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**Supplement 1.** The Characteristics of Studies Included in the Systematic Review and Meta-Analysis<sup>z</sup>

	<b>Author<sup>a</sup></b>	<b>Year</b>	<b>Location</b>	<b>Sample Size</b>	<b>Study design</b>	<b>Sample Derived from</b>	<b>Age, y</b>	<b>OR/RR</b>	<b>95% CI</b>
<b>1</b>	Ahmed	2011	Pakistan	2000	CS	Community sample	≥ 18	1.56	0.83 - 2.91
<b>2</b>	Akhtar	2016	Pakistan	241	CS	IDUs	Mean: 32	2.7	1.45 - 5.02
<b>3</b>	Akhtar	2004	Pakistan	168	CC	Blood donors	Range: 18 - 64	0.7	0.3 - 1.7
<b>4</b>	Alavian	2002	Iran	389	CC	Blood donors	NR	6.1	2.1 - 18.3
<b>5</b>	Alipour	2013	Iran	1444	CS	HIV-infected individuals/outside	Mean: 38.4	2	1.3- 3.1
						prison; HIV-infected individuals/in side prison	Mean: 38.4	2.6	1.4 - 4.8
<b>6</b>	Alvarado-esquivel	2005	Mexico	181	CS	Prison	Range: 17 - 74	41.6	6.06 - 1752.87
<b>7</b>	Ataei	2011	Iran	466	CS	Hospital	Mean: 17.46	1.5	0.24 - 9.32
<b>8</b>	Azarkar	2010	Iran	358	CS	Prison	Mean: 34.7	3.96	1.8 - 8.7
<b>9</b>	Babudieri	2005	Italy	973	CS	Prison	Mean: 36.9	2.97	2.27 - 3.88
<b>10</b>	Bair	2005	USA	1002	CS	Prison	Mean: 15	1.9	0.2 - 1.95
<b>11</b>	Balasekaran	1999	USA	116	CC	Hospital	Mean: 44; (SE:11)	5.9	1.1 - 30.7
<b>12</b>	Bari	2001	Pakistan	237	CC	Community sample	Mean: 43.1; (SE:13.1)	0.9	0.3 - 2.7
<b>13</b>	Basseri	2010	USA	800	CS	Hospital	Mean: 48.5; (SE: 0.4)	1.34	1.08 - 1.67
<b>14</b>	Birku	201	Ethiopia	403	CS	Military	Mean:	1.93	0.67 -

		5					32.6		5.6
15	Bjorkman	2001	Sweden	576	CC-M	Blood donors	Range: 18 - 65	1.5	0.6 - 3.6
16	Bollepalli	2007	USA	242	CS	Hospital	Mean: 42.3; (SE:9.3)	1.07	0.54 - 2.09
17	Brandao	2002	Brazil	534	CC	Blood donors	Range: 30 - 59	4.1	2 - 8.3
18	Brau	2002	USA	1016	CS	Community sample	Range: 22 - 99	2.2	1.3 - 3.7
19	Bravo	2012	Spain	305	CO	Non-IDUs	Range: 18 - 30	0.7	0.2 - 2.8
20	Briggs	2001	USA/Boston	1032	CS	Military	≥ 20	3.88	2.77 - 5.46
						Hospital		3.2	1.6 - 5.66
21	Brillman	2002	USA	221	CC	Hospital	Mean: 43.9	6.3	1.9 - 24.3
22	Brusaferro	1999	Italy	743	CO	Hospital	Any Age	2.5	1.1 - 5.6
23	Butler	2007	Australia	612	CS	Prison	Mean: 31	2.27	1.5 - 3.44
24	Butler	2004	Australia	29	CS	IDUs:prison	Any Age	19.2	8.3 - 29.8
				90		Prison: all	Any Age	10.8	5.1 - 16.4
25	Campello	2002	Italy	2154	CO	Community sample	Range: 17 - 67	4.18	1.5 - 15.22
26	Carney	2013	USA	3871	CC	Hospital	Mean: 55	3.74	2.95 - 4.73
27	Cha	2016	Korea	1335	CS	Hospital	Mean: 41.8	2.96	0.36 - 24.24
28	Chang	1999	Taiwan	899	CS	Drug users	Mean: 31.5	1.47	0.84 - 2.56
29	Challeng	2008	India	143	CS	IDUs	Range: 14 - 56	0.58	0.27 - 1.21
30	Christensen	2000	Denmark	325	CS	Prison	Any Age	2.1	0.7 - 6.2
31	Coelho	2009	Brazil	333	CS	Prison	Mean: 30.1	3.2	1.05 - 10
32									
33	Coppola	2002	Italy	3549	CS	Community sample	Mean: 33.19; (SD: 12.18)	8.56	4.67 - 15.68
34	Delage	199	Canada	1335	CC	Blood donors	NR	10.3	6.9 -

		9							15.4
35	Dominguez	2001	Spain	1660	CS	Community sample	Range: 15 - 70	7.55	2.71 - 21.02
36	Dominitz	2002	USA	1288	CS	Military	Any age	3.8	2 - 7.1
	Eassa	2007	Egypt	304	CS	Community sample	Range: 20 - 40	3.43	0.44 - 21.25
37	El-Wahab	2014	Egypt	396	CS	Hospital	Mean: 41.5	6.5	4 - 10.5
38	Gates	2004	Australia	125	CO	Prison	Mean: 32.5	1.85	0.8 - 4.6
39	Gelberg	2012	USA	534	CS	Homeless	≥ 18	1.7	0.96 - 3.01
40	Ghias	2009	Pakistan	400	CC	Hospital	≥ 10	27.48	2.02 - 37.25
41									
42	Goldman	2009	Canada	7382	CC-M	Blood donors	NR	3.47	1.49 - 8.08
43	Goodrick	1994	England	50/50	CC-M	Blood donors: all	Range: 21 - 60	7	0.9 - 99
						Blood donors: Non-IDUs	Range: 21 - 61	20	3.1 - 99
44									
45	Gyarmathy	2002	USA	483	CS	Community sample	Any age	2.2	1 - 4.7
46	Habib	2000	Egypt	3999	CS	Community sample	Any age	0.9	0.3 - 3
47	Habib	2001	Australia/New South Wales	336	CS	IDUs	Range: 14 - 64	0.71	0.39 - 1.31
48	Hadush	2013	Ethiopia	300	CS	HIV-infected individuals	Mean: 28.95	1.56	0.43 - 5.69
49	Hahn	2001	USA	308	CS	IDUs	Median: 22	0.88	0.51 - 1.52
50	Hajiani	2006	Iran	514	CS	Hospital	Mean: 28.4; (SD: 15.22)	4.73	1.01 - 22.1
51	Haley	2001	USA	626	CS	Hospital	Any age	6.3	3.6 - 11.2
52	Haley	2003	USA/Texas	626	CS	Hospital	NR	1.2	0.5 - 3.3
53	Hammer	2003	USA	981	CO	Non-IDUs	> 18	6.5	0.1 - 54
54	Hand	2005	USA	627	CC	Hospital	Range: 14 - 99	2.9	1.9 - 4.6

55	He	2011	China	915	CC	Blood donors	Range: 18 - 55	12.2	6.8 - 21.89
56	Hellard	2004	Australia	642	CS	Prison	Mean: 31.6	2.7	1.4 - 5.2
57	Hermanstylene	2012	USA/San Francisco	430	CS	Homeless	$\geq 15$	1.88	0.95 - 3.72
58	Ho	1997	Taiwan	80	CS	Community sample	$> 7$	0.52	0.16 - 1.62
59	Holsen	1993	Norway	70	CS	Prison	Mean: 28.4	5.44	1.68 - 9.21
60	Howe	2005	USA	740	CS	Non-IDUs	Median: 30	3.61	1.15 - 11.26
61	HUANG	2015	China	149175	CS	Community sample	Any age	1.2	0.95 - 3.82
62	Hwang	2006	USA	7960	CS	Students	Median: 21	1.1	0.59 - 2.08
63	Janjua	2010	Pakistan	1997	CS	Community sample	$\geq 18$	0.37	0.14 - 0.97
64	Jin	2005	Australia	824	CO	Men who have sex with men	Range: 18 - 75	2.85	0.63 - 12.89
65	Judd	2005	UK	720	CS	IDUs	Any Age	1.13	0.8 - 1.59
66	Kaldor	1992	Australia	430	CC	Blood donors	Any age	11	4.9 - 26
67	Kerzman	2007	Israel(FSUI <sup>b</sup> )	256	CC-M	Blood donors	Any age	2.6	1.2 - 5.4
			Israel/(Nis <sup>c</sup> )	178		Blood donors		4.2	1.7 - 10.2
68	Kim, JY	2012	Korea	711	CO	Hospital	Mean: 58.1	2.07	1.13 - 3.78
69	Kim	1996	Korea	192	CC-M	Community sample	Range: 40 - 60	1.6	0.5 - 4.8
70	Kim	2002	Korea	404	CC	Community sample	Any age	1.67	0.72 - 3.93
				405		Hospital		0.88	0.36 - 2.12
71	Kim	1998	Korea	193	CC	Community sample	Any age	1.6	0.5 - 4.8
72	Kin	2013	USA/California	768	CC-M	Hospital	Range: 20 - 86	12	10.52 - 13.47
73	Kinner	2012	Australia	1322	CO	Prison	Mean: 30.8	2.19	1.67 - 2.86
74	Ko	1992	Taiwan	209	CC	Community sample	Mean: 18.7;	5.9	1.6 - 22

							(SE:0.3)		
75	Kuehlkamp	201 4	Brazil	304	CC- M	Non-IDUs	≥ 35	10.73	4.92 - 51.3
				80		IDUs		13.41	4.62 - 51.03
76	La Torre	200 6	Italy	175	CS	Hospital	Mean: 57	7.68	1 - 60.2
77	Lai	200 7	Taiwan	285	CS	Prison	Mean: 34.1; (SD:8.6 )	2.97	1.37 - 6.43
78	Liakina	201 2	Lithuania	1528	CS	Community sample	Range: 18 - 85	4.4	3.92 - 5.75
79	Liao	200 6	Taiwan	297	CS	Prison	37.59 (SD: 11.7)	2.24	1.03 - 4.88
80	Liao	200 6	Taiwan	1000	CS	Drug users	Mean: 33.3; (SD: 7.9)	1.27	0.86 - 1.89
81	Lim	200 7	Australia	52	CS	IDUs	Median: 28	4.18	1.24 - 14.1
82	Lima	200 9	Brazil	534	CS	Community sample	Mean: 25.3	22.93	1.28 - 410.9
83	Lomtadze	201 3	USA/Tbilis i, Georgia	326	CO	Hospital	≥ 18	2.8	1.1 - 6.8
84	Long	200 1	Ireland	607	CS	Prison	Median: 23	11.6	1.4 - 237.3
85	Macias	200 7	Spain	182	CS	Non-IDUs	Median: 34	3.3	1.3 - 8.5
86	Maggi	199 9	Italy	2403	CC	Community sample	Range: 18 - 85	0.94	0.34 - 2.6
87	Mariano	200 4	Italy	598	CC	IDUs	Range: 15 - 56	5.6	2.8 - 11
88	Mathei	200 5	Belgium	310	CS	Drug users	Mean: 33.5; (SD: 6.6)	7.99	1.01 - 63.5
89	Matos	201 2	Brazil	780	CS	Community sample	Mean: 44	1.78	0.31 - 3.87
90	McMahon	200 7	USA	265	CS	Drug users	40.3 (SE: 7.8)	3	1.72 - 5.22
91	Medhat	200 2	Egypt	6033	CS	Community sample	Any age	1.1	0.5 - 2.8
92	Meffre	201	France	1441	CS	Community	Range:	2.3	1 -

		0		6		sample	18 - 80		5.4
93	Mele	199 5	Italy	363	CC	Community sample	NR	2.5	0.8 - 7.79
94	Mendes- Correa	200 5	Brazil	235	CC	HIV-infected individuals	≥ 20	5.94	2.37 - 13.2
95	Merat	201 0	Iran	50	CS	Community sample	Range: 18 - 65	8.1	2.5 - 26.2
96	Miller	200 9	Australia	382	CO	Prison	≥ 18	1.11	0.99 - 1.24
						IUDs		1.11	0.99 - 1.24
97	Mitrovic	201 5	Serbia	96	CC- M	Blood donors	Range: 18 - 65	8.38	2.02 - 38.53
98	Moezzi	201 5	Iran	3000	CS	Community sample	≥ 15	4.68	2.06 - 10.5
99	Mohammas d Alizadeh	200 5	Iran	427	CS	Prison	Mean: 37.9; (SE:9.7)	1.05	0.7 - 1.6
10 0	Mohtasham Amiri	200 7	Iran	460	CS	Prison	Mean: 34.7; SD: (8.9)	1.8	1.1 - 3.1
10 1	Muller	200 1	Hungary	585	CS	Blood donors	Range: 19 - 74	5.07	2.88 - 8.93
10 2	Murphy	200 0	USA	1797	CS	Blood donors	Any age	7	4.9 - 10
10 3	Mussi	200 7	Brazil	1008	CS	HIV-infected individuals	Mean: 37.2	3.8	2 - 7
10 4	Neal	199 4	UK	224	CC	Blood donors	Mean: 34.6	3.3	1.2 - 8.7
10 5	Nelwan	201 0	Indonesia	639	CS	HIV-infected individuals	Mean: 31.3	1.74	0.71- 4.23
10 6	Neumeister	200 7	USA	243	CS	Community sample	Mean: 41	3.2	1.03 - 9.74
10 7	Nguyen	200 7	Vietnam	837	CS	Community sample	Mean: 42.3; Range: 16 - 82	13.37	1.8 - 96.15
10 8	Nishioka	200 3	Brazil	354	CS	Blood donors	Mean: 29.4 (SE:7.5)	6.41	1.29 - 31.84
10 9	Nokhodian	201 2	Iran	531	CS	IDUs	Mean: 31.77	1.72	1.02 - 2.9
11 0	Nurgalieva	200 7	Kazakhstan	290	CS	Community sample	Range: 10 - 64	14.4	1.76 - 118.3 2

11 1	Nurutdinov a	201 1	USA	816	CS	Drug users	Mean:3 5.8	2.05	1.15 - 3.66
11 2	Nyamathi	200 6	USA	19	CC	Non-IDUs	Range: 18 - 65	4.51	1.36 - 14.97
						IDUs		3.6	1.27 - 10.37
11 3	Obrien	200 8	Canada	920	CC	Blood donors	NR	3.8	2 - 7.3
11 4	Okonkwo	201 7	Nigeria	1498	CS	Community sample	≥ 18	1.34	0.83 - 2.18
11 5	Oliveira- Filho	201 4	Eastern Amazon	300	CS	Non-IDUs	Mean: 32.5	3.3	1.9 - 5.6
11 6	Orton	200 4	USA	290	CC	Blood donors	≥ 17	11	0.8 - 566
11 7	Pallas	199 9	Spain	693	CS	Prison	Mean: 30.6; (SD: 9.9)	3.2	1.4 - 7.1
11 8	Parana	199 9	Brazil	143	CO	Hospital	Mean: 31.8	30	3.36 - 268.1 1
11 9	Paris	200 3	Thailand	381	CS	Community sample	Range: 20 - 45	2	0.7 - 6
12 0	Pereira	201 3	Brazil	1950 3	CS	Community sample	Range: 10 - 69	1.63	0.95 - 2.8
12 1	Perez	200 7	USA/Puert o Rico	400	CS	Community sample	Range:2 1 - 64	8.9	1.7 - 44.7
12 2	Pérez	200 5	USA/Puert o Rico	964	CS	Community sample	Range: 21 - 64	8.9	1.7 - 44.7
12 3	PHOON	198 8	Singapore	6328	CO	Blood donors	Range:3 5 - 65	1.14	0.8 - 1.63
12 4	Poel	199 1	Netherland s	125	CS	Blood donors	Range: 19 - 64	7.33	1.09 - 49.16
12 5	Pourahmad	200 7	Iran	1432	CC	Prison	Range: 25 - 61	2.95	2.34 - 3.7
12 6	Prasetyo	201 4	Indonesia	143	CS	Men who have sex with men	Any Age	2.1	0.66 - 6.55
12 7	Rhodes	200 2	USA	498	CS	Men who have sex with men	Mean: 34.3	0.82	0.48 - 1.38
12 8	Richards	200 6	Georgia	272	CS	Hospital	Mean: 34	2.6	1.2 - 5.7
12 9	Riestra	200 1	Spain	1170	CS	Community sample	Any age	5.1	1.1 - 23.7
13	Rosa	201	Brazil/Sao	202	CC -	Community	Mean:	6.9	1.56 -



0		4	Paulo		M	sample	47.1		30.37
13 1	Rossi	200 8	Argentina	504	CS	Non-IDUs	Range: 18 - 65	2.5	1.1 - 5.5
13 2	Roy	200 1	Canada	437	CO	Homeless (Street youth)	Mean:1 9.5	1.8	0.9 - 3.6
13 3	Sahajian	200 6	France	988	CS	Hospital	>18	2.75	1.01 - 7.51
13 4	Salleras	199 7	Spain	215	CC	Community sample	Mean: 28.5; (SE: 4)	18.15	0.45 - 759.1
13 5	SAMIMI - RAD	200 7	Iran	174	CS	Hospital	Any age	0.45	0.03 - 5.81
13 6	Samuel	200 1	USA	1003	CO	IDUs	Median: 37	1.7	0.9 - 2.9
13 7	Sanchez	200 0	Peru	2827	CO	Blood donors	Any age	0.77	0.25 - 2.25
13 8	Sandhu	199 9	Canada	336	CS	Hospital	Mean: 57.4; (SD: 15.4)	3.8	1 - 12.13
13 9	Satti	201 2	Pakistan	503	CO	Community sample	Any Age	0.98	0.52 - 1.83
14 0	Sawanpany alert	199 6	Thailand	3053	CS	Blood donors/HCV Patient	Any Age	5.1	0.6 - 22.6
						Blood donors/HIV- AIDS Patient		1.8	0.1 - 12.1
14 1	Schmidt	201 4	Switzerland	840	CO	Men who have sex with men	Range: 17 - 79	10.36	1.99 - 53.94
14 2	Shafiq	201 5	Pakistan	500	CC	Hospital	≥ 18	0.38	0.08 - 1.66
14 3	Shev	199 5	Sweden	102	CC	Blood donors	Range: 25 - 35	9.3	2.44 - 53.06
14 4	Shi	200 7	Taiwan	1897	CC	Military	All 20 years old	5	1.83 - 13.65
14 5	Shopper	199 5	USA	500	CS	Students	Range: 14 - 70	12.19	5.4 - 28
14 6	Sohn	201 6	Korea	234	CC - M	Hospital	≥ 20	2.29	1.37 - 3.82
14 7	Souto	201 2	Brazil	3910	CS	Community sample	Range: 2 - 86	5.3	3.3 - 8.3
14 8	Spinelli	200 7	Canada	1492	CC - M	Community sample	Range: 20 - 79	1.12	0.73 - 1.72

149	Strehlow	2012	USA	387	CS	Homeless	≥ 18	3.1	2 - 4.9
150	SU	2013	China	129	CS	Hospital	Mean: 57.5	2.5	0.5 - 10.7
151	Sun	2001	Taiwan	3562	CC	Community sample	Range 30 - 64	2.2	0.6 - 8.1
152	Taketa	2003	Thailand	248	CS	IDUs	Any age	5.7	3.02 - 10.8
153	Talamini	2004	Italy	729	CC	Hospital	Mean: 59; Range: 18 - 84	2.46	0.87 - 6.99
154	Teutsch	2010	Australia	488	CO	IDUs	28 (SE: 6.9)	2.01	1.01 - 4.01
155	Thaikruea	2004	Thailand	495	CC	Blood donors	Mean: 29.4	1.6	0.94 - 2.67
156	Urbanus	2011	Netherlands	434	CS	Community sample	Mean: 28	4.37	0.53 - 35.9
157	Utsumi	1995	Japan	201	CC	Prison	Mean: 45; SE(13)	1.57	0.63 - 3.92
158	Viitanen	2011	Finland	388	CS	Prison	Range: 16 - 69	1.8	0.4 - 7.6
159	Viviana	2008	Argentina	310	CS	HIV - infected individuals	Mean: 35	25.62	4.24 - 154.56
160	Wada	1999	Japan	95	CS	Hospital	Mean: 24.4; (SD:6.1)	5.3	1.79 - 15.92
161	Watson	1999	Australia	757	CS	Community sample	Range: 13 - 50	0.58	0.1 - 3.3
162	Wolff	2007	Brazil	597	CC	Hospital	Mean: 40.3; (SE:8.7)	1.2	0.7 - 2.1
163	Wong	1999	Australia	1021	CS	Blood donors	Mean: 32.7	7.4	3.7 - 14.9

<sup>z</sup>Abbreviations: CC, case-control; CS, cross-sectional; CI, confidence interval; CO, cohort; HCV, hepatitis C virus; IDU, injection drug user; NR, not reported; SD, standard deviation; SE, standard error.

<sup>a</sup>For references see Appendix 1.

<sup>b</sup>Immigrants from the former Soviet Union.

<sup>c</sup>Native Israeli.