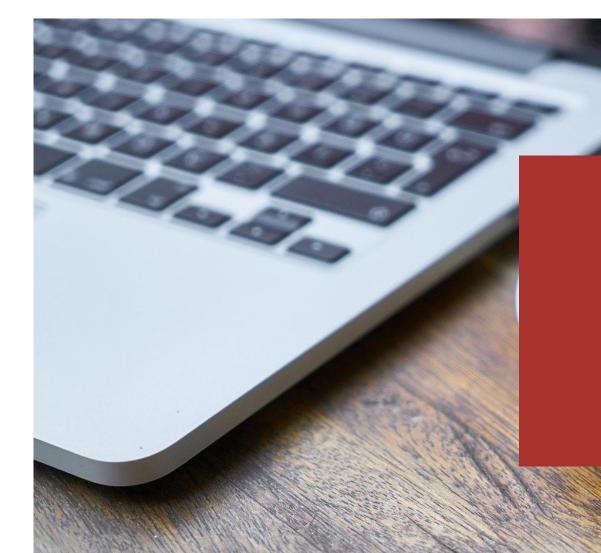
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Coffee Lectures

Systematic Research PICO process in PubMed and Embase

Bettina Etzel 5 March 2025 New knowledge in 10 minutes:

- Create a research question with PICO
- Searching PubMed and Embase



PICO framework for clinical questions

«Is physiotherapy more effective than rest for rehabilitation of ankle sprains?»

Ρ	Patient, Population, or Problem	Persons with a sprained ankle
I	Intervention, Prognostic Factor, or Exposure	physiotherapy
С	C omparison or Intervention (if appropriate)	rest
0	Outcome you would like to measure or achieve	Faster return to activity

Formulating a search phrase

«Is physiotherapy more effective than rest for rehabilitation of ankle sprains?»

P (atient, Problem)	ankle sprain*			
I (ntervention)	physiotherapy	exercise therapy		
C (omparison)	rest	immobilization		AND (Search History)
O (utcome)	return to sport	recovery	pain reduction	
	OR			\rightarrow

((ankle sprain*)) AND ((physiotherapy) OR (exercise therapy)) AND ((rest) OR (immobilization)) AND ((pain reduction) OR (return to sport) OR (recovery))

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PICO in PubMed – Use Search History

uery bo	(
				ise therapy)) AND ((<u>rest</u> OR immo	bilization)) <mark>AN</mark>	D (pain	×		Search ~		
requctio	Ŭ OK <u>(etul</u>	<u>î to sport</u>	OR recovery)	Adapt	and comb	oine searc	n strateg	y				
listory	and Sear	ch Detai	ls					,↓, Do	ownload	🔟 Delete		
	Actions			. 21 1 25					Result			
Search	Actions	Details	Query Date	9: 31.1.25					Result	sime		
#13	•••	>		le sprain) AND (pł immobilization)) very)					89	08:32:05		
#12	•••	>	Search: pain re	eduction OR retur	n to sport OR	recovery			768,789	2	ch every sing	
#10	• • •	>	Search: rest O	R immobilization					370,267	-	concept for itself, to combine them adapt the single	
#9	•••	>	Search: physic	otherapy OR exerc	ise therapy				339,382	-		
#8	•••	>	Search: ankle s	sprain					26,237	/	epts (add, e, manipulat	

PICO in Embase – Try PICO framework

PICO						
Quick PICO PV Wizard Medical device Advanced Drug Disease Device Citation information Query translator						
Default strategy: /exp 🗸						
Population e.g. diabetes						
O ankle sprain /exp ∨ Explosion S synonyms :all ∨ All fields						
● physiotherapy /exp → Explosion OR → ● kinesiotherapy /exp → Explosion 25 synonyms :all → All fields						
Comparison e.g. placebo						
o immobilization /exp ∨ Explosion 4 synonyms :all ∨ All fields OR ∨						
Outcome e.g. risk						
Or v Oreturn to sport /exp v Explosion Synonyms :all v All fields Or v Oreturn to sport /exp v Explosion Synonyms :all v All fields Or v recovery :ti,ab v Title or Abstract						

Other Frameworks

The SPICE framework is useful for qualitative research topics evaluating the outcomes of a service, project or intervention.

	SPICE Framework					
S	Setting	What is the location or environment of the research or study? (e.g. South Korean Universities, a hospital emergency room)				
Ρ	Perspective	Who is the group being studied? (e.g. adolescents, rural doctors)				
I	Intervention	What is the intervention/interest/exposure that you are evaluating?				
С	Comparison	What is the alternative strategy you would like to compare to the intervention? May include no intervention				
Е	Evaluation	What is the result or outcome measures? (e.g. reduced anxiety, improved memory)				

LibGuides at The Australian National University. Frameworks: PICO, SPIDER, SPICE - Systematic Reviews in the Sciences . Retrieved February 28, 2025, from https://libguides.anu.edu.au/c.php?g=916656&p=7064999

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