# DAFTAR PUSTAKA

Aamir, S., & Latif, N. (2016). *Archives of Pulmonology and Respiratory Care Role of Counselling to Facilitate Compliance to the Dots for the Treatment of Tuberculosis*. 2, 28–31.

Al-Ganmi, A. H. A., Perry, L., Gholizadeh, L., & Alotaibi, A. M. (2018). Behaviour change interventions to improve medication adherence in patients with cardiac disease: Protocol for a mixed methods study including a pilot randomised controlled trial. *Collegian*, *25*(4), 385–394. https://doi.org/10.1016/j.colegn.2017.10.003

Aldina, N. N., Bagus, R., Hermanto, B., & Manggasa, D. D. (2020). *HUBUNGAN KONSELING DENGAN KEPATUHAN MINUM OBAT ANTI TUBERKULOSIS PASIEN TUBERKULOSIS DI KABUPATEN POSO The Counseling Relationship with Medication Adherence Anti-Tuberculosis Medicine of Tuberculosis Patients In Poso*. *1*(1), 1–6.

Aldina, N. N., Hermanto, R. B. B., & Manggasa, D. D. (2020). Hubungan Konseling dengan Kepatuhan Minum Obat Anti Tuberkulosis Pasien Tuberkulosis di Kabupaten Poso. *Madago Nursing Journal*, *1*(1), 1–6. https://doi.org/10.33860/mnj.v1i1.294

Alipanah, N., Jarlsberg, L., Miller, C., Linh, N. N., Falzon, D., Jaramillo, E., & Nahid, P. (2018). Adherence interventions and outcomes of tuberculosis treatment: A systematic review and meta-analysis of trials and observational studies. In *PLoS Medicine* (Vol. 15, Issue 7). https://doi.org/10.1371/journal.pmed.1002595

Alligood, M. . (2017). *Pakar Teori Keperawatan dan Karya Mereka* (A. Y. . Hamid & K. Ibrahim (eds.); 8th Indone). Elsevier Singapora PTe Ltd.

Anaam, M. S., Mohamed Ibrahim, M. I., Al Serouri, A. W., & Aldobhani, A. (2013). Factors affecting patients' compliance to anti-tuberculosis treatment in Yemen. *Journal of Pharmaceutical Health Services Research*, *4*(2), 115–122. https://doi.org/10.1111/jphs.12012

Balakrishnan, S., Manikantan, J., Sreenivas, A., Jayasankar, S., Sunilkumar, M., Rakesh, P. S., Karthickeyan, D. S. A., & Mohandas, C. R. (2015). Social inclusion:

An effort to end loss-to-treatment follow-up in tuberculosis. In *Indian Journal of Tuberculosis* (Vol. 62, Issue 4, pp. 230–234). https://doi.org/10.1016/j.ijtb.2015.11.007

Black, J. M., & Hawks, J. H. (2014). *KEPERAWATAN MEDIKAL BEDAH*.

Budisetyani, W., Vembriati, N., Made, N., Wilani, A., Hizkia, D., Dewi, T., Astiti, P., Wulanyani, S., Made, I., Putu, R., Widiasavitri, N., Rahayu, K., Adijanti, I., Luh, M., Pande, K., Susilawati, A., Kartika, Y., Luh, H., Karisma, M., … Kedokteran, F. (2016). *Bahan Ajar PSIKOLOGI KONSELING*.

C, T., Munn, Z., Aromataris, E., Campbell, J., & Hopp, L. (2020). Systematic reviews of effectiveness. In E. Aromataris & Z. Munn (Eds.), *JBI Manual for Evidence Synthesis, JBI*. https://doi.org/https://doi.org/10.46658/JBIMES-20-01

CASP. (2017a). *CASP (Randomized Controlled Trials) Checklist*.

CASP. (2017b). Critical Appraisal Skills Programme (Randomised Controlled Trial). *Critical Appraisal Skills Programme*, *0317*(2017), 1–5.

CASP. (2018). *Critical Appraisal Skills Programme CASP Randomised Controlled Trial Checklist. [online]. 2018*.

Charyeva, Z., Curtis, S., Mullen, S., Senik, T., & Zaliznyak, O. (2019). What works best for ensuring treatment adherence. Lessons from a social support program for people treated for tuberculosis in Ukraine. *PLoS ONE*, *14*(8), 1–13. https://doi.org/10.1371/journal.pone.0221688

Checklist, C., & How, C. S. (2018). *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Cohort Study) Checklist. [online] Available at: URL. Accessed: Date Accessed*. 1–7.

Chen, B., Peng, Y., Zhou, L., Chai, C., Yeh, H.-C., Chen, S., Wang, F., Zhang, M., He, T., & Wang, X. (2016). Social support received by multidrug-resistant tuberculosis patients and related factors: a cross-sectional study in Zhejiang Province, People's Republic of China. *Patient Preference and Adherence*, *10*, 1063.

Cohen, J., Korevaar D.A, & et al.. (2016). *STARD 2015 quidelines for reporting diagnostic accuracy Studies*. 1–17.

Crisp, J., Douglas, C., Rebeiro, G., & Waters, D. (2016). *Potter & Perry's*

*Fundamentals of Nursing-Australian Version*. Elsevier Health Sciences.

Critical Appraisal Skills Programme (CASP). (2013). *Critical Appraisal Skills Programme (CASP)*. CASP Checklists Oxford. https://doi.org/http://media.wix.com/ugd/dded87_40b9ff0bf53840478331915a8ed8b2fb.pdf

Deshmukh, R. D., Dhande, D. J., Sachdeva, K. S., Sreenivas, A. N., Kumar, A. M. V., & Parmar, M. (2018). Social support a key factor for adherence to multidrug-resistant tuberculosis treatment. *Indian Journal of Tuberculosis*, *65*(1), 41–47. https://doi.org/10.1016/j.ijtb.2017.05.003

Doengoes Marilyn.E. (2008). *Nursing Diagnosis Manual learning individualizing and decomenting Clinical Care,2nd*. F.A Davis Company.

Dungus, R. S. P., & Java, E. (2018). *Analysis Of The Effect Telephone Counseling By Nurses On The Compliance Of The Control Of Dots Poly Tuberculosis Patients At Dungus Madiun Lung Hospital*. *1*(2), 47–52.

Efendi, F., & Makhfudli, M. (2009). *Keperawatan Kesehatan Komunitas: teori dan praktik dalam keperawatan*. Salemba Medika.

Egan, J. (2007). *Marketing communications*. Cengage Learning EMEA.

Eriksen, M., & Frandsen, T. (2018). The impact of patient, intervention, comparison, outcome (PICO) as a search strategy tool on literature search quality: a systematic review. *J Med Libr Assoc*, *106*(4), 420–431. https://doi.org/10.5195/jmla.2018.345

Gebreweld, F. H., Kifle, M. M., Gebremicheal, F. E., Simel, L. L., Gezae, M. M., Ghebreyesus, S. S., Mengsteab, Y. T., & Wahd, N. G. (2018). Factors influencing adherence to tuberculosis treatment in Asmara, Eritrea: A qualitative study. *Journal of Health, Population and Nutrition*, *37*(1), 1–9. https://doi.org/10.1186/s41043-017-0132-y

Gladding, S. T., & Batra, P. (2007). *Counseling: A comprehensive profession*. Pearson Education India.

Green, S. (2005). Systematic Reviews And Meta-Analysis. *Singapore Med. J*, *46*(6), 270–274.

herlana. (2014). STUDI KEJADIAN TB BTA POSITIF DITINJAU DARI ASPEK

PENGETAHUAN, SIKAP DAN LINGKUNGAN DI WILAYAH KERJA PUSKESMAS BANYUANYAR KOTA SURAKARTA. *Applied Microbiology and Biotechnology*, *85*(1), 2071–2079. https://doi.org/10.1016/j.bbapap.2013.06.007

Higgins, J. P. T., Altman, D. G., Gøtzsche, P. C., Jüni, P., Moher, D., Oxman, A. D., Savović, J., Schulz, K. F., Weeks, L., & Sterne, J. A. C. (2011). The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. *BMJ (Online)*, *343*(7829), 1–9. https://doi.org/10.1136/bmj.d5928

Irawan, H. (2017). Pengaruh Konseling Kesehatan Terhadap Penurunan Tingkat Kecemasan Pasien TBC Paru Di Puskesmas Campurejo Kota Kediri. *Jurnal Ilmu Kesehatan*, *4*(1), 87. https://doi.org/10.32831/jik.v4i1.79

Jain, V. K., Iyengar, K. P., Samy, D. A., & Vaishya, R. (2020). Tuberculosis in the era of COVID-19 in India. *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, *14*(5), 1439–1443. https://doi.org/10.1016/j.dsx.2020.07.034

Kalichman, S. C., Kalichman, M. O., Cherry, C., Eaton, L. A., Cruess, D., & Schinazi, R. F. (2016). Randomized Factorial Trial of Phone-Delivered Support Counseling and Daily Text Message Reminders for HIV Treatment Adherence. *Journal of Acquired Immune Deficiency Syndromes*, *73*(1), 47–54. https://doi.org/10.1097/QAI.0000000000001020

Karuniawati, H., Putra, O. N., & Wikantyasning, E. R. (2019). Impact of pharmacist counseling and leaflet on the adherence of pulmonary tuberculosis patients in lungs hospital in Indonesia. *Indian Journal of Tuberculosis*, *66*(3), 364–369. https://doi.org/10.1016/j.ijtb.2019.02.015

Kementerian Kesehatan Republik Indonesia. (2016). Profil Dinas Kesehatan Kota Surabaya. *PERATURAN MENTERI KESEHATAN REPUBLIK INDONESIA NOMOR 67 TAHUN 2016 TENTANG PENANGGULANGAN TUBERKULOSIS DENGAN RAHMAT TUHAN YANG MAHA ESA MENTERI KESEHATAN REPUBLIK INDONESIA,* 163.

Khachadourian, V., Truzyan, N., Harutyunyan, A., Petrosyan, V., Davtyan, H., Davtyan, K., Van Den Boom, M., & Thompson, M. E. (2020). People-centred care

versus clinic-based DOT for continuation phase TB treatment in Armenia: A cluster randomized trial. *BMC Pulmonary Medicine*, *20*(1), 1–10. https://doi.org/10.1186/s12890-020-1141-y

Khanal, S., Elsey, H., King, R., Baral, S. C., Bhatta, B. R., & Newell, J. N. (2017). Development of a patient-centred, psychosocial support intervention for multi-drug-resistant tuberculosis (MDR-TB) care in Nepal. *PLoS ONE*, *12*(1), 1–16. https://doi.org/10.1371/journal.pone.0167559

Kjeldsen. (2011). ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation: The Task Force for the management of acute coronary syndromes (ACS) in patients presenting without persistent ST-segment elevatio. *European Heart Journal*, *32*(23), 2999–3054.

Kumar, R., Probandari, A., Ojha, B., Bhattarai, A. H., & Subronto, Y. W. (2019). Implementation fidelity of provider-initiated HIV testing and counseling of tuberculosis patients under the National Tuberculosis Control Program in Kathmandu District of Nepal: An implementation research. *BMC Health Services Research*, *19*(1), 1–9. https://doi.org/10.1186/s12913-019-4343-3

Kurniasih, N., Supadmi, W., & Darmawan, E. (2014). Evaluasi Pengaruh Pemberian Konseling dan Short Messages Service (SMS) Terhadap Kepatuhan Terapi Hipertensi Pasien Hemodialisis di RSUD Banjar. *Magister Program in Clinical Pharmacy Ahmad Dahlan University*, 56–57. download.portalgaruda.org/article.

Lei, X., Huang, K., Liu, Q., Jie, Y. F., & Tang, S. L. (2016). Are tuberculosis patients adherent to prescribed treatments in China? Results of a prospective cohort study. *Infectious Diseases of Poverty*, *5*(1), 1–9. https://doi.org/10.1186/s40249-016-0134-9

Lifson, A. R., Workneh, S., Hailemichael, A., MacLehose, R. F., Horvath, K. J., Hilk, R., Fabian, L., Sites, A., & Shenie, T. (2018). A multi-site community randomized trial of community health workers to provide counseling and support for patients newly entering HIV care in rural Ethiopia: study design and baseline implementation. *HIV Clinical Trials*, *19*(3), 112–119. https://doi.org/10.1080/15284336.2018.1461999

Liu, G., Jimmy, C. Y., Lu, G. Q. M., & Cheng, H.-M. (2011). Crystal facet engineering of semiconductor photocatalysts: motivations, advances and unique properties. *Chemical Communications*, *47*(24), 6763–6783.

Llongo, I. (2004). Tuberculosis health belief gaps of tuberculosis and suspected tuberculosis cases in New York City. *International Journal of Clinical and Health Psychology*, *4*(1), 69–90.

Loriana, R. (2013). Efek konseling terhadap pengetahuan, sikap dan kepatuhan berobat penderita tuberkulosis paru. *Jurnal Husada Mahakam*, *III*(6), 281–287.

M'Imunya, J. M., Kredo, T., & Volmink, J. (2012). Patient education and counselling for promoting adherence to treatment for tuberculosis. *Cochrane Database of Systematic Reviews*, *5*. https://doi.org/10.1002/14651858.cd006591.pub2

Machoki, J., Kredo, T., & Volmink, J. (2012). Patient education and counselling for promoting adherence to treatment for tuberculosis. *Cochrane Database of Systematic Reviews*, *5*.

Mekonnen, H. S., & Azagew, A. W. (2018). Non-adherence to anti-tuberculosis treatment, reasons and associated factors among TB patients attending at Gondar town health centers, Northwest Ethiopia 11 Medical and Health Sciences 1103 Clinical Sciences 11 Medical and Health Sciences 1117 Public Hea. *BMC Research Notes*, *11*(1), 1–8. https://doi.org/10.1186/s13104-018-3789-4

Ministry of Health Indonesia. (2016). *Pedoman nasional pengendalian tuberkulosis*.

Ministry of Health Indonesia. (2018). *Hasil Utama Riskesdes 2018*.

Moher, D, Liberati, A., Tetzlaff, J., Altman, D. ., & Tugwell. P. (2009). Preferred reporting item for systematic reviews and meta-analysis. The PRISMA statement. *Plos Medicine*.

Moher, David, Liberati, A., Tetzlaff, J., Altman, D. G., Altman, D., Antes, G., Atkins, D., Barbour, V., Barrowman, N., Berlin, J. A., Clark, J., Clarke, M., Cook, D., D'Amico, R., Deeks, J. J., Devereaux, P. J., Dickersin, K., Egger, M., Ernst, E., … Tugwell, P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, *6*(7). https://doi.org/10.1371/journal.pmed.1000097

Munn, Z., Tufanaru, C., & Aromataris, E. (2014). Data Extraction and Synthesis. *The Joanna Briggs Institute*, *114*(7), 49–54. https://doi.org/10.1097 / 01.NAJ.0000451683.66447.89

Naidoo, P., & Mwaba, K. (2010). Helplessness, depression, and social support among people being treated for tuberculosis in South Africa. *Social Behavior and Personality*, *38*(10), 1323–1334. https://doi.org/10.2224/sbp.2010.38.10.1323

Oxford Centre for Evidence-based Medicine - Levels of Evidence (March 2009). (2009). *Oxford Centre for Evidence-based Medicine – Levels of Evidence*.

Pai, M., Delavallade, C., Huddart, S., Bossuroy, T., Pons, V., & Baral, S. (2018). Knowledge about tuberculosis and infection prevention behavior: A nine city longitudinal study from India. *PLoS ONE*, *13*(10), 1–15. https://doi.org/10.1371/journal.pone.0206245

Porritt, K., Gomersall, J., & Lockwook, C. (2014). Study Selection and Critical Appraisal. *The American Journal of Nursing*, *114*(6), 47–52.

Potter, P. A., & Perry, A. G. (2005). *Virtual Clinical Excursions 3.0 to Accompany Fundamentals of Nursing*. Mosby Incorporated.

price & wilson. (2006). *No Title*.

RAFLYTHENU, A. G. (2019). *PENGARUH PERAN PETUGAS TB TERHADAP HASIL PENGOBATAN TB-MDR DI PUSKESMAS KOTA SURABAYA*. Universitas Airlangga.

Rahmi, N., Medison, I., & Suryadi, I. (2017). Hubungan Tingkat Kepatuhan Penderita Tuberkulosis Paru dengan Perilaku Kesehatan, Efek Samping OAT dan Peran PMO pada Pengobatan Fase Intensif di Puskesmas Seberang Padang September 2012 - Januari 2013. *Jurnal Kesehatan Andalas*, *6*(2), 345. https://doi.org/10.25077/jka.v6i2.702

Raza, S., Sarfaraz, M., & Ahmad, M. (2012). Practice of family and non-family based directly obseved treatment for tuberculosis in Pakistan: a retrospective cohort study. *The Health*, *3*, 39–44.

Ruru, Y., Matasik, M., Oktavian, A., Senyorita, R., Mirino, Y., Tarigan, L. H., van der Werf, M. J., Tiemersma, E., & Alisjahbana, B. (2018). Factors associated with

non-adherence during tuberculosis treatment among patients treated with DOTS strategy in Jayapura, Papua Province, Indonesia. *Global Health Action*, *11*(1). https://doi.org/10.1080/16549716.2018.1510592

Safii, S., Putri, S. T., & Suparto, T. A. (2018). Gambaran Kepatuhan Pasien Tuberkulosis Paru Terhadap Regimen Terapeutik Di Puskesmas Padasuka. *Jurnal Pendidikan Keperawatan Indonesia*, *1*(2), 98. https://doi.org/10.17509/jpki.v1i2.9747

Sajjad, S. S., Sajid, N., Fatimi, A., Maqbool, N., Baig-Ansari, N., & Amanullah, F. (2020). The impact of structured counselling on patient knowledge at a private TB program in Karachi. *Pakistan Journal of Medical Sciences*, *36*(1), S49–S54. https://doi.org/10.12669/pjms.36.ICON-Suppl.1713

Salih, K. E. M., Bilal, J. A., Alfadeel, M. A., Hamid, Y., Eldouch, W., Elsammani, E., Ibrahim, S. A., & Adam, I. (2014). Poor adherence to the world health organization guidelines of treatment of severe pneumonia in children at Khartoum, Sudan. *BMC Research Notes*, *7*(1), 1–4. https://doi.org/10.1186/1756-0500-7-531

Santos, C. M. D. C., Pimenta, C. A. D. M., & Nobre, M. R. C. (2007). The PICO strategy for the research question construction and evidence search. *Revista Latino-Americana de Enfermagem*, *15*(3), 508–511.

Saranya, P., Swathi, S., Kousalya, K., & Praveen, D. (2016). A prospective interventional study of knowledge, attitude and practice (KAP) towards tuberculosis among patients with koch's disease. *International Journal of Pharmacy and Pharmaceutical Sciences*, *8*(3), 58–61.

Sharma, P., Goyal, R. K., Nandave, M., Sciences, D. P., Res, D., Sciences, D. P., & Vihar, P. (2020). *A Review : Prevention , Treatment and Management of Tuberculosis through Combinational Approaches of Different Indian Systems of Medicine Authors*.

Sharma, S., Sarin, R., Sahu, G., & Shukla, G. (2019). ScienceDirect Original article Demographic profile , clinical and microbiological predictors of mortality amongst admitted pediatric TB patients in a tertiary referral tuberculosis hospital. *Indian Journal of Tuberculosis*, *xxxx*, 1–8. https://doi.org/10.1016/j.ijtb.2019.10.001

Tang, N., بيبيبيبيبيي ثبثبث, Pública, S., Msp, I. I., Miranda, C., Casos, E. D. E. L. O. S., En, D. E. C., John, L., بيبيبيبيبيي ثبثبث, California, B., Pérez Gómez, B., Rodríguez Artalejo, F., Villar Álvarez, F., López-Abente, G., Imaz Iglesia, I., Jiménez Jiménez, D., Catalán Castilla, J., González Enríquez, J., Martín Moreno, J. M., … Dizaje, O. D. E. A. (2018). No Title□□□□□ . بيبيب, ثقثقثقثق ,(ثق ثقثقثق)□ □□□ □.

The Joanna Briggs Institute. (2017a). Checklist for Quasi-Experimental Studies (non-randomized experimental studies). *The Joanna Briggs Institute*, 1–6. https://doi.org/10.3389/fneur.2015.00202

The Joanna Briggs Institute. (2017b). *JBI_Quasi-Experimental_Appraisal_Tool2017*.

Thiam, S., LeFevre, A. M., Hane, F., Ndiaye, A., Ba, F., Fielding, K. L., Ndir, M., & Lienhardt, C. (2007). Effectiveness of a strategy to improve adherence to tuberculosis treatment in a resource-poor setting: a cluster randomized controlled trial. *Jama*, *297*(4), 380–386.

Thomas, B. E., Shanmugam, P., Malaisamy, M., Ovung, S., Suresh, C., Subbaraman, R., Adinarayanan, S., & Nagarajan, K. (2016). Psycho-socio-economic issues challenging multidrug resistant tuberculosis patients: A systematic review. *PLoS ONE*, *11*(1), 1–15. https://doi.org/10.1371/journal.pone.0147397

Tina Poklepovic Pericic and Sarah Tanveer. (2019). *Why systematic reviews matter*.

Tola, H. H., Shojaeizadeh, D., Tol, A., Garmaroudi, G., Yekaninejad, M. S., Kebede, A., Ejeta, L. T., Kassa, D., & Klinkenberg, E. (2016). Psychological and educational intervention to improve tuberculosis treatment adherence in Ethiopia based on health belief model: A cluster randomized control trial. *PLoS ONE*, *11*(5), 1–15. https://doi.org/10.1371/journal.pone.0155147

Truzyan, N., Crape, B., Harutyunyan, T., & Petrosyan, V. (2018). *Family-Based Tuberculosis Counseling Supports Directly Observed Therapy in Armenia : A Pilot Project*. 113–124. https://doi.org/10.4236/jtr.2018.62011

van den Hof, S., Collins, D., Hafidz, F., Beyene, D., Tursynbayeva, A., & Tiemersma, E. (2016). The socioeconomic impact of multidrug resistant tuberculosis on patients: Results from Ethiopia, Indonesia and Kazakhstan. *BMC Infectious Diseases*, *16*(1). https://doi.org/10.1186/s12879-016-1802-x

Vergnes, J. N., Marchal-Sixou, C., Nabet, C., Maret, D., & Hamel, O. (2010). Ethics in systematic reviews. *Journal of Medical Ethics*, *36*(12), 771–774. https://doi.org/10.1136/jme.2010.039941

Volino LR, Das RP, Mansukhani RP, C. LE. (2014). *scholar (2)*.

Wei, X. L., Yin, J., Zou, G. Y., Zhang, Z. T., Walley, J., Harwell, J., Li, H. T., Sun, Q., Li, R. Z., Wang, L. X., & Zhang, X. L. (2015). Treatment interruption and directly observed treatment of multidrug-resistant tuberculosis patients in China. *International Journal of Tuberculosis and Lung Disease*, *19*(4), 413–419. https://doi.org/10.5588/ijtld.14.0485

Weingarten, M. A., Paul, M., & Leibovici, L. (2004). *Assessing ethics of trials in systematic reviews How would the protocol work in practice? 328*(April), 1013–1014.

World Health Organization, (2018).

World Health Organization. (2019). *Global Tuberculosis Report*.

Yan, S., Zhang, S., Tong, Y., Yin, X., Lu, Z., & Gong, Y. (2018). Nonadherence to Antituberculosis Medications: The Impact of stigma and depressive symptoms. *American Journal of Tropical Medicine and Hygiene*, *98*(1), 262–265. https://doi.org/10.4269/ajtmh.17-0383

Yani, D. I. (2012). *Effect of Family-Based DOTS Support Program on Adherence to Health Behaviors in PAtients with Pulmonary Tuberculosis in Indonesia*.

Yin, J., Wang, X., Zhou, L., & Wei, X. (2018). The relationship between social support, treatment interruption and treatment outcome in patients with multidrug-resistant tuberculosis in China: a mixed-methods study. *Tropical Medicine and International Health*, *23*(6), 668–677. https://doi.org/10.1111/tmi.13066

Zulham, Mufidah, & Djaharuddin, I. (2016). Efektivitas Konseling oleh Apoteker terhadap Peningkatan dan Kepatuhan Pasien Tuberkulosis Paru. *JST Kesehatan*, *6*(3), 298–302.

## LAMPIRAN-LAMPIRAN

# 11 questions to help you make sense of a trial

## How to use this appraisal tool

Three broad issues need to be considered when appraising a

randomised controlled trial study: Are the results of the study

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

The 11 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.

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 (2017). CASP (insert name of checklist i.e. Randomised Controlled Trial) Checklist. [online] Available at: *URL*. Accessed: *Date Accessed*.**

# (A) Are the results of the trial valid?

<u>Screening Questions</u>

**1. Did the trial address a clearly focused issue?**  ☐ Yes

☐ Can't tell  ☐ No

HINT: An issue can be 'focused' In terms of
- The population studied
- The intervention given
- The comparator given
- The outcomes considered

---

**2. Was the assignment of patients to treatments**  ☐ Yes  ☐ Can't tell

☐ No randomised?

HINT: Consider
- How was this carried out?
- Was the allocation sequence concealed from researchers and patients?

---

**3. Were all of the patients who entered**  ☐ Yes  ☐ Can't tell

☐ No the trial properly accounted for at its

conclusion?

HINT: Consider
- Was the trial stopped early?

- Were patients analysed in the groups to which they were randomised?

# Is it worth continuing?

**4. Were patients, health workers and study** ☐ Yes ☐ Can't tell

☐ **No personnel 'blind' to treatment?**

HINT: Think about
- Patients?
- Health workers?
- Study personnel?

---

**5. Were the groups similar at the start of the trial?** ☐ Yes ☐ Can't tell ☐ No

HINT: Look at
- Other factors that might affect the outcome such as age, sex, social class

---

**6. Aside from the experimental intervention,** ☐ Yes

☐ **Can't tell** ☐ **No were**

**the groups treated equally?**

## (B) What are the results?

**7. How large was the treatment effect?**

HINT: Consider
- What outcomes were measured?
- Is the primary outcome clearly specified?
- What results were found for each outcome?

---

**8. How precise was the estimate of the treatment effect?**

HINT: Consider
- What are the confidence limits?

## (C) Will the results help locally?

●

**9.** **Can the results be applied in your context?**  ☐ **Yes**

☐ **Can't tell**  ☐ **No (or to**

**the local population?)**

HINT: Consider whether

- Do you think that the patients covered by the trial are similar enough to the patients to whom you will apply this?, if not how to they differ?

**10.** **Were all clinically important outcomes**  ☐ **Yes**

☐ **Can't tell**  ☐ **No**

**considered?**

HINT: Consider

a.   Is there other information you would like to have seen?
b.   If not, does this affect the decision?

**11.** **Are the benefits worth the harms and costs?**  ☐ **Yes**

☐ **Can't tell**  ☐ **No**

HINT: Consider

c.   Even if this is not addressed by the trial, what do you think?

# LAMPIRAN 2 .TOOLS PENILAIAN KUALITAS ARTIKEL
## CASP KOHOR STUDY

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.*

# C∧SP
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Paper for appraisal and reference: ....................................................................................................................

1. Did the study address a clearly focused issue?

Yes ☐
Can't Tell ☐
No ☐

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 ☐
Can't Tell ☐
No ☐

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 ☐

Can't Tell ☐

No ☐

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 ☐

Can't Tell ☐

No ☐

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 ☐
Can't Tell ☐
No ☐

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 ☐
Can't Tell ☐
No ☐

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 ☐
Can't Tell ☐
No ☐

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 ☐
Can't Tell ☐
No ☐

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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:

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9. Do you believe the results?

Yes ☐
Can't Tell ☐
No ☐

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:

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**Section C: Will the results help locally?**

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

Yes ☐
Can't Tell ☐
No ☐

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 ☐
Can't Tell ☐
No ☐

Comments:

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

Yes ☐
Can't Tell ☐
No ☐

Comments:

# LAMPIRAN 3. PENILAIAN RISIKO BIAS

## Cochrane Collaboration's tool for assessing risk of bias (adapted from Higgins and Altman13)

| Bias domain | Source of bias | Support for judgment | Review authors' judgment (assess as low, unclear or high risk of bias) |
|---|---|---|---|
| Selection bias | Random sequence generation | Describe the method used to generate the allocation sequence in sufficient detail to allow an assessment of whether it should produce comparable groups | Selection bias (biased allocation to interventions) due to inadequate generation of a randomised sequence |
| | Allocation concealment | Describe the method used to conceal the allocation sequence in sufficient detail to determine whether intervention allocations could have been foreseen before or during enrolment | Selection bias (biased allocation to interventions) due to inadequate concealment of allocations before assignment |
| Performance bias | Blinding of participants and personnel* | Describe all measures used, if any, to blind trial participants and researchers from knowledge of which intervention a participant received. Provide any information relating to whether the intended blinding was effective | Performance bias due to knowledge of the allocated interventions by participants and personnel during the study |
| Detection bias | Blinding of outcome assessment* | Describe all measures used, if any, to blind outcome assessment from knowledge of which intervention a participant received. Provide any information relating to whether the intended blinding was effective | Detection bias due to knowledge of the allocated interventions by outcome assessment |
| Attrition bias | Incomplete outcome data* | Describe the completeness of outcome data for each main outcome, including attrition and exclusions from the analysis. State whether attrition and exclusions were reported, the numbers in each intervention group (compared with total randomised participants), reasons for attrition or exclusions where reported, and any reinclusions in analyses for the review | Attrition bias due to amount, nature, or handling of incomplete outcome data |
| Reporting bias | Selective reporting | State how selective outcome reporting was examined and what was found | Reporting bias due to selective outcome reporting |
| Other bias | Anything else, ideally Prespecified | State any important concerns about bias not covered in the other domains in the tool | Bias due to problems not covered elsewhere |

| Section/topic | # | Checklist item | √ | Reported on page # |
|---|---|---|---|---|
| **TITLE** | | | | |
| Title | 1 | Identify the report as a systematic review, meta-analysis, or both. | √ | Page 1 line 2 |
| **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. | √ | Page 1 Line 4-24 |
| **INTRODUCTION** | | | | |
| Rationale | 3 | Describe the rationale for the review in the context of what is already known. | √ | Page 2 Line 62-72 |
| Objectives | 4 | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS). | √ | Page 2 Line 75-78 |
| **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. | √ | Page 3 Line 81-84 |
| 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. | √ | Page 2-3 Line 93-101 Line 109-113 |
| 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. | √ | Page 3 Line 104-105 Line 114-116 |
| Search | 8 | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. | √ | Page 3 Line 105-113 |
| 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). | √ | Page 3 Line 118-132 Page 15 |
| 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. | √ | Page 3 Line 133-138 |
| Data items | 11 | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. | √ | Page 14 |

| Section/topic | # | Checklist item | √ | Reported on page # |
|---|---|---|---|---|
| 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. | √ | Page 3-4 Line 140-157 |
| 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. | | - |
| 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. | √ | Page 3 Line 118-132 |
| 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. | √ | Page 4 Line 165-165 |
| 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). | √ | Page 4 Line 158-162 Page 16-17 |
| 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. | √ | Page 4-6 Line 174-252 |
| 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). | √ | Page 6-8 Line 255-331 |
| 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). | √ | Page 8 Line 346-352 |

| Conclusions | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | √ | Page 8 Line 334-344 |
|---|---|---|---|---|
| **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. | √ | Page 8 Line 361-362 |

## LAMPIRAN 4. PRISMA 2009 CHECKLIST