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The impact of patient, intervention, comparison, outcome (PICO) as a search strategy tool on literature search quality: a systematic review Mette Brandt Eriksen, PhD; Tove Faber Frandsen, PhD

APPENDIX B

Excluded studies

The following studies were excluded from the review due to wrong study design, wrong intervention, or wrong outcomes.

Wrong study design

- Boudin F, Nie JY, Bartlett JC, Grad R, Pluye P, Dawes M. Combining classifiers for robust PICO element detection. BMC Med Inform Decis Mak. 2010 May 15;10:29.
- Bramer WM. Patient, intervention, control, and outcome (PICO): an overrated tool [expert searching]. MLA News. 2015 Feb;55(2):6.
- Chillingworth M. Pico reveals latent talent. Inf World Rev. 2006;(224):33.
- da Costa Santos CM1, de Mattos Pimenta CA, Nobre MR. The PICO strategy for the research question construction and evidence search. Rev Lat Am Enfermagem. 2007 May–Jun;15(3):508–11.
- Davies KS. Formulating the evidence based practice question: a review of the frameworks. Evidence Based Libr Inf Pract. 2011;6(2):75–80.
- Diaz M, Chacón JDO, Ronda VM, José F. Design of clinical questions in evidence-based practice. formulation models. Enfermeria Global. 2016;15(3):431–8.
- Elkins MY. Using PICO and the brief report to answer clinical questions. Nursing. 2010 Apr;40(4):59–60.
- Haroon M, Phillips R. "There is nothing like looking, if you want to find something" asking questions and searching for answers the evidence based approach. Arch Dis Child Educ Pract Ed. 2010 Apr;95(2):34–9.
- Hastings C, Fisher CA. Searching for proof: creating and using an actionable PICO question. Nurs Manage. 2014 Aug;45(8):9–12.
- Henley M. Using patient characteristics, interventions, comparison group, and expected (or desired) outcomes (PICO) for clinical questions: simple search strategies for finding best evidence [expert searching]. MLA News. 2013 Sep;53(8):10.
- Medina McKeon JM, McKeon PO. PICO: a hot topic in evidence-based practice. Int J Athl Ther Train. 2015 Jan;20(1):1–3.
- Miller SA, Forrest JL. Enhancing your practice through evidence-based decision making: PICO, learning how to ask good questions. J Evidence-Based Dental Pract. 2001 Oct;1(2):136–41.
- Stone PW. Popping the (PICO) question in research and evidence-based practice [ask an expert]. Appl Nurs Res. 2002 Aug;15(3):197–8.
- Sun H, Shi JP. Expansion of PICO model in evidence-based medicine and its application in qualitative research. Chin J Evidence-Based Med. 2014 Jan;14(5):505–8.
- Van Den Bruel A, Boland B, Vermeire E, Buntinx F, Aertgeerts B. [From PICO to search terms on the Internet: how to find relevant information? new coxibs: do they have a better gastrointestinal safety?] Rev Med de Liege. 2005 Jan;60(1):52–60.
- Yensen J. PICO search strategies. Online J Nurs Inform. 2013 Fall;17(3):1-5.





Wrong interventions

• Schardt C, Adams MB, Owens T, Keitz S, Fontelo P. Utilization of the PICO framework to improve searching PubMed for clinical questions. BMC Med Inform Decis Mak. 2007 Jun 15;7:16.

Wrong outcomes

- Cooke A, Smith D, Booth A. Beyond PICO: the SPIDER tool for qualitative evidence synthesis. Qual Health Res. 2012 Oct;22(10):1435–43.
- Ho GJ, Liew SM, Ng CJ, Shunmugam RH, Glasziou P. Development of a search strategy for an evidence based retrieval service. PLOS ONE. 2016;11(12):e0167170.