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Lampiran 1: Strategi pencarian pada database elektronik

f. Pencarian di Pubmed

Rincian Riwayat dan Pencarian Unduh Menghapus

Cari	Tindakan	Detail	Pertanyaan	Hasil	Waktu
# 1	...	>	Cari: ((perawat ATAU perawat) DAN ("intervensi multimoda" ATAU "strategi multimoda")) DAN ("Kepatuhan kebersihan tangan" ATAU "kepatuhan kebersihan tangan" ATAU "kepatuhan mencuci tangan" ATAU "kepatuhan membersihkan tangan")	19	04:37:19

Menampilkan 1 hingga 1 dari 1 entri

RESULTS BY YEAR 19 results

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Abstract

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Associated data

Quoted phrase not found: "hand cleaning compliance"

1 **A multimodal regional intervention strategy** framed as friendly competition to improve **hand hygiene compliance**.

van Dijk MD, Mulder SA, Erasmus V, van Beeck AHE, Vermeeren JMJJ, Liu X, Beeck EFV, Vos MC. Infect Control Hosp Epidemiol. 2019 Feb;40(2):187-193. doi: 10.1017/ice.2018.261. PMID: 30698134 [Free PMC article](#). Clinical Trial.

OBJECTIVE: To investigate the effects of friendly competition on **hand hygiene compliance** as part of a

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((nurse OR nurses) AND ("multimodal intervention" OR "multimodal strategy") ✕ [Search](#)

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van Dijk MD, Mulder SA, Erasmus V, van Beeck AHE, Vermeeren JMJJ, Liu X, Beeck EFV, Vos MC.

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TEXT AVAILABILITY

Abstract

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van Dijk MD, Mulder SA, Erasmus V, van Beeck AHE, Vermeeren JMJJ, Liu X, Beeck EFV, Vos MC.

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RESULTS BY YEAR 11 results

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Associated data

1 A **multimodal regional intervention strategy** framed as friendly competition to improve **hand hygiene compliance**.
van Dijk MD, Mulder SA, Erasmus V, van Beeck AHE, Vermeeren JMJJ, Liu X, Beeck EFV, Vos MC.
Infect Control Hosp Epidemiol. 2019 Feb;40(2):187-193. doi: 10.1017/ice.2018.261.
PMID: 30698134 Free PMC article. Clinical Trial.
OBJECTIVE: To investigate the effects of friendly competition on **hand hygiene compliance** as part of a **multimodal intervention** program. ...CONCLUSION: Between the start and the end of the **multimodal**

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nurse OR nurses in Anywhere

AND "multimodal intervention" OR "multimodal strategy" in Anywhere

AND "Hand hygiene compliance" OR "hand hygiene adherence" OR "hand washing compliance" OR "hand cleaning compliance" in Anywhere

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...compliance rates range between 25% and 51%...

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...increase HCWs' hand hygiene compliance and awareness/perception of the need for...

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Quality & Safety in Health Care, London Vol. 18, Iss. 6, (Dec 2009): 429.

...the overall rates of hand hygiene adherence among nurses were comparable to...

...nurses improved markedly. Although we cannot definitely explain why the hand...

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...the overall rates of hand hygiene adherence among nurses were comparable to...

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 Valim, Marília Duarte; Rocha, Ianne Lanna de Souza; Souza, Thais Pedrosa Martins; da Cruz, Yasmin Aparecida; Bezerra, Thaisa Blanco; et al.
Revista Brasileira de Enfermagem; Brasília Vol. 72, Iss. 2, (Mar/Apr 2019): 552-565.
 ...E. et al. Efficacy of the multimodal strategy for Hand Hygiene compliance: an...
 ...multimodal intervention strategy in improving hand hygiene compliance in a...
 ...in hand hygiene compliance after a multimodal intervention among health-care...

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- Efficacy of a multimodal intervention strategy in improving hand hygiene compliance in a tertiary level intensive care unit** Full Text

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37 results Modify search Recent searches Save search/alert

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Scholarly Journals

Last 10 Years

compliance

Sorted by Relevance

Limit to

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- Peer reviewed

Source type

Select 1-20

- Efficacy of a multimodal intervention strategy in improving hand hygiene compliance in a tertiary level intensive care unit** Full Text

Mathai, Ashu, George, Smitha, Abraham, John.
Indian Journal of Critical Care Medicine; New Delhi Vol. 15, Iss. 1, (Jan-Mar 2011): 6-15.
 ... Despite this, hand hygiene compliance among health care personnel...
 ...hand hygiene compliance among health care workers, to evaluate the levels of...
 ...five moments of hand hygiene" in improving hand hygiene compliance within our...

Abstract/Details Full text Full text - PDF (611 kB) Cited by (9) References (27) Show Abstract
- Hand hygiene compliance among healthcare workers in an accredited tertiary care hospital** Full Text

Chavali, Siddharth; Menon, Varun; Shukla, Urvi.
Indian Journal of Critical Care Medicine; New Delhi Vol. 18, Iss. 10, (Oct 2014): 689-693.
 ...of a multimodal intervention strategy in improving hand hygiene compliance in a...
 ...MB. Measuring rates of hand hygiene adherence in the intensive care setting: A...
 ...hand hygiene compliance. J Hosp Infect 2010;76:252-5. 8. Mathai AS, George...

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(nurse OR nurses) AND ("multimodal intervention" OR "multimodal strategy") AND ("Hand hygiene compliance" OR "hand hygiene adherence" OR "hand washing compliance" OR "hand cleaning compliance")

36 results

Applied filters: Scholarly Journals, Last 10 Years, compliance, Article

Sorted by: Relevance

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1 Efficacy of a multimodal intervention strategy in improving hand hygiene compliance in a tertiary level intensive care unit
Mathai, Ashu, George, Smitha, Abraham, John.
Indian Journal of Critical Care Medicine; New Delhi Vol. 15, Iss. 1, (Jan-Mar 2011): 6-15.
... Despite this, hand hygiene compliance among health care personnel...
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2 Hand hygiene compliance among healthcare workers in an accredited tertiary care hospital
Chavali, Siddharth; Menon, Varun; Shukla, Urvi.
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... of a multimodal intervention strategy in improving hand hygiene compliance in a...

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(nurse OR nurses) AND ("multimodal intervention" OR "multimodal strategy") AND ("Hand hygiene compliance" OR "hand hygiene adherence" OR "hand washing compliance" OR "hand cleaning compliance")

36 results

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1 Efficacy of a multimodal intervention strategy in improving hand hygiene compliance in a tertiary level intensive care unit
Mathai, Ashu, George, Smitha, Abraham, John.
Indian Journal of Critical Care Medicine; New Delhi Vol. 15, Iss. 1, (Jan-Mar 2011): 6-15.
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...five moments of hand hygiene" in improving hand hygiene compliance within our...
Abstract/Details Full text Full text - PDF (611 KB) Cited by (9) References (27) Show Abstract

2 Hand hygiene compliance among healthcare workers in an accredited tertiary care hospital
Chavali, Siddharth; Menon, Varun; Shukla, Urvi.
Indian Journal of Critical Care Medicine; New Delhi Vol. 18, Iss. 10, (Oct 2014): 689-693.

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time of alcohol-based handrubs to 15 seconds	Pittet, D., Kramer, A.		
Assessing sustainability of hand hygiene adherence 5 years after a contest-based intervention in 3 Japanese hospitals	Sakihama, T., Kayauchi, N., Kamiya, T., (...), Honda, H., Tokuda, Y.	2020	American Journal of Infection Control
A multimodal regional intervention strategy framed as friendly competition to improve hand hygiene compliance	Van Dijk, M.D., Mulder, S.A., Erasmus, V., (...), Van Beeck, E.F., Vos, M.C.	2019	Infection Control and Hospital Epidemiology
A multimodal intervention to improve hand hygiene compliance in a tertiary care center	Laskar, A.M., R, D., Bhat, P., (...), Sastry, A.S., Sneha, R.	2018	American Journal of Infection Control
Role of quality control circle in sustained improvement of hand hygiene compliance: An observational study in a stomatology hospital in Shandong, China	Chen, P., Yuan, T., Sun, Q., (...), Wang, H., Xu, A.	2016	Antimicrobial Resistance and Infection Control

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Title	Authors	Year	Source
Multimodal intervention program to improve hand hygiene compliance: effectiveness and challenges	Ben Fredj, S., Ben Cheikh, A., Bhiri, S., (...), Ben Rejeb, M., Said Latiri, H.	2020	Journal of the Egyptian Public Health Association
Improving hand hygiene adherence in healthcare workers before patient contact: A multimodal intervention in four tertiary care hospitals in Japan	Saitoh, A., Sato, K., Magara, Y., (...), Ratz, D., Saint, S.	2020	Journal of Hospital Medicine
Improving hand hygiene compliance in nursing homes: Protocol for a cluster randomized controlled trial (HANDSOME Study)	Teasing, G.R., Erasmus, V., Pettrignani, M., (...), Richardus, J.H., Voeten, H.A.C.M.	2020	Journal of Medical Internet Research
Hand antiseptis without decreasing efficacy by shortening the rub-in time of alcohol based handrubs to 15 seconds	Harnoss, J.C., Dancer, S.J., Kaden, C.F., (...), Pittet, D., Kramer, A.	2020	Journal of Hospital Infection

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American Journal of Infection Control, Volume 46, Issue 7, July 2018, Pages 775-780
Abdul Mannan Laskar, Deepashree R, Prasanna Bhat, Biju Pottakkat, ... R Sneha

Research article

The determinant factor of nurse's hand hygiene adherence in Indonesia
Enfermería Clínica, Volume 29, Supplement 2, September 2019, Pages 257-261
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- 2019 (10,843)
- 2018 (10,482)
- 2017 (9,659)
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- 2015 (9,488)
- 2014 (8,834)
- 2013 (8,407)

Research article

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- 2020 (9,782)
- 2019 (10,843)
- 2018 (10,482)
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- 2016 (9,822)
- 2015 (9,488)
- 2014 (8,834)
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Research article

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Years

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- 2019 (111)
- 2018 (100)
- 2017 (109)
- 2016 (134)
- 2015 (86)
- 2014 (107)
- 2013 (111)
- 2012 (82)

Research article

A multimodal intervention to improve hand hygiene compliance in a tertiary care center
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Research article ● Open access

Assessing sustainability of hand hygiene adherence 5 years after a contest-based intervention in 3 Japanese hospitals
 American Journal of Infection Control, Volume 48, Issue 1, January 2020, Pages 77-81
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Utility of electronic hand hygiene counting devices for measuring physicians' hand hygiene adherence applied to outpatient settings
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Umpan balik

j. Pencarian di Garuda

The screenshot shows a search interface on the Garuda platform. The search query is "perawat DAN kepatuhan hand hygiene". The results show 21 documents found. The first result is titled "Pengaruh Faktor Individu, Organisasi dan Perilaku terhadap Kepatuhan Perawat dalam Melaksanakan Hand Hygiene di Ruang Rawat Inap Rumah Sakit Tk. II Dr. Soepraoen Malang" by Fauzia, Nella, and Ahsan, published in Jurnal Aplikasi Manajemen Vol 12, No 4 (2014). The second result is "EFEKTIFITAS EDUKASI DALAM MENINGKATKAN MOTIVASI DAN KEPATUHAN FIVE MOMENT FOR HAND HYGIENE DI RUANG PERAWATAN INTENSIF" by Fitri, Cemy Nur, Sulastri, and Sulastri, published in Proceeding Seminar LPPM UMP 2015. The third result is another version of the first article. The interface includes filters for year (2014 to 2020) and options to download PDFs or show abstracts.

Lampiran 2: Prisma Checklist



PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	



PRISMA 2009 Checklist


Section/topic	#	Checklist item	Reported on page #
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med* 6(7): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit: www.prisma-statement.org.


Lampiran 3: Lampiran 2: Tools Penilaian Kualitas Artikel


k. Instrumen CASP dengan studi cohort



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Critical Appraisal
Skills Programme



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CASP Checklist: 12 questions to help you make sense of a **Cohort Study**

How to use this appraisal tool: Three broad issues need to be considered when appraising a cohort study:

-  Are the results of the study valid? (Section A)
-  What are the results? (Section B)
-  Will the results help locally? (Section C)

The 12 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a "yes", "no" or "can't tell" to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

About: These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

Referencing: we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Cohort Study) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

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Critical Appraisal Skills Programme (CASP) part of Oxford Centre for Triple Value Healthcare Ltd www.casp-uk.net

Paper for appraisal and reference:.....

Section A: Are the results of the study valid?

1. Did the study address a clearly focused issue?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: A question can be 'focused' in terms of

- the population studied
- the risk factors studied

• is it clear whether the study tried to detect a beneficial or harmful effect

- the outcomes considered

Comments:

2. Was the cohort recruited in an acceptable way?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Look for selection bias which might compromise the generalisability of the findings:

- was the cohort representative of a defined population
- was there something special about the cohort
- was everybody included who should have been

Comments:

Is it worth continuing?

3. Was the exposure accurately measured to minimise bias?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Look for measurement or classification bias:
- did they use subjective or objective measurements
 - do the measurements truly reflect what you want them to (have they been validated)
 - were all the subjects classified into exposure groups using the same procedure

Comments:

4. Was the outcome accurately measured to minimise bias?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Look for measurement or classification bias:
- did they use subjective or objective measurements
 - do the measurements truly reflect what you want them to (have they been validated)
 - has a reliable system been established for detecting all the cases (for measuring disease occurrence)
 - were the measurement methods similar in the different groups
 - were the subjects and/or the outcome assessor blinded to exposure (does this matter)

Comments:

5. (a) Have the authors identified all important confounding factors?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT:
• list the ones you think might be important, and ones the author missed

Comments:

5. (b) Have they taken account of the confounding factors in the design and/or analysis?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT:
• look for restriction in design, and techniques e.g. modelling, stratified-, regression-, or sensitivity analysis to correct, control or adjust for confounding factors

Comments:

6. (a) Was the follow up of subjects complete enough?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider
• the good or bad effects should have had long enough to reveal themselves
• the persons that are lost to follow-up may have different outcomes than those available for assessment
• in an open or dynamic cohort, was there anything special about the outcome of the people leaving, or the exposure of the people entering the cohort

6. (b) Was the follow up of subjects long enough?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

Comments:

Section B: What are the results?

7. What are the results of this study?

HINT: Consider

- what are the bottom line results
- have they reported the rate or the proportion between the exposed/unexposed, the ratio/rate difference
- how strong is the association between exposure and outcome (RR)
- what is the absolute risk reduction (ARR)

Comments:

8. How precise are the results?

HINT:

- look for the range of the confidence intervals, if given

Comments:

9. Do you believe the results?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider
- big effect is hard to ignore
 - can it be due to bias, chance or confounding
 - are the design and methods of this study sufficiently flawed to make the results unreliable
 - Bradford Hills criteria (e.g. time sequence, dose-response gradient, biological plausibility, consistency)

Comments:

Section C: Will the results help locally?

10. Can the results be applied to the local population?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider whether
- a cohort study was the appropriate method to answer this question
 - the subjects covered in this study could be sufficiently different from your population to cause concern
 - your local setting is likely to differ much from that of the study
 - you can quantify the local benefits and harms

Comments:

11. Do the results of this study fit with other available evidence?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

Comments:

12. What are the implications of this study for practice?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- one observational study rarely provides sufficiently robust evidence to recommend changes to clinical practice or within health policy decision making
 - for certain questions, observational studies provide the only evidence
 - recommendations from observational studies are always stronger when supported by other evidence

Comments:

1. Critical Appraisal tools Checklist for Quasi-Experimental Studies



JBI Critical Appraisal Checklist for Quasi-Experimental Studies (non-randomized experimental studies)

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not applicable
1. Is it clear in the study what is the 'cause' and what is the 'effect' (i.e. there is no confusion about which variable comes first)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the participants included in any comparisons similar?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Was there a control group?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were there multiple measurements of the outcome both pre and post the intervention/exposure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were the outcomes of participants included in any comparisons measured in the same way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was appropriate statistical analysis used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include Exclude Seek further info

Comments (including reason for exclusion)

Lampiran 4: Evidence Level and Quality Guide

Johns Hopkins Nursing Evidence-Based Practice
Appendix C: Evidence Level and Quality Guide

Evidence Levels	Quality Guides
<p>Level I Experimental study, randomized controlled trial (RCT) Systematic review of RCTs, with or without meta-analysis</p>	<p>A High quality: Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence</p> <p>B Good quality: Reasonably consistent results; sufficient sample size for the study design; some control, fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence</p> <p>C Low quality or major flaws: Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn</p>
<p>Level II Quasi-experimental study Systematic review of a combination of RCTs and quasi-experimental, or quasi-experimental studies only, with or without meta-analysis</p>	
<p>Level III Non-experimental study Systematic review of a combination of RCTs, quasi-experimental and non-experimental studies, or non-experimental studies only, with or without meta-analysis Qualitative study or systematic review with or without a meta-synthesis</p>	

Johns Hopkins Nursing Evidence-Based Practice
Appendix C: Evidence Level and Quality Guide

Evidence Levels	Quality Guides
<p>Level IV Opinion of respected authorities and/or nationally recognized expert committees/consensus panels based on scientific evidence</p> <p>Includes:</p> <ul style="list-style-type: none"> • Clinical practice guidelines • Consensus panels 	<p>A High quality: Material officially sponsored by a professional, public, private organization, or government agency; documentation of a systematic literature search strategy; consistent results with sufficient numbers of well-designed studies; criteria-based evaluation of overall scientific strength and quality of included studies and definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years</p> <p>B Good quality: Material officially sponsored by a professional, public, private organization, or government agency; reasonably thorough and appropriate systematic literature search strategy; reasonably consistent results, sufficient numbers of well-designed studies; evaluation of strengths and limitations of included studies with fairly definitive conclusions; national expertise is clearly evident; developed or revised within the last 5 years</p> <p>C Low quality or major flaws: Material not sponsored by an official organization or agency; undefined, poorly defined, or limited literature search strategy; no evaluation of strengths and limitations of included studies; insufficient evidence with inconsistent results, conclusions cannot be drawn; not revised within the last 5 years</p>

**Johns Hopkins Nursing Evidence-Based Practice
Appendix C: Evidence Level and Quality Guide**

<p>Level V Based on experiential and non-research evidence</p> <p>Includes:</p> <ul style="list-style-type: none"> • Literature reviews • Quality improvement, program or financial evaluation • Case reports • Opinion of nationally recognized experts(s) based on experiential evidence 	<p>Organizational Experience:</p> <p>A High quality: Clear aims and objectives; consistent results across multiple settings; formal quality improvement, financial or program evaluation methods used; definitive conclusions; consistent recommendations with thorough reference to scientific evidence</p> <p>B Good quality: Clear aims and objectives; consistent results in a single setting; formal quality improvement or financial or program evaluation methods used; reasonably consistent recommendations with some reference to scientific evidence</p> <p>C Low quality or major flaws: Unclear or missing aims and objectives; inconsistent results; poorly defined quality improvement, financial or program evaluation methods; recommendations cannot be made</p> <p>Literature Review, Expert Opinion, Case Report, Community Standard, Clinician Experience, Consumer Preference:</p> <p>A High quality: Expertise is clearly evident; draws definitive conclusions; provides scientific rationale; thought leader(s) in the field</p> <p>B Good quality: Expertise appears to be credible; draws fairly definitive conclusions; provides logical argument for opinions</p> <p>C Low quality or major flaws: Expertise is not discernable or is dubious; conclusions cannot be drawn</p>
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Lampiran 5: Instrumen Risiko Bias

B. The Risk Of Bias In Non-randomised Studies - of Interventions (ROBINS-I) tool				
Website: https://www.riskofbias.info/				
Major Components	Response options			
Part 1: Bias due to confounding				
1.1 Is there potential for confounding of the effect of intervention in this study? If No/ Probably No to 1.1: the study can be considered to be at low risk of bias due to confounding and no further signalling questions need be considered If Yes/ Probably Yes to 1.1: determine whether there is a need to assess time-varying confounding:	Yes/ Probably Yes	No/ Probably No		
1.2. Was the analysis based on splitting participants' follow up time according to intervention received? If No/ Probably No, answer questions relating to baseline confounding (1.4 to 1.6) If Yes/ Probably Yes, go to question 1.3.	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
1.3. Were intervention discontinuations or switches likely to be related to factors that are prognostic for the outcome? If No/ Probably No, answer questions relating to baseline confounding (1.4 to 1.6) If Yes/ Probably Yes, answer questions relating to both baseline and time-varying confounding (1.7 and 1.8)	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
Questions relating to baseline confounding only (1.4 to 1.6)				
1.4. Did the authors use an appropriate analysis method that controlled for all the important confounding domains?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
1.5. If Yes/ Probably Yes to 1.4: Were confounding domains that were controlled for measured validly and reliably by the variables available in this study?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable

1.6. Did the authors control for any post-intervention variables that could have been affected by the intervention?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
Questions relating to baseline and time-varying confounding (1.7to 1.8)				
1.7. Did the authors use an appropriate analysis method that controlled for all the important confounding domains and for time-varying confounding?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
1.8. If Yes/ Probably Yes to 1.7: Were confounding domains that were controlled for measured validly and reliably by the variables available in this study?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
Risk of bias judgement:	Low risk of bias/ Moderate risk of bias/ Serious risk of bias/ Critical risk of bias/ No information			
Optional: What is the predicted direction of bias due to confounding?	Favours experimental/ Favours comparator/ Unpredictable			
Part 2: Bias in selection of participants into the study				
2.1. Was selection of participants into the study (or into the analysis) based on participant characteristics observed after the start of intervention? If No/ Probably No to 2.1: go to 2.4	Yes/ Probably Yes	No/ Probably No	No Information	
2.2. If Yes/ Probably Yes to 2.1: Were the post-intervention variables that influenced selection likely to be associated with intervention?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
2.3 If Yes/ Probably Yes to 2.2: Were the post-intervention variables that influenced selection likely to be influenced by the outcome or a cause of the outcome?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
2.4. Do start of follow-up and start of intervention coincide for most participants?	Yes/ Probably Yes	No/ Probably No	No Information	
2.5. If Yes/ Probably Yes to 2.2 and 2.3, or No/ Probably No to 2.4: Were adjustment techniques used that are likely to correct for the presence of selection biases?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
Risk of bias judgement:	Low risk of bias/ Moderate risk of bias/ Serious risk of bias/ Critical risk of bias/ No information			

Optional: What is the predicted direction of bias due to selection of participants into the study?	Favours experimental/ Favours comparator/ Towards null/ Away from null/ Unpredictable			
Part 3: Bias in classification of interventions				
3.1 Were intervention groups clearly defined?	Yes/ Probably Yes	No/ Probably No	No Information	
3.2 Was the information used to define intervention groups recorded at the start of the intervention?	Yes/ Probably Yes	No/ Probably No	No Information	
3.3 Could classification of intervention status have been affected by knowledge of the outcome or risk of the outcome?	Yes/ Probably Yes	No/ Probably No	No Information	
Risk of bias judgement:	Low risk of bias/ Moderate risk of bias/ Serious risk of bias/ Critical risk of bias/ No information			
Optional: What is the predicted direction of bias due to measurement of outcomes or interventions?	Favours experimental/ Favours comparator/ Towards null/ Away from null/ Unpredictable			
Part 4: Bias due to deviations from intended interventions				
If your aim for this study is to assess the effect of assignment to intervention, answer questions 4.1 and 4.2				
4.1. Were there deviations from the intended intervention beyond what would be expected in usual practice?	Yes/ Probably Yes	No/ Probably No	No Information	
4.2. If Yes/ Probably Yes to 4.1: Were these deviations from intended intervention unbalanced between groups and likely to have affected the outcome?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
If your aim for this study is to assess the effect of starting and adhering to intervention, answer questions 4.3 to 4.6				
4.3. Were important co-interventions balanced across intervention groups?	Yes/ Probably Yes	No/ Probably No	No Information	
4.4. Was the intervention implemented successfully for most participants?	Yes/ Probably Yes	No/ Probably No	No Information	

4.5. Did study participants adhere to the assigned intervention regimen?	Yes/ Probably Yes	No/ Probably No	No Information	
4.6. If No/ Probably No to 4.3, 4.4 or 4.5: Was an appropriate analysis used to estimate the effect of starting and adhering to the intervention?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
Risk of bias judgement:	Low risk of bias/ Moderate risk of bias/ Serious risk of bias/ Critical risk of bias/ No information			
Optional: What is the predicted direction of bias due to deviations from the intended interventions?	Favours experimental/ Favours comparator/ Towards null/ Away from null/ Unpredictable			
Part 5: Bias due to missing data				
5.1 Were outcome data available for all, or nearly all, participants?	Yes/ Probably Yes	No/ Probably No	No Information	
5.2 Were participants excluded due to missing data on intervention status?	Yes/ Probably Yes	No/ Probably No	No Information	
5.3 Were participants excluded due to missing data on other variables needed for the analysis?	Yes/ Probably Yes	No/ Probably No	No Information	
5.4 If No/ Probably No to 5.1, or Yes/ Probably Yes to 5.2 or 5.3: Are the proportion of participants and reasons for missing data similar across interventions?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
5.5 If PN/N to 5.1, or Y/PY to 5.2 or 5.3: Is there evidence that results were robust to the presence of missing data?	Yes/ Probably Yes	No/ Probably No	No Information	Not Applicable
Risk of bias judgement:	Low risk of bias/ Moderate risk of bias/ Serious risk of bias/ Critical risk of bias/ No information			
Optional: What is the predicted direction of bias due to missing data?	Favours experimental/ Favours comparator/ Towards null/ Away from null/ Unpredictable			
Part 6: Bias in measurement of outcomes				

6.1 Could the outcome measure have been influenced by knowledge of the intervention received?	Yes/ Probably Yes	No/ Probably No	No Information	
6.2 Were outcome assessors aware of the intervention received by study participants?	Yes/ Probably Yes	No/ Probably No	No Information	
6.3 Were the methods of outcome assessment comparable across intervention groups?	Yes/ Probably Yes	No/ Probably No	No Information	
6.4 Were any systematic errors in measurement of the outcome related to intervention received?	Yes/ Probably Yes	No/ Probably No	No Information	
Risk of bias judgement:	Low risk of bias/ Moderate risk of bias/ Serious risk of bias/ Critical risk of bias/ No information			
Optional: What is the predicted direction of bias due to measurement of outcomes?	Favours experimental/ Favours comparator/ Towards null/ Away from null/ Unpredictable			
Part 7: Bias in selection of the reported result				
Is the reported effect estimate likely to be selected, on the basis of the results, from...				
7.1. ... multiple outcome measurements within the outcome domain?	Yes/ Probably Yes	No/ Probably No	No Information	
7.2 ... multiple analyses of the intervention-outcome relationship?	Yes/ Probably Yes	No/ Probably No	No Information	
7.3 ... different subgroups?	Yes/ Probably Yes	No/ Probably No	No Information	
Risk of bias judgement:	Low risk of bias/ Moderate risk of bias/ Serious risk of bias/ Critical risk of bias/ No information			
Optional: What is the predicted direction of bias due to selection of the reported result?	Favours experimental/ Favours comparator/ Towards null/ Away from null/ Unpredictable			
Overall bias				

Risk of bias judgement:	Low risk of bias/ Moderate risk of bias/ Serious risk of bias/ Critical risk of bias/ No information
Optional: What is the overall predicted direction of bias for this outcome?	Favours experimental/ Favours comparator/ Towards null/ Away from null/ Unpredictable

Lampiran 6: Hasil Penilaian Risiko Bias

Risk Of Bias In Non-randomized Studies - of Interventions (ROBINS-1)

No	ROBINS-1	Ben Fredj et al, (2020)	Saitoh et al, (2020)	Yousef, Salem, & Mahmoud, (2019)	Arntz et al, (2016)	Chen et al, (2016)	Sakihama et al (2016)	Mahfouz et al (2014)	Schmitz et al (2014)	Dos Santos et al (2013)	Allegran zi et al (2013)	Mathai, George & Abraham (2011)
1	Bias due to confounding											
	1.1 Is there potential for confounding of the effect of intervention in this study? If No/ Probably No to 1.1: the study can be considered to be at low risk of bias due to confounding and no further signalling questions need be considered If Yes/ Probably Yes to 1.1: determine whether there is a need to assess time-varying confounding:	No	No	No	No information	No	No information	No	No	No information	No	No
	1.2. Was the analysis based on splitting participants' follow up time according to intervention received? If No/ Probably No, answer questions relating to baseline confounding (1.4 to 1.6) If Yes/ Probably Yes, go to question 1.3.											
	1.3. Were intervention discontinuations or switches likely to be related to factors that are prognostic for the outcome? If No/ Probably No, answer questions relating to baseline confounding (1.4 to 1.6) If Yes/ Probably Yes, answer questions relating to both baseline and time-varying confounding (1.7 and 1.8)											
	Questions relating to baseline confounding only (1.4 to 1.6)											
	1.4. Did the authors use an appropriate analysis method that controlled for all the important confounding domains?											
	1.5. If Yes/ Probably Yes to 1.4: Were confounding domains that were controlled for measured validly and reliably by the variables available in this study?											
	1.6. Did the authors control for any post-intervention variables that could have been affected by the intervention?											
	Questions relating to baseline and time-varying confounding (1.7 to 1.8)											
	1.7. Did the authors use an appropriate analysis method that controlled for all the important confounding domains and for time-varying confounding?											
	1.8. If Yes/ Probably Yes to 1.7: Were confounding domains that were controlled for measured validly and reliably by the variables available in this study?											
	Risk of bias judgement:	Low risk of bias	Low risk of bias	Low risk of bias	No information	Low risk of bias	No information	Low risk of bias	Low risk of bias	No information	Low risk of bias	Low risk of bias
2	Bias in selection of participants into the study											
	2.1. Was selection of participants into the study (or into the analysis) based on participant characteristics observed after the start of intervention? If No/ Probably No to 2.1: go to 2.4	No information	Yes	Yes	Yes	Yes	No information	Yes	No information	No information	Yes	Yes
	2.2. If Yes/ Probably Yes to 2.1: Were the post-intervention variables that influenced selection likely to be associated with intervention?		Yes	Yes	Yes	Yes		Yes			Yes	Yes
	2.3. If Yes/ Probably Yes to 2.2: Were the post-intervention variables that influenced selection likely to be influenced by the outcome or a cause of the outcome?		Yes	Yes	Yes	Yes		Yes			Yes	Yes
	2.4. Do start of follow-up and start of intervention coincide for most participants?											

	2.5. If Yes/ Probably Yes to 2.2 and 2.3, or No/ Probably No to 2.4: Were adjustment techniques used that are likely to correct for the presence of selection biases?												
	Risk of bias judgement:	No information	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	No information	Low risk of bias	No information	No information	Low risk of bias	Low risk of bias
3	Bias in classification of interventions												
	3.1. Were intervention groups clearly defined?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	3.2. Was the information used to define intervention groups recorded at the start of the intervention?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	3.3. Could classification of intervention status have been affected by knowledge of the outcome or risk of the outcome?	Probably Yes	Probably Yes	Yes	Yes	Yes	Yes	Probably Yes	Yes	Probably Yes	Yes	Yes	
	Risk of bias judgement	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	
4	Bias due to deviations from intended interventions												
	If your aim for this study is to assess the effect of assignment to intervention, answer questions 4.1 and 4.2												
	4.1. Were there deviations from the intended intervention beyond what would be expected in usual practice?												
	4.2. If Yes/ Probably Yes to 4.1: Were these deviations from intended intervention unbalanced between groups and likely to have affected the outcome?												
	If your aim for this study is to assess the effect of starting and adhering to intervention, answer questions 4.3 to 4.6												
	4.3. Were important co-interventions balanced across intervention groups?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	4.4. Was the intervention implemented successfully for most participants?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	4.5. Did study participants adhere to the assigned intervention regimen?	Yes	Probably Yes	Probably Yes	Probably Yes	Probably Yes	Yes	Probably Yes	Probably Yes	Probably Yes	Yes	Yes	
	4.6. If No/ Probably No to 4.3, 4.4 or 4.5: Was an appropriate analysis used to estimate the effect of starting and adhering to the intervention?												
	Risk of bias judgement	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	
5	Bias due to missing data												
	5.1. Were outcome data available for all, or nearly all, participants?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	5.2. Were participants excluded due to missing data on intervention status?	No information	No information	No information	Yes	No information	No information	No information	Yes	No information	No information	No information	
	5.3. Were participants excluded due to missing data on other variables needed for the analysis?	No information	No information	No information	Yes	No information	No information	No information	Yes	No information	No information	No information	
	5.4. If No/ Probably No to 5.1, or Yes/ Probably Yes to 5.2 or 5.3: Are the proportion of participants and reasons for missing data similar across interventions?												
	5.5. If PN/N to 5.1, or Y/PY to 5.2 or 5.3: Is there evidence that results were robust to the presence of missing data?												
	Risk of bias judgement	No information	No information	No information	Low risk of bias	No information	No information	No information	Low risk of bias	No information	No information	No information	
6	Bias in measurement of outcomes												
	6.1. Could the outcome measure have been influenced by knowledge of the intervention received?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	6.2. Were outcome assessors aware of the intervention received by study participants?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	6.3. Were the methods of outcome assessment comparable across intervention groups?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

	6.4. Were any systematic errors in measurement of the outcome related to intervention received?	No	No	No	No	No	No	No	No	No	No	No
	Risk of bias judgement	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias
7	Bias in selection of the reported result											
	Is the reported effect estimate likely to be selected, on the basis of the results, from...											
	7.1 ... multiple outcome measurements within the outcome domain?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	7.2 ... multiple analyses of the intervention-outcome relationship?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	7.3 ... different subgroups?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Risk of bias judgement	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias	Low risk of bias