nieuwenhuijzen, L., van Nieuwenhuijzen L FAU - van Achterberg, T., van Achterberg T FAU - Rikkert, M. O., Rikkert MO FAU - Schers, H., Schers H FAU - Heinen, M., Heinen M FAU - Melis, R., & Melis, R. (2012). *Impact of interprofessional education on collaboration attitudes, skills, and behavior among primary care professionals*. PG - 196-204 LID - 10.1002/chp.21145 [doi] (Issues 1554-558X (Electronic), pp. 196–204). J Contin Educ health.
- Rusdiana, Khasanah. (2015). *Pengaruh Keadilan Distributif, Keadilan Prosedural Dan Keadilan Interaksional Terhadap Kepuasan Kerja Dan Kinerja Pegawai Puskesmas*. Universitas Sebelas Maret.
- Saputra, Muhamad Andika Sasmita., A. (2021). Manajemen konflik sebagai strategi peningkatan kinerja tenaga kesehatan di RSUD. *Jurnal 'Aisyiyah Medika*, 6(1), 71–92.
- Siokal, B. (2021). Potensi Penerapan Interprofessional Collaboration Practice (IPC) Di Rumah Sakit Universitas Hasanuddin. *Journal of Muslim Community Health (JMCH)*, 2(1), 1–8.
- Supper, I., Catala, O., Lustman, M., et al. (2015). Interprofessional collaboration in primary health care: a review of facilitators and barriers perceived by involved actors. *Journal of Public Health*, 37(4), 716–727.
- Utami, Dian Oktumulada., Syfanah, Hanny., Kindly, Bianda Tasyaikilla. (2019). *Pentingnya peran kolaborasi kepemimpinan tenaga kesehatan dan pemangku kebijakan untuk mewujudkan Health Cities*.
- Utami, L., Hapsari, S., Widyandana, W. (2017). Hubungan Antara Sikap dan Perilaku Kolaborasi dan Praktik Kolaborasi Interprofesional di Ruang Rawat Inap Rumah Sakit Panti Rapih. *Jurnal Keperawatan Muhammadiyah*, 1(2), 28–38.
- van Dongen, J. J. J., Lenzen, S. A., van Bokhoven, M. A., Daniëls, R., van der Weijden, T., & Beurskens, A. (2016). Interprofessional collaboration regarding patients' care plans in primary care: a focus group study into influential factors. *BMC Family Practice*, 17(1), 58. <https://doi.org/10.1186/s12875-016-0456-5>
- WHO. (2016). *Framework on integrated people-centred health services: an overview*. <https://doi.org/10.1111/igs.13866>
- World Health Organization. (2010). Framework for Action on Interprofessional Education & Collaborative Practice. *Practice*, 1–63. <https://doi.org/10.1111/j.1741-1130.2007.00144.x>
- Yusra, RY., Findyartini, A., Soematri, D. (2019). Healthcare professionals' perceptions regarding interprofessional collaborative practice in Indonesia. *Journal of Interprofessional Education & Practice*, 15, 24–29.