

Appendix 2. Search strategy

Title: A systematic literature review and meta-analysis to assess the effects of interventions to support smoking cessation in adult patients with diabetes.

Search summary:

We searched the Cochrane Central Register of Controlled Trials [The Cochrane Library, Wiley] (Issue 4, 2012), Medline [OvidSP] (1946 – present), Embase [OvidSP] (1974 – present), CINAHL [EbscoHOST] (1980 – present), PsycINFO [OvidSP] (1967 – present) & Science Citation Index, Social Sciences Citation Index, Conference Proceedings Citation Index- Science & Conference Proceedings Citation Index- Social Science & Humanities [Web of Knowledge] (1945 – present). The original search was run 14th May 2012, an update search was run 1st October 2012. The final update search was run 4th September 2013.

We searched trial registries for ongoing trials. We scanned reference lists of relevant articles and contacted researchers in the field.

Search methods:

Database name:	Interface:	Year range:	Date searched:	Hits:
CINAHL	EbscoHOST	1980 –	04/09/13	34
Cochrane Central Register of Controlled Trials	Cochrane Library, Wiley	Iss 9. 2013		6
Embase	OvidSP			
Medline	OvidSP	1974 –		126
PsycINFO	OvidSP	1946 –		83
Science Citation Index, Social Sciences Citation Index, Conference Proceedings Citation Index- Science & Conference Proceedings Citation Index- Social Science & Humanities	Web of Knowledge	1967 –		19
Scopus	Elsevier	1945 -		93
Unique references from May 2012 search = 1480 Unique references from Oct 2012 update = 115 References retrieved in this update = 461 Duplicates removed = 290 Final total = 1766 Unique references for Sep 2013 update = 171				
Limits: Human: animal studies excluded Publication type: RCTs				

Other resources searched:

Trial registers:

- ClinicalTrials.gov <http://clinicaltrials.gov> – Added from 01/01/2012-04/09/2013= 10 results
- WHO <http://apps.who.int/trialsearch/> - Added from 01/01/2012-04/09/2013= 8 results

16 new results once deduplicated

Search terms used:

“smoking cessation” AND diabetes
Condition=Diabetes AND Intervention=smoking

Other search methods used:

- Review of reference lists
- Contacted the following authors: Thomas, Janet L.

Search strategies:

CINAHL

S21	S20 Limiters - Published Date: 20120101-20130931	34
S20	S10 and S18 Limiters - Clinical Queries: Therapy - High Sensitivity	151
S19	S10 and S18	558
S18	S11 or S12 or S13 or S14 or S15 or S16 or S17	16395
S17	TI ((quit* or stop* or cease* or giv*) n5 smoking) OR AB ((quit* or stop* or cease* or giv*) n5 smoking)	2984
S16	TI (smoking cessation OR tobacco cessation) OR AB (smoking cessation OR tobacco cessation)	5442
S15	(MH "Nicotine Patch")	293
S14	(MH "Nicotine Replacement Therapy")	874
S13	(MH "Smoking/PC/TH")	4127
S12	(MH "Tobacco") OR (MH "Tobacco, Smokeless")	3491
S11	(MH "Smoking Cessation") OR (MH "Smoking Cessation Programs")	9416
S10	S6 NOT S9	70595
S9	S7 or S8	240
S8	TI diabet* insipidus OR AB diabet* insipidus	148
S7	(MH "Diabetes Insipidus")	192
S6	S1 or S2 or S3 or S4 or S5	70760
S5	TI (insulin* depend* or insulin?depend*) OR AB (insulin* depend* or insulin?depend*)	1513
S4	TI (non insulin* depend* or non insulin* depend* or non insulin?depend* or non insulin?depend*) OR AB (non insulin* depend* or non insulin* depend* or non insulin?depend* or non insulin?depend*)	569
S3	TI (IDDM or NIDDM or MODY or T1DM or T2DM or T1D or T2D) OR AB (IDDM or NIDDM or MODY or T1DM or T2DM or T1D or T2D)	1909
S2	TI diabet* OR AB diabet*	55873
S1	(MH "Diabetes Mellitus+")	56134

Cochrane Central Register of Controlled Trials (Cochrane Library, Wiley)

ID Search

#1 MeSH descriptor: [Diabetes Mellitus] explode all trees

#2 diabet*:ti,ab,kw

#3 IDDM or NIDDM or MODY or T1DM or T2DM or T1D or T2D:ti,ab,kw

#4 non insulin* depend* or non insulin depend* or non insulin?depend* or non insulin?depend:ti,ab,kw

#5 insulin* depend* or insulin?depend*:ti,ab,kw

#6 #1 or #2 or #3 or #4 or #5

#7 MeSH descriptor: [Diabetes Insipidus] explode all trees

#8 diabet* insipidus:ti,ab,kw

#9 #7 or #8

#10 #6 not #9

#11 MeSH descriptor: [Tobacco Use Cessation] explode all trees

#12 MeSH descriptor: [Tobacco] explode all trees

#13 MeSH descriptor: [Nicotine] explode all trees

#14 MeSH descriptor: [Tobacco Use Disorder] explode all trees

#15 MeSH descriptor: [Tobacco Smoke Pollution] explode all trees

#16 MeSH descriptor: [Smoking] explode all trees and with qualifiers: [Prevention & control - PC, Therapy - TH]

#17 ((smoking or tobacco) next cessation):ti,ab,kw

#18 ((quit* or stop* or cease* or giv*) near smoking):ti,ab,kw

#19 #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18

#20 #10 and #19

Embase (OvidSP)

1	exp Diabetes Mellitus/	572211
2	diabet*.ti,ab,ot.	542710
3	(IDDM or NIDDM or MODY or T1DM or T2DM or T1D or T2D).ti,ab,ot.	35227
4	(non insulin* depend* or non insulin* depend* or non insulin?depend* or non insulin?depend*).ti,ab,ot.	12485
5	(insulin* depend* or insulin?depend*).ti,ab,ot.	33290
6	1 or 2 or 3 or 4 or 5	672891
7	exp Diabetes Insipidus/	11125
8	diabet* insipidus.ti,ab,ot.	8319
9	7 or 8	12401
10	6 not 9	663690
11	smoking cessation/ or smoking cessation program/	36479
12	tobacco dependence/	12329
13	tobacco/ or smokeless tobacco/	33838
14	nicotine replacement therapy/	2903
15	nicotine gum/ or nicotine lozenge/ or nicotine patch/ or nicotine vaccine/	2923
16	smoking/pc, th [Prevention, Therapy]	8268
17	((smoking or tobacco) adj cessation).ti,ab.	19294
18	((quit* or stop* or cease* or giv*) adj5 smoking).ti,ab.	12708
19	11 or 12 or 13 or 14 or 15 or 16 or 17 or 18	85348
20	random*.ti,ab.	853850
21	factorial*.ti,ab.	22168
22	(crossover* or cross over*).ti,ab.	70017
23	placebo*.ti,ab.	199972
24	(doubl* adj blind*).ti,ab.	146490
25	(singl* adj blind*).ti,ab.	14132
26	assign*.ti,ab.	234619
27	allocat*.ti,ab.	80752
28	volunteer*.ti,ab.	178753
29	crossover-procedure/	38291
30	double-blind procedure/	119862
31	single-blind procedure/	18184

32 randomized controlled trial/	357716
33 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32	1395000
34 10 and 19 and 33	534
35 (2012* or 2013*).em,dp,yr.	2434440
36 34 and 35	126

Medline (OvidSP)

1	exp Diabetes Mellitus/	315240
2	diabet*.ti,ab,ot.	411846
3	(IDDM or NIDDM or MODY or T1DM or T2DM or T1D or T2D).ti,ab,ot.	25647
4	(non insulin* depend* or non insulin* depend* or non insulin?depend* or non insulin?depend*).ti,ab,ot.	10679
5	(insulin* depend* or insulin?depend*).ti,ab,ot.	28202
6	1 or 2 or 3 or 4 or 5	465021
7	exp Diabetes Insipidus/	6897
8	diabet* insipidus.ti,ab,ot.	6799
9	7 or 8	8870
10	6 not 9	457756
11	Smoking Cessation/	20837
12	"Tobacco Use Cessation"/	755
13	((smoking or tobacco) adj cessation).ti,ab.	17133
14	((quit* or stop* or cease* or giv*) adj5 smoking).ti,ab.	11236
15	tobacco/ or tobacco, smokeless/	26600
16	Nicotine/	21738
17	"Tobacco Use Disorder"/	8359
18	Tobacco Smoke Pollution/	10633
19	exp Smoking/pc, th [Prevention & Control, Therapy]	16628
20	11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19	92023
21	randomized controlled trial.pt.	383307
22	controlled clinical trial.pt.	88946
23	randomized.ab.	298936
24	placebo.ab.	160755
25	drug therapy.fs.	1741540
26	randomly.ab.	211895
27	trial.ab.	314995
28	groups.ab.	1349081
29	21 or 22 or 23 or 24 or 25 or 26 or 27 or 28	3371868
30	exp animals/ not humans.sh.	4021928

31 29 not 30	2889885
32 10 and 20 and 31	602
33 (2012* or 2013*).ed,dp,yr.	2269358
34 32 and 33	83

PsycINFO (OvidSP)

1	Diabetes/ or Diabetes Mellitus/	10050
2	diabet*.ti,ab,ot.	17407
3	(IDDM or NIDDM or MODY or T1DM or T2DM or T1D or T2D).ti,ab,ot.	822
4	(non insulin* depend* or non insulin* depend* or non insulin?depend* or non insulin?depend*).ti,ab,ot.	188
5	(insulin* depend* or insulin?depend*).ti,ab,ot.	928
6	1 or 2 or 3 or 4 or 5	17632
7	exp Diabetes Insipidus/	143
8	diabet* insipidus.ti,ab,ot.	209
9	7 or 8	242
10	6 not 9	17401
11	((smoking or tobacco) adj cessation).ti,ab.	7083
12	((quit* or stop* or cease* or giv*) adj5 smoking).ti,ab.	4471
13	smoking cessation/	8438
14	tobacco smoking/	21293
15	smokeless tobacco/	507
16	nicotine/	7566
17	11 or 12 or 13 or 14 or 15 or 16	28732
18	10 and 17	239
19	limit 18 to "therapy (maximizes sensitivity)"	109
20	(2012* or 2013*).up,dp,yr.	319784
21	19 and 20	19

**Science Citation Index Expanded (SCI-EXPANDED), Social Sciences Citation Index (SSCI) ,
Conference Proceedings Citation Index- Science (CPCI-S) & Conference Proceedings Citation
Index- Social Science & Humanities (CPCI-SSH) (Web of Knowledge)**

Set Results

- # 6 [93](#) #3 AND #4 AND #5
Databases=SCI-EXPANDED, SSCI, CPCI-S, CPCI-SSH, CCR-EXPANDED, IC
Timespan=2012-01-01 - 2013-09-04 (Processing Date)
- # 5 [272,437](#) TS=(random* or blind* or allocat* or assign* or trial* or placebo* or crossover*
or cross-over*)
- # 4 [3,998](#) TS=("smoking cessation") OR TS=(((quit* or stop* or cease* or giv*) SAME
smoking))
- # 3 [49,778](#) #1 NOT #2
- # 2 [363](#) TS=("diabetes insipidus")
- # 1 [50,141](#) TS=(diabet*) OR TS=(IDDM OR NIDDM OR MODY OR T1DM OR T2DM OR T1D
OR T2D) OR TS=("non insulin* depend*" OPR "non insulin* depend*" OR "non
insulin?depend*" OR "non insulin?depend*") OR TS=("insulin* depend*" or
"insulin?depend*")
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SCOPUS

((TITLE-ABS-KEY(diabet*)) AND ((TITLE-ABS-KEY("smoking cessation")) OR ((TITLE(smoking W/5
(quit* OR stop* OR ceas* OR giv*)) OR ABS(smoking W/5 (quit* OR stop* OR ceas* OR giv*))))
OR ((TITLE(smoking W/5 (quit* OR stop* OR ceas* OR giv*)) OR ABS(smoking W/5 (quit* OR
stop* OR ceas* OR giv*)))) OR (TITLE(smoking* OR smoker* OR tobacco OR nicotine)))) AND
((TITLE(random* OR blind* OR allocat* OR assign* OR trial* OR placebo* OR crossover* OR
cross-over*) OR ABS(random* OR blind* OR allocat* OR assign* OR trial* OR placebo* OR
crossover* OR cross-over*))) AND (LIMIT-TO(PUBYEAR, 2013) OR LIMIT-TO(PUBYEAR, 2012))

Methodological search filters:

CINAHL	<p>RCTS:</p> <p>EbscoHOST Clinical Queries: Therapy – High Sensitivity</p> <p>Reference:</p> <p>Wong SS, Wilczynski NL, Haynes RB. Optimal CINAHL search strategies for identifying therapy studies and review articles. J Nurs Scholarsh. 2006;38(2):194-9. http://www3.interscience.wiley.com/journal/118600195/abstract?CRETRY=1&SRETRY=0 (See table 3)</p>
Embase	<p>RCTs</p> <p>Ovid Clinical Queries: Treatment (2 or more terms high sensitivity)</p> <p>Reference:</p> <p>Wong SS, Wilczynski NL, Haynes RB. Developing optimal search strategies for detecting clinically sound treatment studies in EMBASE. J Med Libr Assoc. 2006 Jan;94(1):41-7. http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=16404468 (See table 3)</p>
Medline	<p>RCTs</p> <p>Cochrane Highly Sensitive Search Strategy for identifying randomized trials in MEDLINE: sensitivity-maximizing version (2008 revision); Ovid format http://www.cochrane-handbook.org (Section 6.4.11)</p>
PsycINFO	<p>RCTs:</p> <p>Ovid Clinical Queries: Treatment (high sensitivity)</p> <p>Reference:</p> <p>Eady AM, Wilczynski NL, Haynes RB. PsycINFO search strategies identified methodologically sound therapy studies and review articles for use by clinicians and researchers. J Clin Epidemiol. 2008 Jan;61(1):34-40. http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=18083460 (see table 2)</p>