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# Literature searching with the Cochrane Library Exercises & solutions

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# Exercise 1: PICO



Timon is 10 years old and obese. His doctor wants to prescribe an intervention to stabilize his weight. However, she is not sure which type of intervention is better, one with the child alone (without the parents) or one with the parents alone (without the child).



<https://youtu.be/57jEMZ87ND8>

# Exercise 1: PICO



## Case study:

Timon is 10 years old and obese. His doctor wants to prescribe an intervention to stabilize his weight. However, she is not sure which type of intervention is better, one with the child alone (without the parents) or one with the parents alone (without the child).

## Exercise 1:

What are the PICO concepts of this case and what is the PICO question?

Patient:

Intervention:

Control:

Outcome:

PICO Question:

# Exercise 1: Solution

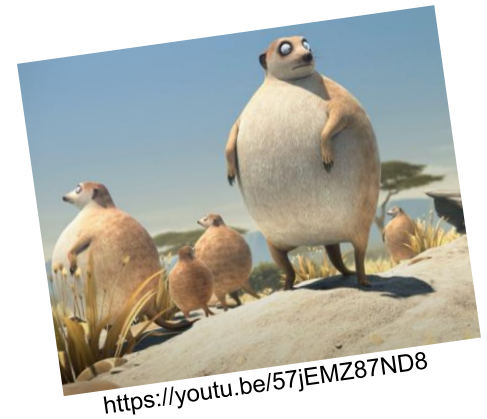


Patient/Population: **Overweight, obese children**

Intervention: **Parent-only interventions**

Control: **Child-only interventions**

Outcome: **Stabilize the weight**



Research question designed with PICO:

In **overweight or obese children**, are **parent-only** or **child-only interventions** more effective to **stabilize the weight**?

## Exercise 2: Text words



In **overweight or obese children**, are **parent-only** or **child-only interventions** more effective to **stabilize the weight**?

### Task:

Find appropriate text words for each PICO aspect. Use Boolean and proximity operators to connect the text words within a PICO aspect. Also use truncation.



<https://youtu.be/57jEMZ87ND8>

# Exercise 2: Proposed solution



<b>Patient</b>	Pediatric obesity, paediatric obesity, Childhood Overweight, Childhood Obesity, Child Obesity. <i>Advanced:</i> <b>(p?ediatric OR child* OR kid OR kids ) NEAR/3 (overweight OR obese OR obesity OR adipose OR adiposity)</b>
<b>Intervention</b>	Parent-only, Parent-focused, Phrases like: interventions focusing on parents only. <i>Advanced:</i> <b>(parent? OR mother? OR father? OR caretaker?) NEAR/2 (only OR focus* OR centered OR centred OR just OR alone OR based OR directed)</b>
<b>Control</b>	<b>(child* OR kid OR kids OR boy? OR girl? OR schoolchild*) NEAR/2 (only OR focus* OR centered OR centred OR just OR alone OR based OR directed)</b>
<b>Outcome</b>	<b>(reduce OR reduction OR stabili?e OR stabili?ation OR control* OR manage*) NEAR/3 (weight OR BMI OR 'body mass index' OR (body NEXT fat))</b>

# Exercise 3: MeSH terms



In **overweight or obese children**, are **parent-only** or **child-only interventions** more effective to **stabilize the weight**?

## Task:

Find MeSH terms matching the PICO aspects (via Medical terms or search manager) and search for them (add to search manager).

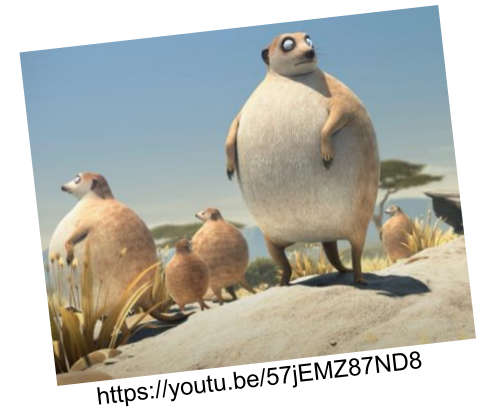


<https://youtu.be/57jEMZ87ND8>

# Exercise 3: Proposed solution



"Pediatric Obesity"  
"Parents"  
"Child" (not exploded)  
"Body Weight"



MeSH descriptor: [Pediatric Obesity] explode all trees

MeSH descriptor: [Parents] explode all trees

MeSH descriptor: [Child] this term only

MeSH descriptor: [Body Weight] explode all trees



# Exercise 4: Combinations



In **overweight or obese children**, are **parent-only** or **child-only interventions** more effective to **stabilize the weight**?

## Task:

Now combine the MeSH search with the text word search. Use the Search Manager for this. Individual lines can be combined with # and the line number.



<https://youtu.be/57jEMZ87ND8>

# Exercise 4: Proposed solution (search manager)



#1	((p?ediatic OR child* OR kid OR kids) NEAR/3 (overweight OR obese OR obesity OR adipose OR adiposity)):ti,ab,kw	Limits	4759
#2	((parent? OR mother? OR father? OR caretaker?) NEAR/2 (only OR focus* OR centered OR centred OR just OR alone OR based OR	Limits	1893
#3	((child* OR kid OR kids OR boy? OR girl? OR schoolchild*) NEAR/2 (only OR focus* OR centered OR centred OR just OR alone OR based OR	Limits	3688
#4	((reduce OR reduction OR stabili?e OR stabili?ation OR control* OR manage*) NEAR/3 (weight OR BMI OR 'body mass index' OR (body NEXT	Limits	37758
#5	#1 AND #2 AND #3 AND #4	Limits	11
#6	MeSH descriptor: [Pediatric Obesity] explode all trees	MeSH ▼	1402
#7	MeSH descriptor: [Parents] explode all trees	MeSH ▼	5568
#8	MeSH descriptor: [Child] this term only	MeSH ▼	51790
#9	MeSH descriptor: [Body Weight] explode all trees	MeSH ▼	30081
#10	#6 AND #7 AND #8 AND #9	Limits	126
#11	(#1 OR #6) AND (#2 OR #7) AND (#3 OR #8) AND (#4 OR #9)	Limits	258

Result of the text-only word search

Result of the MeSH-only search

Result of the combined MeSH and text word search

# Exercise 4: Proposed solution (search manager) «Single Line Search» (very advanced)



#12	<pre>([mh "Pediatric Obesity"] OR ((p?ediatic OR child* OR kid OR kids ) NEAR/3 (overweight OR obese OR obesity OR adipose OR adiposity)):ti,ab,kw) AND ([mh "Parents"] OR ((parent? OR mother? OR father? OR caretaker?) NEAR/2 (only OR focus* OR centered OR centred OR just OR alone OR based OR directed)):ti,ab,kw) AND ([mh ^"Child"] OR ((child* OR kid OR kids OR boy? OR girl? OR schoolchild*) NEAR/2 (only OR focus* OR centered OR centred OR just OR alone OR based OR directed)):ti,ab,kw) AND ([mh "Body Weight"] OR ((reduce OR reduction OR stabili?e OR stabili?ation OR control* OR manage*) NEAR/3 (weight OR BMI OR 'body mass index' OR (body NEXT fat))):ti,ab,kw)</pre>	Limits	258
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([mh "Pediatric Obesity"] OR ((p?ediatic OR child* OR kid OR kids ) NEAR/3 (overweight OR obese OR obesity OR adipose OR adiposity)):ti,ab,kw) AND ([mh "Parents"] OR ((parent? OR mother? OR father? OR caretaker?) NEAR/2 (only OR focus* OR centered OR centred OR just OR alone OR based OR directed)):ti,ab,kw) AND ([mh ^"Child"] OR ((child* OR kid OR kids OR boy? OR girl? OR schoolchild*) NEAR/2 (only OR focus* OR centered OR centred OR just OR alone OR based OR directed)):ti,ab,kw) AND ([mh "Body Weight"] OR ((reduce OR reduction OR stabili?e OR stabili?ation OR control* OR manage*) NEAR/3 (weight OR BMI OR 'body mass index' OR (body NEXT fat))):ti,ab,kw)
```

**Note:** In systematic reviews, the aim is to find all potentially relevant references, hence the search is as sensitive as possible. Therefore, one would usually not search all PICO aspects, as not all PICO aspects can be clearly formulated or are reported in the title/abstract/keywords/subject headings of a reference.