Supplementary search strategy for major databases (February, 2018)

Pubmed

1. "Baths"[Mesh]
2. (shower* or bath* or wash* or cleans*) [Title]
3. 1 or 2
4. "Chlorhexidine"[Mesh]
5. (chlorhexidine or chlorohex* or eludril* or corsodyl* or Periochip* or CHX or nolvasan* or sebidin* or tubulicid* or Cervitec* or Chlorzoin* or hibitane*)[Title]
6. 4 or 5
7. "Methicillin-Resistant Staphylococcus aureus"[Mesh]
8. (methicillin-resistan* or meticillin-resistan* or MRSA or EMRSA or MDRO)[Title]
9. 7 or 8
10. "Enterococcus"[Mesh]
11. "Vancomycin Resistance"[Mesh]
12. 10 and 11
13. (vancomycin resistant enterococc* or VRE) [Title]
14. 12 or 13
15. 9 or 14
16. 3 and 6 and 15

Embase

1. ''bath'/exp
2. (shower* or bath* or wash* or cleans*):ti
3. 1 OR 2
4. 'chlorhexidine'/exp
5. (chlorhexidine or chlorohex* or eludril* or corsodyl* or Periochip* or hibitane or nolvasan* or sebidin* or tubulicid* or Cervitec* or Chlorzoin* or* CHX):ti
6. 4 OR 5
7. 'methicillin resistant staphylococcus aureus'/exp
8. (methicillin-resistan* or meticillin-resistan* or MRSA or EMRSA or MDRO):ti
9. 7 OR 8
10. 'enterococcus'/exp
11. 'antibiotic resistance'/exp
12. 10 AND 11
13. (vancomycin resistant enterococc* or VRE):ti
14. 12 OR 13
15. 9 OR 14
16. 3 AND 6 AND 15

The Cochrane Library

#1 MeSH descriptor: [Baths] explode all trees
#2 shower* or bath* or wash* or cleans*:ti (Word variations have been searched)
#3 #1 or #2
#4 MeSH descriptor: [Chlorhexidine] explode all trees
#5 chlorhexidine or chlorohex* or eludril* or corsodyl* or Periochip* or CHX or nolvasan* or sebidin* or tubulicid* or Cervitec* or Chlorzoin* or hibitane*:ti (Word variations have been searched)
#6 #4 or #5
#7 MeSH descriptor: [Methicillin-Resistant Staphylococcus aureus] explode all trees
#8 methicillin-resistan* or meticillin-resistan* or MRSA or EMRSA or MDRO:ti (Word variations have been searched)
#9 #7 or #8
#10 MeSH descriptor: [Enterococcus] explode all trees
#11 MeSH descriptor: [Vancomycin Resistance] explode all trees
#12 #11 and #10
#13 vancomycin resistant enterococc* or VRE:ti (Word variations have been searched)
#14 #12 or #13
#15 #9 or #14
#16 #3 and #6 and #15

Supplementary quality assessment. Methodological quality of included articles based on the Newcastle–Ottawa Scale for non-randomized control trials and the Cochrane risk of bias tool for randomized controlled trials.

Study		Selection				Comparability	Outcome			
		Representativeness of the exposed cohort	Selection of the non exposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability of cohorts on the basis of the design or analysis	Assessment of outcome	Was follow-up long enough for outcomes to occur	Adequacy of follow up of cohorts	Total quality score
Lowe	2017		★	★	★	★★	★	★	★	8
Kim	2016		★	★	★	★★	★	★	★	8
Colling	2015		★	★	★	★★	★	★		7
Bass	2013		★	★	★	★★	★	★		7
Kassakian	2011	★	★	★	★	★★		★	★	9
Evans	2010		★	★	★	★★	★	★	★	8
Fraser	2010	★	★	★	★	★★		★	★	8
Popovich	2010	★	★	★	★	★★	★	★		8
Climo	2009		★	★	★	★★	★	★		7
Popovich	2009		★	★	★	★★	★	★		7
Ridenour	2007	★	★	★	★	★★	★	★		8

Newcastle-Ottawa Scale for assessing the quality of studies in meta-analysis

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability.

Study	Year	Random sequence generation	Allocation concealment	Blinding of participants and researchers	Blinding of outcome assessment	Incomplete outcome data	Selective reporting	Other bias
Amirov	2017	**L**	**U**	**H**	**U**	**L**	**H**	**L**
Millar	2015	**L**	**L**	**H**	**H**	**L**	**H**	**L**
Climo	2013	**L**	**U**	**H**	**U**	**L**	**L**	**L**
Huang	2013	**L**	**L**	**H**	**U**	**L**	**L**	**H**
Montecalvo	2012	**L**	**U**	**H**	**U**	**L**	**H**	**H**
Vernon	2006	**L**	**L**	**H**	**H**	**L**	**L**	**H**

Note: Cochrane Collaboration's tool for assessing risk of bias for randomized trials, which assesses the risk of bias (L=low, H=high, U=unclear) across 7 domains: random sequence generation, allocation concealment, blinding of participants and researchers, blinding of outcome assessment, incomplete outcome data, selective reporting and other bias.