



Communicating effectively with patients about vaccination: A systematic review of randomized controlled trials

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Supplemental material A: Search strategy

Supplemental material B: Effective communication strategies

Supplemental material C: Data extraction grid

Supplemental material A: Search strategy

Communicating effectively with patients about vaccination: a systematic review

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Table S1-1: Medline (Ovid) Search Strategy

#	Searches	Results
1	(Randomized Controlled Trial or Controlled Clinical Trial or Pragmatic Clinical Trial or Equivalence Trial or Clinical Trial, Phase III).pt.	650,890
2	Randomized Controlled Trial/	556,745
3	exp Randomized Controlled Trials as Topic/	155,994
4	"Randomized Controlled Trial (topic)"/	0
5	Controlled Clinical Trial/	94,658
6	exp Controlled Clinical Trials as Topic/	161,640
7	"Controlled Clinical Trial (topic)"/	0
8	Randomization/	106,474
9	Random Allocation/	106,474
10	Double-Blind Method/	169,621
11	Double Blind Procedure/	0
12	Double-Blind Studies/	169,621
13	Single-Blind Method/	31,518
14	Single Blind Procedure/	0
15	Single-Blind Studies/	31,518
16	Placebos/	35,867
17	Placebo/	0
18	Control Groups/	1,809
19	Control Group/	1,809
20	(random* or sham or placebo*).ti,ab,hw,kf,kw.	1,663,636
21	((singl* or doubl*) adj (blind* or dumm* or mask*)).ti,ab,hw,kf,kw.	254,030
22	((tripl* or trebl*) adj (blind* or dumm* or mask*)).ti,ab,hw,kf,kw.	1,319
23	(control* adj3 (study or studies or trial* or group*)).ti,ab,kf,kw.	1,108,677



Table S1-1: Medline (Ovid) Search Strategy (continued)

#	Searches	Results
24	((Nonrandom* or non random* or non-random* or quasi-random* or quasirandom*).ti,ab,hw,kf,kw.	49,571
25	allocated.ti,ab,hw.	75,239
26	((open label or open-label) adj5 (study or studies or trial*).ti,ab,hw,kf,kw.	39,896
27	((equivalence or superiority or non-inferiority or noninferiority) adj3 (study or studies or trial*).ti,ab,hw,kf,kw.	10,309
28	(pragmatic study or pragmatic studies).ti,ab,hw,kf,kw.	507
29	((pragmatic or practical) adj3 trial*).ti,ab,hw,kf,kw.	6,629
30	((quasiexperimental or quasi-experimental) adj3 (study or studies or trial*).ti,ab,hw,kf,kw.	9,963
31	(phase adj3 (III or "3") adj3 (study or studies or trial*).ti,hw,kf,kw.	32,483
32 *	or/1-31	2,387,659
33	exp Vaccines/	251,757
34	exp Immunization/	192,285
35	(vaccin* or immuni*).ti,ab,kf.	613,984
36	or/33-35	707,247
37	exp "Patient Acceptance of Health Care"/	166,783
38	(satisf* or dropout* or drop out).ti,ab,kf.	393,915
39	(compliance or comply*).ti,ab,kf.	141,581
40	(encourage* or improve* or improving or increas* or promot*).ti,ab,kf.	8,840,508
41	(uptake or particip* or nonattend* or non-attend*).ti,ab,kf.	1,809,696
42	(accept* or attend* or attitude* or utilisation or utilization or adher*).ti,ab,kf.	1,262,518
43	(hesitat* or refus* or respon* or reluctant* or nonrespon* or non-respon*).ti,ab,kf.	3,900,857
44	or/37-43	12,485,552
45	exp Physicians/	161,329
46	(physician? or doctor? or general practitioner? or clinician? or hospitalist?).ti,ab,kf.	821,001
47	exp Education, Medical, Graduate/	76,885
48	(resident? or intern? or internship or PGME).ti,ab,kf.	190,893
49	exp Nurses/	94,485
50	(nurse? or nursing personnel).ti,ab,kf.	290,429
51	Pharmacists/	19,586
52	pharmacist?. ti,ab,kf.	38,259
53	(health care provider? or healthcare provider?).ti,ab,kf.	67,518
54	(health care professional? or healthcare professional?).ti,ab,kf.	57,150
55	(health care worker? or healthcare worker?).ti,ab,kf.	31,857
56	or/45-55	1,482,772
57	exp Professional-Patient Relations/	146,818
58	exp Patient-Centered Care/	22,791
59	physician patient relation*.ti,ab,kf.	3,994
60	patient physician relation*.ti,ab,kf.	1,599
61	doctor patient relation*.ti,ab,kf.	4,324
62	nurse patient relation*.ti,ab,kf.	1,477
63	pharmacist patient relation*.ti,ab,kf.	58
64	(patient-centered or patient-centred).ti,ab,kf.	28,110
65	(person-centered or person-centred).ti,ab,kf.	7,586
66	(person-oriented or patient-oriented).ti,ab,kf.	3,917
67	(patient-focused or person-focused).ti,ab,kf.	1,995
68	(client-centred or client-centered).ti,ab,kf.	1,702



Table S1-1: Medline (Ovid) Search Strategy (continued)

#	Searches	Results
69	(client-oriented or client-focused).ti,ab,kf.	277
70	or/57-69	198,939
71	56 or 70	1,597,958
72	exp Communication/	339,762
73	(communication? or interact* or contact? or convers* or exchange? or tell* or dialogue? or discussion? or talk? or talking or discourse? or consultation? or interact*).ti,ab,kf.	3,371,939
74	(convinc* or persuad* or sway* or argue or satisfy or talk into or win over).ti,ab,kf.	122,403
75	teach back method.ti,ab,kf.	105
76	(inform* or listen* or reassur* or empathy or humo? r or shar*).ti,ab,kf.	2,152,730
77	(question* or counsel* or facilitat* or orient*).ti,ab,kf.	2,018,101
78	(partner* adj1 build*).ti,ab,kf.	618
79	(body adj1 language).ti,ab,kf.	560
80	or/72-79	6,687,844
81	health education/ or exp consumer health information/ or health fairs/ or health promotion/ or exp patient education as topic/ or teach-back communication/	226,854
82	(health adj3 (education or information or literac*).ti,ab,kf.	111,633
83	81 or 82	308,177
84	80 or 83	6,830,773
85	32 and 36 and 44 and 71 and 84	1,563

* Strings attached: CADTH's Database Search Filters | CADTH [Internet]. [cited 2022 Jan 20]. Available from: <https://www.cadth.ca/strings-attached-cadths-database-search-filters>

Table S1-2: Cochrane Central Register of Controlled Trials (Ovid) Search Strategy

#	Searches	Results
1	exp Vaccines/	13,549
2	exp Immunization/	5,212
3	(vaccin* or immuni*).ti,ab.	33,504
4	or/1-3	34,828
5	exp "Patient Acceptance of Health Care"/	28,340
6	(satisf* or dropout* or drop out).ti,ab.	84,908
7	(compliance or comply*).ti,ab.	40,484
8	(encourage* or improve* or improving or increas* or promot*).ti,ab.	778,667
9	(uptake or particip* or nonattend* or non-attend*).ti,ab.	358,815
10	(accept* or attend* or attitude* or utilisation or utilization or adher*).ti,ab.	156,059
11	(hesitat* or refus* or respon* or reluctan* or nonrespon* or non-respon*).ti,ab.	305,937
12	or/5-11	1,121,122
13	exp Physicians/	1,986
14	(physician? or doctor? or general practitioner? or clinician? or hospitalist?).ti,ab.	86,863
15	exp Education, Medical, Graduate/	448
16	(resident? or intern? or internship or PGME).ti,ab.	13,526
17	exp Nurses/	1,304
18	(nurse? or nursing personnel).ti,ab.	27,831
19	Pharmacists/	681
20	pharmacist?. ti,ab.	5,287
21	(health care provider? or healthcare provider?).ti,ab.	5,409
22	(health care professional? or healthcare professional?).ti,ab.	4,228


Table S1-2: Cochrane Central Register of Controlled Trials (Ovid) Search Strategy (continued)

23	(health care worker? or healthcare worker?).ti,ab.	1,908
24	or/13-23	128,091
25	exp Professional-Patient Relations/	2,710
26	exp Patient-Centered Care/	813
27	physician patient relation*.ti,ab.	62
28	patient physician relation*.ti,ab.	60
29	doctor patient relation*.ti,ab.	167
30	nurse patient relation*.ti,ab.	24
31	pharmacist patient relation*.ti,ab.	3
32	(patient-centered or patient-centred).ti,ab.	3,915
33	(person-centered or person-centred).ti,ab.	878
34	(person-oriented or patient-oriented).ti,ab.	728
35	(patient-focused or person-focused).ti,ab.	185
36	(client-centred or client-centered).ti,ab.	344
37	(client-oriented or client-focused).ti,ab.	23
38	or/25-37	9,108
39	24 or 38	133,143
40	exp Communication/	15,872
41	(communication? or interact* or contact? or convers* or exchange? or tell* or dialogue? or discussion? or talk? or talking or discourse? or consultation? or interact*).ti,ab.	176,499
42	(convinc* or persuad* or sway* or argue or satisfy or talk into or win over).ti,ab.	8,592
43	teach back method.ti,ab.	58
44	(inform* or listen* or reassur* or empathy or humo? r or shar*).ti,ab.	192,737
45	(question* or counsel* or facilitat* or orient*).ti,ab.	217,377
46	(partner* adj1 build*).ti,ab.	37
47	(body adj1 language).ti,ab.	49
48	or/40-47	4,813,59
49	health education/ or exp consumer health information/ or health fairs/ or health promotion/ or exp patient education as topic/ or teach-back communication/	18,696
50	(health adj3 (education or information or literac*).ti,ab.	13,490
51	49 or 50	30,049
52	48 or 51	490,715
53	4 and 12 and 39 and 52	1,364

Table S1-3: Embase (Ovid) Search Strategy

#	Searches	Results
1	(Randomized Controlled Trial or Controlled Clinical Trial or Pragmatic Clinical Trial or Equivalence Trial or Clinical Trial, Phase III).pt.	0
2	Randomized Controlled Trial/	695,330
3	exp Randomized Controlled Trials as Topic/	219,028
4	"Randomized Controlled Trial (topic)"/	218,934
5	Controlled Clinical Trial/	465,192
6	exp Controlled Clinical Trials as Topic/	227,449
7	"Controlled Clinical Trial (topic)"/	12,142
8	Randomization/	93,097
9	Random Allocation/	89,278
10	Double-Blind Method/	169,854



Table S1-3: Embase (Ovid) Search Strategy (continued)

#	Searches	Results
11	Double Blind Procedure/	194,242
12	Double-Blind Studies/	152,790
13	Single-Blind Method/	42,974
14	Single Blind Procedure/	44,983
15	Single-Blind Studies/	44,983
16	Placebos/	331,055
17	Placebo/	386,812
18	Control Groups/	122,491
19	Control Group/	122,491
20	(random* or sham or placebo*).ti,ab,hw,kf,kw.	2,315,688
21	((singl* or doubl*) adj (blind* or dumm* or mask*)).ti,ab,hw,kf,kw.	338,730
22	((tripl* or trebl*) adj (blind* or dumm* or mask*)).ti,ab,hw,kf,kw.	1,739
23	(control* adj3 (study or studies or trial* or group*)).ti,ab,kf,kw.	1,563,011
24	(Nonrandom* or non random* or non-random* or quasi-random* or quasirandom*).ti,ab,hw,kf,kw.	62,845
25	allocated.ti,ab,hw.	97,196
26	((open label or open-label) adj5 (study or studies or trial*)).ti,ab,hw,kf,kw.	74,953
27	((equivalence or superiority or non-inferiority or noninferiority) adj3 (study or studies or trial*)).ti,ab,hw,kf,kw.	15,074
28	(pragmatic study or pragmatic studies).ti,ab,hw,kf,kw.	746
29	((pragmatic or practical) adj3 trial*).ti,ab,hw,kf,kw.	6,991
30	((quasiexperimental or quasi-experimental) adj3 (study or studies or trial*)).ti,ab,hw,kf,kw.	15,888
31	(phase adj3 (III or "3") adj3 (study or studies or trial*)).ti,hw,kf,kw.	109,069
32 *	or/1-31	3,448,625
33	exp vaccine/	405,386
34	exp immunization/	354,545
35	(vaccin* or immuni*).ti,ab,kw.	760,170
36	or/33-35	913,473
37	exp patient attitude/	449,269
38	(satisf* or dropout* or drop out).ti,ab,kw.	562,784
39	(compliance or comply*).ti,ab,kw.	225,295
40	(encourage* or improve* or improving or increas* or promot*).ti,ab,kw.	11,892,267
41	(uptake or particip* or nonattend* or non-attend*).ti,ab,kw.	2,372,794
42	(accept* or attend* or attitude* or utilisation or utilization or adher*).ti,ab,kw.	1,767,107
43	(hesitat* or refus* or respon* or reluctan* or nonrespon* or non-respon*).ti,ab,kw.	5,113,407
44	or/37-43	16,637,284
45	exp physician/ or clinician/	905,857
46	(physician? or doctor? or general practitioner? or clinician? or hospitalist?).ti,ab,kw.	1,185,639
47	resident/	55,788
48	(resident? or intern? or internship or PGME).ti,ab,kw.	253,645
49	exp nurse/	204,109
50	(nurse? or nursing personnel).ti,ab,kw.	359,491
51	exp pharmacist/	88,010
52	pharmacist?. ti,ab,kw.	82,647
53	(health care provider? or healthcare provider?).ti,ab,kw.	88,504
54	(health care professional? or healthcare professional?).ti,ab,kw.	79,450
55	(health care worker? or healthcare worker?).ti,ab,kw.	38,778



Table S1-3: Embase (Ovid) Search Strategy (continued)

#	Searches	Results
56	or/45-55	2,404,315
57	exp professional-patient relationship/	53,431
58	exp patient care/	918,027
59	physician patient relation*.ti,ab,kw.	4,494
60	patient physician relation*.ti,ab,kw.	2,102
61	doctor patient relation*.ti,ab,kw.	6,290
62	nurse patient relation*.ti,ab,kw.	1,382
63	pharmacist patient relation*.ti,ab,kw.	115
64	(patient-centered or patient-centred).ti,ab,kw.	35,744
65	(person-centered or person-centred).ti,ab,kw.	8,376
66	(person-oriented or patient-oriented).ti,ab,kw.	5,423
67	(patient-focused or person-focused).ti,ab,kw.	2,766
68	(client-centred or client-centered).ti,ab,kw.	2,306
69	(client-oriented or client-focused).ti,ab,kw.	313
70	or/57-69	1,007,450
71	56 or 70	3,137,336
72	exp interpersonal communication/ or information dissemination/	761,708
73	(communication? or interact* or contact? or convers* or exchange? or tell* or dialogue? or discussion? or talk? or talking or discourse? or consultation? or interact*).ti,ab,kw.	4,247,967
74	(convinc* or persuad* or sway* or argue or satisfy or talk into or win over).ti,ab,kw.	142,053
75	teach back method.ti,ab,kw.	179
76	(inform* or listen* or reassur* or empathy or humo? r or shar*).ti,ab,kw.	2,885,893
77	(question* or counsel* or facilitat* or orient*).ti,ab,kw.	2,672,437
78	(partner* adj1 build*).ti,ab,kw.	804
79	(body adj1 language).ti,ab,kw.	778
80	or/72-79	8,767,036
81	health education/ or health literacy/ or health promotion/ or patient education/ or consumer health information/	327,594
82	(health adj3 (education or information or literac*)).ti,ab,kw.	128,704
83	81 or 82	409,111
84	80 or 83	8,965,965
85	32 and 36 and 44 and 71 and 84	2,869

* Strings attached: CADTH's Database Search Filters | CADTH [Internet]. [cited 2022 Jan 20]. Available from: <https://www.cadth.ca/strings-attached-cadths-database-search-filters>

Table S1-4: APA PsycInfo (Ovid) Search Strategy

#	Searches	Results
1	(Randomized Controlled Trial or Controlled Clinical Trial or Pragmatic Clinical Trial or Equivalence Trial or Clinical Trial, Phase III).pt.	0
2	Randomized Controlled Trial/	813
3	exp Randomized Controlled Trials as Topic/	0
4	"Randomized Controlled Trial (topic)"/	0
5	Controlled Clinical Trial/	0
6	exp Controlled Clinical Trials as Topic/	0
7	"Controlled Clinical Trial (topic)"/	0
8	Randomization/	0
9	Random Allocation/	0
10	Double-Blind Method/	0



Table S1-4: APA PsycInfo (Ovid) Search Strategy (continued)

#	Searches	Results
11	Double Blind Procedure/	0
12	Double-Blind Studies/	0
13	Single-Blind Method/	0
14	Single Blind Procedure/	0
15	Single-Blind Studies/	0
16	Placebos/	0
17	Placebo/	6,166
18	Control Groups/	938
19	Control Group/	938
20	(random* or sham or placebo*).ti,ab,hw.	253,411
21	((singl* or doubl*) adj (blind* or dumm* or mask*).ti,ab,hw.	27,629
22	((tripl* or trebl*) adj (blind* or dumm* or mask*).ti,ab,hw.	99
23	(control* adj3 (study or studies or trial* or group*).ti,ab.	182,150
24	(Nonrandom* or non random* or non-random* or quasi-random* or quasirandom*).ti,ab,hw.	5,794
25	allocated.ti,ab,hw.	11,828
26	((open label or open-label) adj5 (study or studies or trial*).ti,ab,hw.	4,889
27	((equivalence or superiority or non-inferiority or noninferiority) adj3 (study or studies or trial*).ti,ab,hw.	1,053
28	(pragmatic study or pragmatic studies).ti,ab,hw.	118
29	((pragmatic or practical) adj3 trial*).ti,ab,hw.	926
30	((quasiexperimental or quasi-experimental) adj3 (study or studies or trial*).ti,ab,hw.	6117
31	(phase adj3 (III or "3") adj3 (study or studies or trial*).ti,hw.	297
32 *	or/1-31	372,027
33	exp Immunization/	5,287
34	(vaccin* or immuni*).ti,ab.	13,671
35	33 or 34	13,817
36	exp client attitudes/ or treatment compliance/ or client participation/ or treatment barriers/ or treatment dropouts/ or treatment refusal/	49,798
37	(satisf* or dropout* or drop out).ti,ab.	170,918
38	(compliance or comply*).ti,ab.	28,691
39	(encourage* or improve* or improving or increas* or promot*).ti,ab.	1,427,968
40	(uptake or particip* or nonattend* or non-attend*).ti,ab.	801,656
41	(accept* or attend* or attitude* or utilisation or utilization or adher*).ti,ab.	511,593
42	(hesitat* or refus* or respon* or reluctant* or nonrespon* or non-respon*).ti,ab.	906,384
43	or/36-42	2,696,597
44	clinicians/ or exp physicians/	57,419
45	(physician? or doctor? or general practitioner? or clinician? or hospitalist?).ti,ab.	188,985
46	Medical Residency/	4,795
47	(resident? or intern? or internship or PGME).ti,ab.	55,786
48	exp nurses/	34,756
49	(nurse? or nursing personnel).ti,ab.	67,834
50	pharmacists/	1,634
51	pharmacist?. ti,ab.	3,455
52	(health care provider? or healthcare provider?).ti,ab.	19,577
53	(health care professional? or healthcare professional?).ti,ab.	16,934
54	(health care worker? or healthcare worker?).ti,ab.	4,202
55	or/44-54	338,777



Table S1-4: APA PsycInfo (Ovid) Search Strategy (continued)

#	Searches	Results
56	patient centered care/	374
57	physician patient relation*.ti,ab.	796
58	patient physician relation*.ti,ab.	492
59	doctor patient relation*.ti,ab.	1,938
60	nurse patient relation*.ti,ab.	446
61	pharmacist patient relation*.ti,ab.	13
62	(patient-centered or patient-centred).ti,ab.	6,461
63	(person-centered or person-centred).ti,ab.	7,076
64	(person-oriented or patient-oriented).ti,ab.	1,206
65	(patient-focused or person-focused).ti,ab.	547
66	(client-centred or client-centered).ti,ab.	2,911
67	(client-oriented or client-focused).ti,ab.	237
68	or/56-67	21,590
69	55 or 68	351,326
70	exp communication/ or exp communication skills/ or information dissemination/ or knowledge transfer/	348,728
71	(communication? or interact* or contact? or convers* or exchange? or tell* or dialogue? or discussion? or talk? or talking or discourse? or consultation? or interact*).ti,ab.	989,345
72	(convinc* or persuad* or sway* or argue or satisfy or talk into or win over).ti,ab.	102,423
73	teach back method.ti,ab.	31
74	(inform* or listen* or reassur* or empathy or humo? r or shar*).ti,ab.	828,321
75	(question* or counsel* or facilitat* or orient*).ti,ab.	1,007,351
76	(partner* adj1 build*).ti,ab.	411
77	(body adj1 language).ti,ab.	953
78	or/70-77	2,373,930
79	health education/ or health knowledge/ or health information/ or health literacy/ or health promotion/ or client education/	53,271
80	(health adj3 (education or information or literac*)).ti,ab.	33,430
81	79 or 80	74,989
82	78 or 81	2,398,857
83	32 and 35 and 43 and 69 and 82	159

* Strings attached: CADTH's Database Search Filters | CADTH [Internet]. [cited 2022 Jan 20]. Available from: <https://www.cadth.ca/strings-attached-cadths-database-search-filters>

Table S1-5: CINAHL (EbscoHOST) Search Strategy

#	Searches	Results
S81	S19 AND S23 AND S35 AND S63 AND S80	528
S80	S72 OR S79	1,871,460
S79	S73 OR S74 OR S75 OR S76 OR S77 OR S78	243,066
S78	TI ((health N3 (education OR information OR literac*)) OR AB ((health N3 (education OR information OR literac*)))	74,410
S77	(MH "Patient Education+")	81,133
S76	(MH "Health Promotion")	72,356
S75	(MH "Health Fairs")	545
S74	(MH "Consumer Health Information+")	18,583
S73	(MH "Health Education")	28,568
S72	S64 OR S65 OR S66 OR S67 OR S68 OR S69 OR S70 OR S71	1,743,665
S71	TI body N1 language OR AB body N1 language	464
S70	TI partner* N1 build* OR AB partner* N1 build*	844



Table S1-5: CINAHL (EbscoHOST) Search Strategy (continued)

#	Searches	Results
S69	TI (question* OR counsel* OR facilitat* OR orient*) OR AB (question* OR counsel* OR facilitat* OR orient*)	628,750
S68	TI (inform* OR listen* OR reassur* OR empathy OR humo? r OR shar*) OR AB (inform* OR listen* OR reassur* OR empathy OR humo? r OR shar*)	682,954
S67	TI "teach back method" OR AB "teach back method"	112
S66	TI (convinc* OR persuad* OR sway* OR argue OR satisfy OR "talk into" OR "win over") OR AB (convinc* OR persuad* OR sway* OR argue OR satisfy OR "talk into" OR "win over")	41,131
S65	TI (communication? OR interact* OR contact? OR convers* OR exchange? OR tell* OR dialogue? OR discussion? OR talk? OR talking OR discourse? OR consultation? OR interact*) OR AB (communication? OR interact* OR contact? OR convers* OR exchange? OR tell* OR dialogue? OR discussion? OR talk? OR talking OR discourse? OR consultation? OR interact*)	628,608
S64	(MH "Communication+")	303,432
S63	S48 OR S62	1,013,118
S62	S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55 OR S56 OR S57 OR S58 OR S59 OR S60	144,369
S61	TI ("client-oriented" OR "client-focused") OR AB ("client-oriented" OR "client-focused")	223
S60	TI ("client-centred" OR "client-centered") OR AB ("client-centred" OR "client-centered")	1,862
S59	TI ("patient-focused" OR "person-focused") OR AB ("patient-focused" OR "person-focused")	1,416
S58	TI ("person-oriented" OR "patient-oriented") OR AB ("person-oriented" OR "patient-oriented")	1,880
S57	TI ("person-centered" OR "person-centred") OR AB ("person-centered" OR "person-centred")	7,112
S56	TI ("patient-centered" OR "patient-centred") OR AB ("patient-centered" OR "patient-centred")	17,012
S55	TI "pharmacist patient relation*" OR AB "pharmacist patient relation**"	25
S54	TI "nurse patient relation*" OR AB "nurse patient relation**"	1,235
S53	TI "doctor patient relation*" OR AB "doctor patient relation**"	1,312
S52	TI "patient physician relation*" OR AB "patient physician relation**"	618
S51	TI "physician patient relation*" OR AB "physician patient relation**"	768
S50	(MH "Patient Centered Care")	33,221
S49	(MH "Professional-Patient Relations+")	99,485
S48	S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44 OR S45 OR S46 OR S47	925,250
S47	TI ("health care worker?" OR "healthcare worker?") OR AB ("health care worker?" OR "healthcare worker?")	1,728
S46	TI ("health care professional?" OR "healthcare professional?") OR AB ("health care professional?" OR "healthcare professional?")	3,507
S45	TI ("health care provider?" OR "healthcare provider?") OR AB ("health care provider?" OR "healthcare provider?")	7,053
S44	TI pharmacist? OR AB pharmacist?	21,276
S43	(MH "Pharmacists")	17,412
S42	TI (nurse? OR "nursing personnel") OR AB (nurse? OR "nursing personnel")	363,711
S41	(MH "Nurses+")	236,134
S40	TI (resident? OR intern? OR internship OR PGME) OR AB (resident? OR intern? OR internship OR PGME)	71,367
S39	(MH "Interns and Residents")	9,482
S38	TI (physician? OR doctor? OR "general practitioner?" OR clinician? OR hospitalist?) OR AB (physician? OR doctor? OR "general practitioner?" OR clinician? OR hospitalist?)	325,524
S37	(MH "Expert Clinicians+")	4,397
S36	(MH "Physicians+")	125,327
S35	S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34	2,608,384
S34	TI (hesitat* OR refus* OR respon* OR reluctan* OR nonrespon* OR non-respon*) OR AB (hesitat* OR refus* OR respon* OR reluctan* OR nonrespon* OR non-respon*)	643,865
S33	TI (accept* OR attend* OR attitude* OR utilisation OR utilization OR adher*) OR AB (accept* OR attend* OR attitude* OR utilisation OR utilization OR adher*)	396,130
S32	TI (uptake OR particip* OR nonattend* OR non-attend*) OR AB (uptake OR particip* OR nonattend* OR non-attend*)	651,155



Table S1-5: CINAHL (EbscoHOST) Search Strategy (continued)

#	Searches	Results
S31	TI (encourage* OR improve* OR improving OR increas* OR promot*) OR AB (encourage* OR improve* OR improving OR increas* OR promot*)	1,737,648
S30	TI (compliance OR comply*) OR AB (compliance OR comply*)	47,401
S29	TI (satisf* OR dropout* OR drop out) OR AB (satisf* OR dropout* OR drop out)	129,886
S28	(MH "Patient Dropouts")	2,202
S27	(MH "Treatment Refusal")	5,391
S26	(MH "Consumer Participation")	22,310
S25	(MH "Patient Compliance+")	54,374
S24	(MH "Patient Attitudes")	53,297
S23	S20 OR S21 OR S22	99,951
S22	TI ((vaccin* OR immuni*)) OR AB ((vaccin* OR immuni*))	79,519
S21	(MH "Immunization+")	30,212
S20	(MH "Vaccines+")	51,728
S19*	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18	722,655
S18	TI ((phase N3 (III OR "3") N3 (study OR studies OR trial*)) OR AB ((phase N3 (III OR "3") N3 (study OR studies OR trial*)))	16,041
S17	TI (((quasiexperimental OR quasi-experimental) N3 (study OR studies OR trial*)) OR AB (((quasiexperimental OR quasi-experimental) N3 (study OR studies OR trial*)))	7,730
S16	TI (((pragmatic OR practical) N3 trial*) OR AB (((pragmatic OR practical) N3 trial*))	3,270
S15	TI (("pragmatic study" OR "pragmatic studies") OR AB (("pragmatic study" OR "pragmatic studies"))	246
S14	TI ((equivalence OR superiority OR non-inferiority OR noninferiority) N3 (study OR studies OR trial*)) OR AB ((equivalence OR superiority OR non-inferiority OR noninferiority) N3 (study OR studies OR trial*))	4,803
S13	TI (((("open label") N5 (study OR studies OR trial*)) OR AB (((("open label") N5 (study OR studies OR trial*)))	14,411
S12	TI allocated OR AB allocated	22,689
S11	TI ((Nonrandom* OR "non random*" OR quasi-random* OR quasirandom*) OR AB ((Nonrandom* OR "non random*" OR quasi-random* OR quasirandom*))	13,538
S10	TI ((control* N3 (study OR studies OR trial* OR group*)) OR AB ((control* N3 (study OR studies OR trial* OR group*)))	333,512
S9	TI (((tripl* OR trebl*) N1 (blind* OR dumm* OR mask*)) OR AB (((tripl* OR trebl*) N1 (blind* OR dumm* OR mask*)))	580
S8	TI (((singl* OR doubl*) N1 (blind* OR dumm* OR mask*)) OR AB (((singl* OR doubl*) N1 (blind* OR dumm* OR mask*)))	54,280
S7	TI ((random* OR sham OR placebo*) OR AB ((random* OR sham OR placebo*))	426,449
S6	(MH "Control (Research)+")	13,023
S5	(MH "Placebos")	13,199
S4	(MH "Single-Blind Studies") OR (MH "Triple-Blind Studies") OR (MH "Double-Blind Studies")	67,560
S3	(MH "Clinical Trials")	180,959
S2	(MH "Randomized Controlled Trials+")	125,129
S1	PT "Randomized Controlled Trial" OR "Controlled Clinical Trial" OR "Pragmatic Clinical Trial" OR "Equivalence Trial" OR "Clinical Trial, Phase III"	162,012

* Strings attached: CADTH's Database Search Filters | CADTH [Internet]. [cited 2022 Jan 20]. Available from: <https://www.cadth.ca/strings-attached-cadths-database-search-filters>



Supplemental material B: Effective communication strategies

Table S2-1: Level 1 – Examination summary

Level 1 – Screening summary	Yes (Include)	No (Exclude)	I don't know
1) LANGUAGE Is the article published in French or English ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) STUDY DESIGN Is it a randomized controlled trial ? A randomized controlled trial is a type of scientific experiment designed to reduce bias when testing a hypothesis by randomly assigning participants to experimental and control groups.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) POPULATION Does the study include healthcare professionals eligible to administer vaccines (doctors, nurses, pharmacists and resident physicians [post-graduate medical education])?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) COMMUNICATION TECHNIQUES Does this study describe or evaluate communication techniques related to vaccination in the healthcare professional-patient relationship?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Table S2-2: Level 2 – Full screening

Level 2 – Full screening	Yes (Include)	No (Exclude)
5) STUDY CRITERIA Is the article an example of an original study in a peer-reviewed scholarly, academic or academic research journal ? Scholarly, academic, and peer-reviewed journal: <ul style="list-style-type: none"> Articles are written by and for teaching professionals, researchers and academics (chemists, historians, doctors, artists, etc.) Use of technical language Articles tend to be long and detailed, focusing on research in a particular academic discipline Include full citations for sources Are often arbitrated or evaluated by peers Include information about the authors 	<input type="checkbox"/>	<input type="checkbox"/>
6) RESULTS Do the results of this study report on the effectiveness of communication techniques related to vaccination in a healthcare professional-patient relationship between an experimental group and a control group?	<input type="checkbox"/>	<input type="checkbox"/>
Inclusion of the study in this review?	<input type="checkbox"/>	<input type="checkbox"/>



Supplemental material C: Data extraction grid

General Information

Title

Title of paper

First author last name

Year of publication

Country in which the study was conducted

- United-States
- UK
- Canada
- Australia
- Other

Characteristics of Included Study

Methods

Aim of Study

As described by the objective or research question of study.

Study Design

- RCT



Study Setting

Describe setting of study (i.e. community clinic, hospital, pharmacy, family physician consult, ...)

Participants

Total number of participants

Number of participants in intervention group

Number of participants in control group

Description of participants

Pick one or more items from the list.

1. Physicians
2. Nurses
3. Pharmacists
4. Post-graduate trainees (resident or fellow)
5. Non specified (i.e. HCP or licensed staff)

Characteristics of Communication Intervention

Description of intervention (as reported by study)

Include a description of communication training/intervention reported.



Cause for intervention (as reported by study)

Include targeted cause for vaccination and targeted patient population for vaccination when reported.

◀
▶

Duration of intervention

◀
▶

Description of control group

◀
▶

Outcomes

Outcomes reported and results

Note: The conclusion of statistical results can be copied/pasted in sentence form. (i.e. include when a significant difference occurs)

	Primary or secondary outcome?	Outcome name	Outcome assessment tool/chosen mode of measure	Timing of measurement	Intervention group statistical results (as reported by study)	Control group statistical results (as reported by study)	Conclusion of statistical results
Outcome 1							
Outcome 2							
Outcome 3							