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## Analysis of Obstacles in the Implementation of the Clinical Pathway in Indonesia: Integrative Review

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#### **Abstract**

This review aims to analyze the obstacles in the implementation of clinical pathways in Indonesia. Integrative review refers to the Preferred Reporting Items for Systematic Review and Meta-Analyses checklist. Literature search used PubMed, ProQuest, DOAJ, Garuda and Google Scholar with the following criteria: 1) studies using a sample of health service staff; 2) studies that present the results of obstacles in the implementation of clinical pathways; 3) published in the last 5 years (2016-2021); and 4) studies conducted in Indonesia, both in Indonesian and English. Studies are excluded if: 1) do not have the full text; 2) duplicate articles; and 3) review articles. Assessment of study quality uses the Critical Appraisal Skills Program Qualitative-Checklist, Mixed Methods Appraisal Tool-Version-2018 and the Critical Appraisal Skills Program Case Study. Six articles were identified in this review, including three qualitative studies, two mixed-methods studies and one case study. We identified a number of obstacles in the implementation of clinical pathways in several hospitals in Indonesia, but the most reported obstacles were the lack of outreach and training related to the implementation of clinical pathways in hospitals and the lack of compliance of officers in implementing clinical pathways. In the implementation of clinical pathways in several hospitals in Indonesia, many obstacles were identified that caused the implementation of clinical pathways to be not optimal. Therefore, evaluation must be carried out routinely so that it can identify various obstacles in the implementation of clinical pathways in hospitals.

**Keywords:** Health Service Workers, Obstacles, Implementation, Clinical Pathway

#### Introduction

Hospitals (RS) as a health institution are obliged to provide services to all patients without reducing the quality of service and have an obligation to provide safe, quality health, do not discriminate against patients and effectively prioritize patient needs based on hospital service standards (Paat et al., 2017) ). One of the efforts made to achieve this is by implementing a clinical pathway as a clinical pathway guide for all staff in providing services to patients (Sylvester & George, 2014).

Clinical Pathway (CP) is an evidence-based structured multi-disciplinary treatment plan that describes all relevant diagnostic and therapeutic steps in the care of patients with specific health problems (Lawal et al., 2016). CP is used to translate evidence into practice by considering regional conditions and demands as the final step in applying evidence-based knowledge into practice (Rotter et al., 2013). CP has the potential to reduce medication errors which can improve patient health outcomes and quality of care, increase the effectiveness of the health

care system, maximize the effectiveness of available resources, establish consistent standard care procedures and control costs (Yan et al., 2011). Previous literature studies suggest that the development and application of CP has a positive correlation with risk control and improving the quality of services in hospitals, because the presence of CP will improve intra- and intermultidisciplinary communication, good teamwork and efficient treatment planning (Hadira et al., 2020).

Due to the demands of change in the healthcare system, it is considered important to align the quality of care and evidence-based practices with the economic aspects and patient expectations so that CP becomes the answer to overcome unwanted variations in evidence-based, reliable and patient-centered hospital healthcare. (Urizar et al., 2018). Currently most CPs are developed internally within hospitals so the quality of CPs may be limited by a lack of rigor and expertise in interpreting the best evidence for inclusion in these pathways which can pose greater challenges and obstacles during implementation in the field (Jabbour et al., 2018). According to Evans-lacko et al (2010) obstacles to the use of CP can be present at the development, implementation and evaluation stages so that they can hinder success in its implementation.

A number of reviews regarding the implementation of CP have been carried out, including a systematic review involving 14 studies in English and German which identified obstacles and facilitators for CP implementation in primary care (Seckler et al., 2020); a systematic review in Indonesia involving 12 studies from all countries identified the application of an effective interprofessional collaboration model in efforts to improve patient safety (Keumalasari et al., 2021); a review of previous literature which was also conducted in Indonesia on 24 studies that identified the effectiveness of CP on interprofessional collaboration and quality of health services (Asmirajanti et al., 2018). However, the review related to the obstacles to the implementation of CP in Indonesia is not yet known. Therefore, this integrative review aims to analyze the obstacles in implementing clinical pathways in Indonesia.

#### **Methods**

### Design

This review uses an integrative review approach to summarize past empirical or theoretical literature from various research methodologies including experimental and non-experimental in order to provide a more comprehensive understanding of certain phenomena or health problems (Cronin & George, 2020). This approach is considered in accordance with the purpose of this review, namely to analyze various obstacles in the implementation of clinical pathways in Indonesia so that it will provide comprehensive information to service workers and policy makers in hospitals. The preparation of this integrative review refers to the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) checklist guidelines to minimize bias in the identification, selection and synthesis of articles being reviewed (Moher et al., 2016).

### **Search Strategy**

Article searches used five databases, namely: PubMed, ProQuest, DOAJ, Garuda and Google Scholar with the keywords: (health service staff OR health workers) AND (barriers OR hurdle OR obstacle) AND (implementation clinical pathway OR application clinical pathway).

Table 1. Keywords Used in Searching Articles in the Database

Database	Keyword	<b>Access Date</b>	Results
PubMed	((health service staff OR health workers[MeSH Terms])	28-29	83
	AND (barriers OR hurdle OR obstacle[MeSH Terms])) AND	Nov 2022	

	(implementation clinical pathway OR application clinical pathway[MeSH Terms])		
ProQuest	(health service staff OR health workers) AND (barriers OR hurdle OR obstacle) AND (implementation clinical pathway OR application clinical pathway)	28-29 Nov 2022	126
DOAJ	(health service staff) AND (barriers) AND (implementation clinical pathways)  Search by article	02-04 Des 2022	9
Garuda	(tenaga kesehatan) AND (hambatan) AND (pelaksanaan clinical pathway)  Search by abstract	02-04 Des 2022	7
Google Scholar	(staf pelayanan kesehatan OR tenaga kesehatan) AND (hambatan OR kendala) AND (pelaksanaan <i>clinical pathway</i> OR implementasi alur klinis)	02-04 Des 2022	1.250

#### **Inclusion and Exclusion Criteria**

The inclusion criteria established in this review are: 1) all studies using a sample of health service staff; 2) all studies presenting results regarding barriers to implementation of CP; 3) published studies of the last 5 years (2016-2021); and 4) all studies conducted in Indonesia, both in Indonesian and English. Studies are excluded if: 1) do not have the full text; 2) duplicate articles; and 3) review articles.

#### **Search Results**

In our initial search, we identified 1,475 relevant articles. After reviewing the year of publication, article language and duplicate articles, 58 articles were filtered out. We screened 17 full text articles and resulted in 6 articles for inclusion in this review (Figure 1).

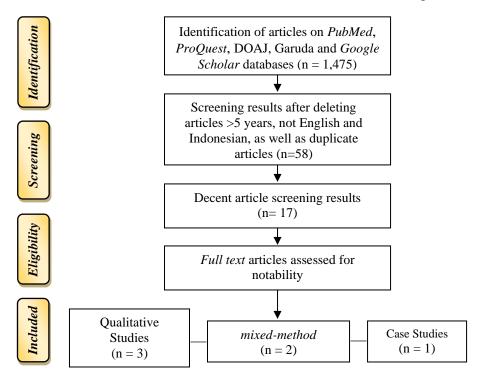


Figure 1: Flow Diagram of the Study Search and Selection Process

## **Critical Appraisal and Data Syenthesis**

In this review, an assessment of the quality of the articles was carried out by the main author (TH) and then discussed with the second and third authors (RR and EF) to obtain agreement on the selection of articles to be included in the review. For qualitative study designs assessed using the Critical Appraisal Skills Program (CASP) Qualitative-Checklist (Critical Appraisal Skills Program, 2018) (table 2), the Mixed-Methods study used the Mixed Methods Appraisal Tool (MMAT) Version-2018 (Hong et al. , 2018) (table 3) and the case studies were assessed using the Critical Appraisal of a Case Study (CEBM, 2016) (table 4).

The synthesized findings in the data table included: author, year, purpose, study design, sample, data collection and analysis and findings (table 5).

Questions	(Paat et al., 2017)	(Nurliawati et al., 2019)	(Wardhana et al., 2019)
Is there a clear statement about the purpose of the study?	Yes	Yes	Yes
Is qualitative methodology appropriate?	Yes	Yes	Yes
Is the research design in accordance with the research objectives?	Yes	Yes	Yes
Is the recruitment strategy in accordance with the research objectives?	Yes	Yes	Yes
Is the data collected in a way that addresses the research issue?	Yes	Yes	Yes
Has the relationship between the researcher and the participant been adequately considered?	Yes	Yes	Yes
Have ethical issues been considered?	Can't tell	Can't tell	Yes
Is data analysis rigorous enough?	Yes	Yes	Yes
Is there a clear statement of the findings?	Yes	Yes	Yes
How valuable is this research?	Very valuable	Very valuable	Very valuable

Table 2. Critical Appraisal of Qualitative Design

In this review, three studies used a qualitative design (Paat et al., 2017; Nurliawati et al., 2019; Wardhana et al., 2019). All studies stated clear objectives; using the right methodology and design in accordance with the research objectives; explain sampling according to research objectives; data collection is carried out in a way that is appropriate to the research problem; all participants have been considered according to the setting and research objectives. Only one of three studies explaining ethical considerations was reviewed by the Research Ethics Commission of the University of Respati Indonesia; all studies carried out good analysis, namely validating data from interviews with patient medical record data (Wardhana et al., 2019). All studies state the findings clearly; all included studies have invaluable value because all three consider the findings in relation to current practices or policies and relevant research so that the findings greatly contribute to increasing knowledge and understanding for health care workers and policy makers in hospitals related to obstacles in the implementation of CP.

(Widyanita (Astuti et **Ouestion** et al., 2016) al., 2017) Are there any obvious research questions? Yes Yes Does the collected data allow to answer research questions? Yes Yes Are participants representative of the target population? Yes Yes Do measurements correspond to outcomes and interventions (or Yes Yes

Table 3. Critical Appraisal of Mixed-Methods Design

exposure)?

Is there complete result data?	Yes	Yes
Does the role count in design and analysis?	Can't tell	Can't tell
During the study period, was the intervention given (or exposure occurred) as intended?	Yes	Yes

Two studies in this review used a mixed-methods design (Widyanita et al., 2016; Astuti et al., 2017). Both of these studies have obvious questions; all data collected can answer research questions; all participants involved have represented the target, namely health service workers in hospitals; results measured based on research objectives; data is presented in full; and during the research all participants were interviewed referring to the research objectives; however, the confounding factors in the study were not explained in detail by these two studies in the article.

Table 4. Critical Appraisal of Case Study Design

Question	(Rosalina et al., 2018)
Does this study address clearly focused questions/issues?	Yes
Is the research method (research design) appropriate for answering research questions?	Yes
Do settings and subjects represent the population to which the findings will be referred?	Yes
Is the researcher's perspective clearly explained and calculated?	Yes
Are the data collection methods clearly explained?	Yes
Is the method for analyzing the data possible valid and reliable? Are quality control measures used?	Yes
Is the analysis repeated by more than one researcher to ensure reliability?	No
Are the results credible and if so, are they relevant for practice?	Yes
Are the conclusions drawn justified by the results?	Yes
Can the research findings be transferred to other settings?	Yes

Only one study in this review used a case study design (Rosalina et al., 2018). This study discusses questions and problems clearly, namely the obstacles to implementing typhoid fever CP monitoring at ABC Malang Hospital; using the appropriate method, namely descriptive exploratory; selection of hospitals and participants representing the population to which the findings will be referred; the researcher's perspective is taken into account clearly, the method of collecting through field observations, document review, interviews and questionnaires; data analysis using a fishbone diagram to find out the root causes of the CP monitoring implementation; analysis of the findings is only carried out by researchers; this study has excellent results and is relevant for practice; drawing conclusions refers to the results and research objectives; these findings can be used in other settings, namely in a number of hospitals that have implemented CP.

### **Results and Discussion**

### **Study Characteristics**

We identified six articles that were relevant to the research objective, namely obstacles to the implementation of CP in Indonesia. This article was published in the 2016-2021 range (the last 5 years) and was conducted in various hospitals in Indonesia. Three studies used a qualitative design (Paat et al., 2017; Nurliawati et al., 2019; Wardhana et al., 2019), two mixed-methods studies (Widyanita et al., 2016; Astuti et al., 2017) and one study used a case study design (Rosalina et al., 2018). All participants included in this review were health workers in hospitals consisting of directors, deputy directors of medical services, heads of medical services, heads of nursing, heads of medical committees, case managers, doctors in charge of services (DPJP), heads of hospital quality committees. , heads of inpatient rooms, executive nurses, medical record staff, pharmacists and nutritionists. Most participants were taken by two studies, each

involving 17 informants (Rosalina et al., 2018; Wardhana et al., 2019), while at least two studies involved seven informants (Paat et al. al., 2017; Nurliawati et al., 2019). The most widely used data collection and validity methods were in-depth interviews, observation and document review then validated using triangulation techniques (Astuti et al., 2017; Paat et al., 2017; Rosalina et al., 2018; Nurliawati et al., 2019; Wardhana et al., 2019). Meanwhile, for data analysis, most of the methods used are open coding, axial coding and themes and drawing conclusions (Widyanita et al., 2016; Astuti et al., 2017; Nurliawati et al., 2019). Details of the studies included in this review can be seen in table 5.

Table 5. Details of included studies

Author	Purpose	Design	Data Collection and Analysis	Findings
(Widyan ita et al., 2016)	To evaluate the implementation of acute clinical pathway appendicitis in patients in the jasmine ward of Panembahan Senopati Bantul Hospital.	Mix methods design case study	Quantitative: ICPAT form, using descriptive analysis of ICPAT checklists and then the data is processed with a program on a computer. Qualitative: triangulation technique that is mix it up. The data that has been obtained is reduced by the stages of open coding, axial coding and thema as well as drawing conclusions.	Obstacles: Lack of compliance in applying CP Lack of awareness in filling out forms Respondents are not used to it so forget Limited time to fill out CP forms
(Astuti et al., 2017)	To evaluate the content and quality of clinical pahways sectio caesarea, compliance with the implementation of clinical pahways and existing obstacles in the implementation of clinical pahways at Panembahan Senopati Bantul Hospital.	Mix methods design case study	Quantitative: ICPAT form, using descriptive analysis of ICPAT checklists and then the data is processed with a program on a computer to obtain the mean, median, frequency and grouping. Qualitative: deep interviews and observations. Data is analyzed by collecting data then reduced through stages: open coding, axial coding and thema and making conclusions.	Obstacles: Lack of compliance implementing CP Lack of awareness of the importance of CP Lack of desire to explore CP No thorough socialization of CP It is difficult to apply discipline to something new and already agreed upon. Low compliance in filling and documenting CP Assessed as an additional workload for staff
(Paat et al., 2017)	To find out the implementation of the clinical pathway and analysis of its constraints at RSUP Prof. Dr. R. D. Kandou Manado.	Qualitative	In-depth interviews. Validation of research results is carried out by means of source triangulation and engineering triangulation.	Obstacles: Socialization of CP implementation is usually only carried out in the run-up to the hospital accreditation process Lack of compliance level in CP implementation
(Rosalina et al., 2018)	To find out the obstacles to the implementation of monitoring clinical pathway typhoid fever at	Exploratory descriptive design case studies	Field observations, document reviews, interviews and questionnaires were then analyzed using <i>fishbone diagrams</i> .	Obstacles: Lack of staff knowledge about CP Lack of socialization and training of staff involved in the implementation of CP

	ABC Hospital Malang.			There is no Standard Operating Procedure for filling out the CP form in the inpatient room CP guidelines have never been reviewed asestablished in 2015 No CP team has yet to be formed Inconsistency of CP guide contents Filling out the CP form is only done by the case manager (room doctor and head of the inpatient room) who has received training.
(Nurliaw ati et al., 2019)	To analyze obstacles and obstacles in the implementation of clinical pathways at dr. Fauziah Bireuen Hospital.	Qualitative descriptive	Semi-structured in-depth interviews in the category of in-depth interviews recorded using tape recorders, document reviews and observations. Data analysis uses descriptive qualitative data processing models Miles and Huberman with stages: data reduction, data display, conclusion or verification and triangulation.	Obstacles: Lack of compliance level in CP implementation Lack of socialization to all staff on how to fill out the CP form Absence of encouragement for officers to express their views on the advantages and difficulties of using CP Lack of pharmacy personnel, especially pharmacists Provision of the drug does not comply with the instructions of the CP Absence of regular meetings to discuss the progress of CP implementation No evaluation of CP implementation compliance was carried out and the results of the evaluation were not communicated to all staff involved No regular training on the use of CP for the staff involved Not all staff receive education in writing regarding CP materials
(Wardha na et al., 2019)	To analyze the implementation system, monitoring and evaluation of clinical pathway as a tool for quality control of services at Koja Hospital.	Qualitative approach to analytical description	Observation, in-depth interviews and document review. Data validity is performed using data source triangulation.	Obstacles: Lack of knowledge in the application of CP There are still many officers who have not attended the training There is a lack of case manager power in each unit which can help facilitate the implementation of CP

CP: Clinical Pathway; dr: doctor; ICPAT: Integrated Care Pathways Appraisal Tools; n: Number of Samples; HOSPITAL: Hospital; Hospital: Regional General Hospital

Table 5 shows that there are a number of obstacles in the implementation of CP in several hospitals in Indonesia. Five studies reported a lack of socialization and training related to CP implementation (Astuti et al., 2017; Paat et al., 2017; Rosalina et al., 2018; Nurliawati et al., 2019; Wardhana et al., 2019). Four studies reported a lack of compliance levels of officers in implementing CP (Widyanita et al., 2016; Astuti et al., 2017; Paat et al., 2017; Nurliawati et al., 2019). Three studies reported a lack of staff awareness of the importance of implementing CP (Widyanita et al., 2016; Astuti et al., 2017; Nurliawati et al., 2019). Two studies report time constraints and the difficulty of applying discipline to something new (Widyanita et al., 2016;

Astuti et al., 2017); CP forms are only filled out by case managers (doctors and heads of inpatient rooms) who have received training (Rosalina et al., 2018; Wardhana et al., 2019); it is rare to evaluate compliance with CP implementation and the evaluation results are not communicated to all staff involved (Rosalina et al., 2018; Nurliawati et al., 2019). One study each reported a lack of knowledge of staff about CP (Rosalina et al., 2018); lack of pharmacy staff, especially pharmacists and drug provision not in accordance with CP instructions (Nurliawati et al., 2019); there is no Standard Operating Procedures (SOP) for filling out CP forms in inpatient rooms (Rosalina et al., 2018); there is an assumption that filling out the CP form is a new burden for staff (Astuti et al., 2017); the CP team has not been formed and the contents of the CP guidelines are inconsistent (Paat et al., 2017).

## **Key Findings**

Based on the results of a review of six studies, we identified six themes related to barriers to CP implementation in Indonesia.

### Lack of outreach and training for staff involved in the implementation of CP

The five studies in this review reported that the lack of socialization and training for staff involved in implementing CP was the main obstacle to optimal implementation of CP (Astuti et al., 2017; Paat et al., 2017; Rosalina et al., 2018; Nurliawati et al., 2019; Wardhana et al., 2019). Paat et al (2017) stated that the hospital had made socialization efforts to all staff, but socialization was generally only carried out at the time of the hospital's accreditation process because it is one of the elements in improving quality and patient safety which is also a criterion for evaluating hospital accreditation. The form of CP socialization is carried out in a combined manner between all parties involved such as DPJP, room doctors and nurses which is usually carried out in a relatively long time. Nurliawati et al (2019), stated that the hospital had made socialization efforts, but there were still many staff who were not present during CP socialization so that many of them did not understand the importance of CP implementation for quality improvement. Rosalina et al (2018) stated that the socialization that had been carried out was limited to the head of the inpatient room before accreditation and had not been resocialized even though there had been a change in head of the room.

### Lack of officer compliance level in CP implementation

In order for CP to be implemented optimally, compliance is required from all staff involved in implementing CP. In this review, four studies reported that the lack of compliance of officers in the implementation of CP was a serious obstacle in optimizing the implementation of CP (Widyanita et al., 2016; Astuti et al., 2017; Paat et al., 2017; Nurliawati et al., 2019). The lack of compliance of officers in implementing CP is caused by several factors, including the lack of awareness of officers on the importance of implementing CP (Astuti et al., 2017); there is no incentive for officers to express their views regarding the advantages and disadvantages of using CP (Nurliawati et al., 2019); as well as discrepancies in the contents of CP guidelines (Rosalina et al., 2018).

# Lack of competent human resources, such as pharmacy staff, especially pharmacists and case managers in each unit

During the CP implementation phase, a case manager is the most important person in the process. The case manager is in charge of carrying out ward visits every day to ensure that all patients receive services according to CP, carry out quality checks on documentation and encourage adherence to the use of CP. They work as a control system liaison between the development team, the CP committee and staff in CP-using wards. The three studies in this review report that limited resources such as pharmacy staff, especially pharmacists and case

managers in each unit and the high workload make it difficult for staff to implement CP in hospitals optimally (Rosalina et al., 2018; Nurliawati et al., 2019; Wardhana et al., 2019).

## Lack of compliance in filling and documenting CPs

CP documentation is part or all of the patient care record and this CP documentation can also be a useful auditing tool for clinical practice. Two studies reported low staff adherence in filling out and documenting CP because staff were not used to it, so they forgot and limited time to fill out CP forms (Widyanita et al., 2016). In addition, it is difficult to apply discipline to something new and is considered as an additional workload for staff to be the cause of low staff compliance in documenting CP in hospitals (Astuti et al., 2017).

## Lack of staff knowledge about the application of CP

Knowledge is the basis for the formation of one's actions. The two studies in this review reported that one of the obstacles in implementing CP in hospitals was the lack of staff knowledge about CP implementation due to socialization that was not provided comprehensively and evenly to all staff (Rosalina et al., 2018; Wardhana et al., 2019).

## Routine evaluation of CP implementation has not been carried out optimally

CP or also known by other names such as: critical care pathway, integrated pathway, coordinated care pathway, caremaps, or anticipated recovery pathway is a plan that provides in detail each important stage of health services, for the majority of patients with clinical problems (diagnosis or procedures) (Astuti et al., 2017). The two studies in this review reported that the obstacles that led to the implementation of CP in hospitals were not optimal due to the absence of routine and follow-up evaluations from management on a regular basis (Rosalina et al., 2018; Nurliawati et al., 2019). The results of interviews conducted with staff, they hope that CP sheets are collected once a week and every 3 months an evaluation is carried out by the quality committee and the evaluation results are submitted to the director, but evaluations are only carried out every 4 months by the quality committee and once a year an evaluation is carried out by management (director) (Nurliawati et al., 2019).

### No SOP for CP filling

One part of implementing CP is providing a standard for CP, this section explains under what circumstances or conditions can treat patients according to CP. One study reported that one of the obstacles that made CP implementation not optimal was due to the absence of an SOP for filling CP in each unit because the CP team had not been formed in the hospital (Rosalina et al., 2018).

This study analyzes the barriers to CP implementation in Indonesia in order to gain and increase a better understanding of the factors that may hinder successful implementation.

Based on the results of a review of six articles, we identified a number of obstacles in the implementation of CP in several hospitals in Indonesia, but in this review the two most common obstacles emerged, namely the lack of outreach and training for staff involved in implementing CP, which was reported by five studies (Astuti et al., 2017; Paat et al., 2017; Rosalina et al., 2018; Nurliawati et al., 2019; Wardhana et al., 2019) and the lack of compliance levels of officers in implementing CP reported by four studies (Widyanita et al., 2016; Astuti et al., 2017; Paat et al., 2017; Nurliawati et al., 2019).

Lack of outreach and training for staff involved in implementing CP is one of the most frequent obstacles in hospitals which greatly affects the optimal implementation of CP in several hospitals in Indonesia. This condition is caused by the fact that most hospitals do not yet have an adequate CP team so that socialization and training are usually only carried out when

approaching hospital accreditation and only a few officers participate. Mater & Ibrahim (2014) stated that to optimize the implementation of CP in hospitals, quality and knowledge from service workers in implementing CP is needed which can be provided through socialization and training on an ongoing basis. The results of this review are in line with previous research which suggested that appropriate socialization and training activities on CP implementation would increase staff motivation in implementing CP (Kramer et al., 2012). Similar results were reported in two previous systematic reviews that focused on implementing CP in hospitals (Fischer et al., 2016; Geerligs et al., 2018).

Apart from the lack of outreach and training, the other most common obstacle found in this review was the lack of compliance by officers in implementing CP in hospitals. This is due to the lack of awareness of the officers on the importance of implementing CP, there is no encouragement for officers to express their views regarding the advantages and difficulties of using CP and the content of the CP guidelines is not appropriate. Two previous studies identified various factors that influence the lack of adherence of officers in implementing CP in hospitals, including due to the lack of a sense of belonging, the presence of therapy that is not in accordance with CP, limited resources, limited time and lack of awareness of staff filling out CP (Paat et al., 2017; Nurliawati & Idawati, 2019). The results of our review are in line with a number of previous studies which suggest that the lack of compliance of officers in using CP and the lack of a sense of belonging from service staff are the main challenges and obstacles in the implementation of CP which is not optimal (Septiani et al., 2015; Khalifa & Alswailem, 2015; Jabbour et al., 2018). In a previous systematic review involving 14 studies in English and German, it was reported that staff knowledge, attitudes and compliance factors were critical to the success of implementing CP in hospitals (Seckler et al., 2020).

This review shows that the lack of socialization and training for staff involved in implementing CP and the lack of compliance of officers in implementing CP are the most common obstacles found in several hospitals in Indonesia.

## **Strengths and Limitations**

Our study has several strengths. First, as far as we know, this review is the first to analyze obstacles to CP implementation in Indonesia using an integrative review approach. Second, we refer to the PRISMA checklist guidelines to minimize bias in the identification, selection and synthesis of reviewed articles. However, this review also has several limitations. First, only health workers were included in the sample so they could not identify obstacles to CP implementation from patient perceptions. Second, the included studies are from the last 5 years, thus narrowing the observations.

Future studies or reviews should consider the factors that influence the lack of socialization and training for staff involved in implementing CP as well as the non-compliance of service staff in implementing CP.

#### Conclusion

Based on the results of a review of the six articles, it was concluded that there were a number of obstacles in the implementation of CP in several hospitals in Indonesia which resulted in the implementation of CP not being optimal. The hospital must carry out routine evaluations to identify various problems or obstacles experienced by officers during the implementation of CP so that it can be used as study material in optimizing the implementation of CP.

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#### **Conflict of Interest**

There is no conflation of interests among writers

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