

Table 1 Summary of characteristics of included studies describing adherence-enhancing interventions.

Authors and year (review authors*)	Study number	Study period	Study design	Country of study (city or region)	Population	Healthcare setting
Blank <i>et al.</i> , 2011 [28]	1	2004–2008	RCT	USA (Philadelphia, PA)	Mental health patients	Community-based (urban)
Berg <i>et al.</i> , 2011 [29]	2	2004–2007	RCT	USA (New York, NY)	PWUD	Community-based (urban)
Chung <i>et al.</i> , 2011 [30]	3	2006–2008	RCT	Kenya (Nairobi)	General	Community-based (urban)
da Costa <i>et al.</i> , 2012 [31]	4	2008–2009	RCT	Brazil (Sao Paulo)	Women	Community-based (urban)
de Bruin <i>et al.</i> , 2010 [32]	5	2005–2007	RCT	Netherlands (Amsterdam)	General	Community-based (urban)
Duncan <i>et al.</i> , 2012 [33]	6	NR	RCT	USA (San Francisco, CA)	General	Community-based (urban)
Fisher <i>et al.</i> , 2011 [34]	7	NR	RCT	USA (Connecticut)	General	Community-based (both)
Hardy <i>et al.</i> , 2011 [35]	8	2008	RCT	USA (Boston, MA)	General	Community-based (urban)
Holstad <i>et al.</i> , 2011 [36]	9	2005–2008	RCT	USA (Atlanta, GA)	Women	Community-based (urban)
Kalichman <i>et al.</i> , 2011 [37]	10	2005–2009	RCT	USA (Atlanta, GA)	General	Community-based (urban)
Kalichman <i>et al.</i> , 2011 [38]	11	2010	RCT	USA (Atlanta, GA)	General	Community-based (urban)
Leon <i>et al.</i> , 2011 [39]	12	2005–2007	RCT	Spain (Barcelona)	General	Community-based (urban)
Pyne <i>et al.</i> , 2011 [40]	13	2007–2008	RCT	USA (various)	Mental health patients	Community-based (urban)
Ramirez-Garcia and Cote, 2012 [41]	14	2006–2007	RCT	Canada (Montreal)	General	Community-based (urban)
Ruiz <i>et al.</i> , 2010 [42]	15	2003	RCT	Spain (various)	General	Hospital clinic (urban)
Sabin <i>et al.</i> , 2010 [43]	16	2006–2007	RCT	China (Yunan Province)	General	Community-based (rural)
Safren <i>et al.</i> , 2012 [44]	17	2005–2008	RCT	USA	PWUD	Community-

					(Boston, MA and Providence, RI)		based (urban)
Uzma <i>et al.</i> , 2011 [45]	18	2008	RCT	Pakistan (Islamabad)	General	Community-based (urban)	
Zubaran <i>et al.</i> , 2012 [46]	19	NR	RCT	Brazil (Caxias do Sul)	General	Hospital clinic and community-based (urban)	
DiIorio <i>et al.</i> , 2003 [47] (Amico <i>et al.</i> [48])	20	NR	RCT	USA (Atlanta, GA)	General	Community-based (urban)	
Fairley <i>et al.</i> , 2003 [49] (Amico <i>et al.</i> [48])	21	2001–2002	RCT-SWD	Australia (Melbourne)	General	Community-based (urban)	
Goujard <i>et al.</i> , 2003 [50] (Amico <i>et al.</i> [48])	22	1999–2001	RCT	France (various)	General	Hospital clinic (both)	
Lyon <i>et al.</i> , 2003 [51] (Amico <i>et al.</i> [48])	23	1998–2000	Before-after	USA (Washington, D.C.)	Children	Community-based (urban)	
Mann, 2001 [52] (Amico <i>et al.</i> [48])	24	NR	RCT	USA (Los Angeles, CA)	Women	Community-based (urban)	
Margolin <i>et al.</i> , 2003 [53] (Amico <i>et al.</i> [48])	25	1997–2000	RCT	USA (New Haven, CT)	PWUD	Community-based (urban)	
McPherson-Baker <i>et al.</i> , 2000 [54] (Amico <i>et al.</i> [48])	26	NR	Case-control	USA (Miami, FL)	General	Community-based (urban)	
Molassiotis <i>et al.</i> , 2003 [55] (Amico <i>et al.</i> [48])	27	NR	Before-after	China (Hong Kong)	General	Community-based (urban)	
Murphy <i>et al.</i> , 2002 [56] (Amico <i>et al.</i> [48])	28	NR	RCT	USA (Los Angeles, CA)	General	Community-based (urban)	
Powell-Cope <i>et al.</i> , 2003 [57] (Amico <i>et al.</i> [48])	29	2000	Before-after	USA (Florida)	PWUD and women	Community-based (urban)	
Pradier <i>et al.</i> , 2003 [58] (Amico <i>et al.</i> [48])	30	1999	RCT	France (Nice)	General	Community-based (urban)	
Rawlings <i>et al.</i> , 2003 [59] (Amico <i>et al.</i> [48])	31	1998–2000	RCT	USA (various)	General	Hospital clinic and community-based (both)	
Rigsby <i>et al.</i> , 2000 [60] (Amico <i>et al.</i> [48])	32	NR	RCT	USA (West Haven, CT)	General	Community-based (urban)	
Safren <i>et al.</i> , 2001 [61] (Amico <i>et al.</i> [48])	33	NR	RCT	USA (Boston,	General	Community-based	

Safran <i>et al.</i> , 2003 [62] (Amico <i>et al.</i> [48])	34	NR	RCT	MA) USA (Boston, MA)	General	(urban) Community- based (urban)	
Smith <i>et al.</i> , 2003 [63] (Amico <i>et al.</i> [48])	35	1998–1999	RCT	USA (Chapel Hill, NC)	General	Community- based (urban)	
Stenzel <i>et al.</i> , 2001 [64] (Amico <i>et al.</i> [48])	36	1998–1999	Before-after	USA (Providence, RI)	General	Community- based (urban)	
Tuldra <i>et al.</i> , 2000 [65] (Amico <i>et al.</i> [48])	37	1997–1998	RCT	Spain (Badalona)	General	Hospital clinic (urban)	
Berrien <i>et al.</i> , 2004 [66] (Bain-Brickley <i>et al.</i> [67])	38	2000–2001	RCT	USA (Connecticut)	Children	Community- based (urban)	
Funck-Brentano <i>et al.</i> , 2005 [68] (Bain-Brickley <i>et al.</i> [67])	39	1999–2003	NRCT	France (Paris)	Children	Community- based (urban)	
Wamalwa <i>et al.</i> , 2009 [69] (Bain-Brickley <i>et al.</i> [67])	40	2004–2005	RCT	Kenya (Nairobi)	Children	Community- based (urban)	
Cantrell <i>et al.</i> , 2008 [70] (Barnighausen <i>et al.</i> [71])	41	2004–2005	NRCT	Zambia (Lusaka)	General	Community- based (urban)	
Chang <i>et al.</i> , 2010 [72] (Barnighausen <i>et al.</i> [71])	42	2006–2008	Cohort	Uganda (Rakai)	General	Community- based (rural)	
Idoko <i>et al.</i> , 2007 [73] (Barnighausen <i>et al.</i> [71])	43	2003	Cohort	Nigeria (Jos)	General	Hospital clinic (urban)	
Kabore <i>et al.</i> , 2010 [74] (Barnighausen <i>et al.</i> [71])	44	2005–2007	Cohort	Lesotho (Maseru), South Africa (Ladysmith), Namibia (Katima- Mulilo), and Botswana (Bobonong)	General	Community- based (NR)	
Lester <i>et al.</i> , 2010 [75] (Barnighausen <i>et al.</i> [71])	45	2007–2008	RCT	Kenya (Nairobi)	General	Community- based (both)	
Mugusi <i>et al.</i> , 2009 [76] (Barnighausen <i>et al.</i> [71])	46	2004–2007	RCT	Tanzania (Dar es Salaam)	General	Hospital clinic (urban)	
Nachega <i>et al.</i> , 2010 [77] (Barnighausen <i>et al.</i> [71])	47	2005–2007	RCT	South Africa (Cape Town)	General	Hospital clinic (urban)	
Ndekha <i>et al.</i> , 2009 [78] (Barnighausen <i>et al.</i> [71])	48	2006–2007	RCT	Malawi (Blantyre)	General	Hospital clinic (urban)	
Ndekha <i>et al.</i> , 2009 [79] (Barnighausen <i>et al.</i> [71])	49	2006–2007	RCT	Malawi (Blantyre)	General	Hospital clinic (urban)	

Pearson <i>et al.</i> , 2007 [80] (Barnighausen <i>et al.</i> [71])	50	2004	RCT	Mozambique (Beira)	General	Hospital clinic (urban)
Pienaar <i>et al.</i> , 2006 [81] (Barnighausen <i>et al.</i> [71])	51	2004–2005	Cohort	South Africa (Western Cape)	General	Hospital clinic and community-based (urban)
Pop-Eleches <i>et al.</i> , 2011 [82] (Barnighausen <i>et al.</i> [71])	52	2007–2008	RCT	Kenya (Nyanza)	General	Community-based (rural)
Roux <i>et al.</i> , 2004 [83] (Barnighausen <i>et al.</i> [71])	53	2004	Before-after	South Africa (North West Province)	General	Community-based (rural)
Sarna <i>et al.</i> , 2008 [84] (Barnighausen <i>et al.</i> [71])	54	2003–2004	RCT	Kenya (Mombasa)	General	Hospital clinic (urban)
Sherr <i>et al.</i> , 2010 [85] (Barnighausen <i>et al.</i> [71])	55	2004–2007	Cohort	Mozambique (Central Region)	General	Hospital clinic (urban)
Stubbs <i>et al.</i> , 2009 [86] (Barnighausen <i>et al.</i> [71])	56	2004–2006	Cohort	Mozambique (Central Region)	General	Hospital clinic (urban)
Taiwo <i>et al.</i> , 2010 [87] (Barnighausen <i>et al.</i> [71])	57	2006–2008	RCT	Nigeria (Jos)	General	Hospital clinic (urban)
Thurman <i>et al.</i> , 2010 [88] (Barnighausen <i>et al.</i> [71])	58	2006	Cross-section	Rwanda (various)	General	Community-based (NR)
Torpey <i>et al.</i> , 2008 [89] (Barnighausen <i>et al.</i> [71])	59	2007	Before-after	Zambia (Northern, Luapula, Central, and Copperbelt Provinces)	General	Hospital clinic (NR)
Antoni <i>et al.</i> , 2006 [90] (Brown <i>et al.</i> [91])	60	1998–2004	RCT	USA (Miami)	General	Community-based (urban)
Creswell <i>et al.</i> , 2009 [92] (Brown <i>et al.</i> [91])	61	2005–2007	RCT	USA (Los Angeles, CA)	General	Community-based (urban)
Johnson <i>et al.</i> , 2011 [93] (Brown <i>et al.</i> [91])	62	2005–2007	RCT	USA (San Francisco, CA)	General	Community-based (urban)
Weiss <i>et al.</i> , 2011 [94] (Brown <i>et al.</i> [91])	63	1997–2005	RCT	USA (various)	Women	Hospital clinic and community-based (both)
Jaffar <i>et al.</i> , 2009 [95] (Brown <i>et al.</i> [91])	64	2005–2009	cRCT	Uganda (Jinja)	General	Community-based (rural)
Wall <i>et al.</i> , 1995 [96] (Fogarty <i>et al.</i> [97])	65	NR	RCT	USA (San Francisco, CA)	PWUD	Hospital clinic (urban)
Knobel <i>et al.</i> , 1999 [98] (Haddad <i>et al.</i> [16])	66	NR	RCT	Spain (Barcelona)	General	Hospital clinic

Altice <i>et al.</i> , 2007 [99], Maru <i>et al.</i> , 2009 [100] (Hart <i>et al.</i> [101])	67	2001–2006	RCT	USA (New Haven, CT)	PWUD	(urban)	Community-based (urban)
Gross <i>et al.</i> , 2009 [102] (Hart <i>et al.</i> [101])	68	2002–2006	RCT	USA and South Africa	General	Hospital clinic and community-based (both)	
Lucas <i>et al.</i> , 2006 [103] (Hart <i>et al.</i> [101])	69	2001–2005	Case-control	USA (Baltimore, MD)	PWUD	Community-based (urban)	
Macalino <i>et al.</i> , 2007 [104] (Hart <i>et al.</i> [101])	70	2001–2004	RCT	USA (Northeast)	PWUD	Community-based (both)	
Munoz <i>et al.</i> , 2010 [105] (Hart <i>et al.</i> [101])	71	2005–2007	Case-control	Peru (Lima)	General	Hospital clinic (urban)	
Tinoco <i>et al.</i> , 2004 [106] (Hart <i>et al.</i> [101])	72	1999–2001	Case-control	Spain (Cadiz)	PWUD	Community-based (both)	
Wohl <i>et al.</i> , 2006 [107] (Hart <i>et al.</i> [101])	73	2001–2004	RCT	USA (Los Angeles, CA)	General	Community-based (urban)	
Andrade <i>et al.</i> , 2005 [108] (Haynes <i>et al.</i> [109])	74	1999–2001	RCT	USA (Baltimore, MD)	General	Hospital clinic (urban)	
Collier, 2005 [110] (Haynes <i>et al.</i> [109])	75	NR	RCT	USA (Various)	General	Community-based (urban)	
Remien, 2005 [111] (Haynes <i>et al.</i> [109])	76	2000–2004	RCT	USA (New York, NY)	General	Community-based (urban)	
Samet <i>et al.</i> , 2005 [112] (Haynes <i>et al.</i> [109])	77	1997–2000	RCT	USA (Boston, MA)	PWUD	Hospital clinic (urban)	
Van Servellen <i>et al.</i> , 2005 [113] (Haynes <i>et al.</i> [109])	78	NR	RCT	USA (Los Angeles, CA)	General	Community-based (urban)	
Weber <i>et al.</i> , 2004 [114] (Haynes <i>et al.</i> [109])	79	NR	RCT	Switzerland (Zurich)	General	Hospital clinic (urban)	
DiIorio <i>et al.</i> , 2008 [115] (Hill and Kavookjian [116])	80	2001–2005	RCT	USA (Atlanta, GA)	General	Community-based (urban)	
Parsons <i>et al.</i> , 2007 [117] (Hill and Kavookjian [116])	81	2002–2005	RCT	USA (New York, NY)	PWUD	Community-based (urban)	
Mitty <i>et al.</i> , 2005 [118] (Kenya <i>et al.</i> [119])	82	2000–2005	Before-after	USA (Providence, RI)	PWUD and incarcerated	Community-based (urban)	
Purcell <i>et al.</i> , 2007 [120] (Kenya <i>et al.</i> [119])	83	2001–2003	RCT	USA (various)	PWUD	Community-based (urban)	
Simoni <i>et al.</i> , 2007 [121] (Kenya <i>et al.</i> [119])	84	2000–2002	RCT	USA (New York, NY)	General	Community-based	

							(urban)
Visnagarwala <i>et al.</i> , 2006 [122] (Kenya <i>et al.</i> [119])	85	2003–2004	NRCT	USA (Houston, TX)	Women	Community-based (urban)	
Williams <i>et al.</i> , 2006 [123] (Kenya <i>et al.</i> [119])	86	1999–2002	RCT	USA (Connecticut)	PWUD	Community-based (urban)	
Golin <i>et al.</i> , 2006 [124] (Leeman <i>et al.</i> [125])	87	2001–2003	RCT	USA (North Carolina)	General	Community-based (both)	
Harwell <i>et al.</i> , 2003 [126] (Leeman <i>et al.</i> [125])	88	NR	Before-after	USA (Rhode Island)	PWUD and women	Community-based (urban)	
Holzemer <i>et al.</i> , 2006 [127] (Leeman <i>et al.</i> [125])	89	2002	RCT	USA (Houston, TX)	General	Community-based (Urban)	
Javanbakht <i>et al.</i> , 2006 [128] (Leeman <i>et al.</i> [125])	90	2002–2004	RCT	USA (Los Angeles, CA)	General	Community-based (urban)	
Johnson <i>et al.</i> , 2007 [129] (Leeman <i>et al.</i> [125])	91	2000–2002	RCT	USA (various)	General	Community-based (urban)	
Jones <i>et al.</i> , 2007 [130] (Leeman <i>et al.</i> [125])	92	NR	RCT	USA (various)	Women	Community-based (urban)	
Koenig <i>et al.</i> , 2008 [131] (Leeman <i>et al.</i> [125])	93	1999–2002	RCT	USA (Atlanta, GA)	General	Community-based (urban)	
Levin <i>et al.</i> , 2006 [132] (Leeman <i>et al.</i> [125])	94	2003	Before-after	USA (Philadelphia, PA)	General	Community-based (urban)	
Ma <i>et al.</i> , 2008 [133] (Leeman <i>et al.</i> [125])	95	NR	RCT-SWD	USA (southern region)	PWUD	Community-based (both)	
Milam <i>et al.</i> , 2005 [134] (Leeman <i>et al.</i> [125])	96	1999–2000	RCT	USA (California)	General	Community-based (urban)	
Parsons <i>et al.</i> , 2005 [135] (Leeman <i>et al.</i> [125])	97	2003	Before-after	USA (New York, NY)	PWUD	Community-based (urban)	
Reynolds <i>et al.</i> , 2008 [136] (Leeman <i>et al.</i> [125])	98	1998–1999	RCT	USA (various)	General	Community-based (both)	
Rosen <i>et al.</i> , 2007 [137] (Leeman <i>et al.</i> [125])	99	NR	RCT	USA (Hartford, CT)	PWUD	Community-based (urban)	
Sorenson <i>et al.</i> , 2007 [138] (Leeman <i>et al.</i> [125])	100	2001–2004	Cohort	USA (San Francisco, CA)	PWUD	Community-based (urban)	
Wagner <i>et al.</i> , 2006 [139] (Leeman <i>et al.</i> [125])	101	2001–2005	NRCT	USA (California)	General	Community-based (urban)	
Jones <i>et al.</i> , 2003 [140] (Manias and Williams [141])	102	2000	Before-after	USA (various)	Women	Community-based (urban)	

Rathbun <i>et al.</i> , 2005 [142] (Manias and Williams [141])	103	2001–2002	Before-after	USA (Oklahoma)	General	Community-based (urban)
van Servellen <i>et al.</i> , 2003 [143] (Manias and Williams [141])	104	NR	Before-after	USA (Los Angeles, CA)	General	Community-based (urban)
Wyatt <i>et al.</i> , 2004 [144] (Manias and Williams [141])	105	NR	RCT	USA (Los Angeles, CA)	Women	Community-based (urban)
Levy <i>et al.</i> , 2004 [145] (Rueda <i>et al.</i> [15])	106	2002	RCT	Australia (Melbourne)	General	Hospital clinic (urban)
Mannheimer <i>et al.</i> , 2006 [146] (Saberi and Johnson, 2011 [147])	107	1999–2002	Before-after	USA (various)	General	Community-based (urban)
Murphy <i>et al.</i> , 2007 [148] (Saberi and Johnson, 2011 [147])	108	NR	NRCT	USA (Los Angeles, CA)	General	Community-based (urban)
Simoni <i>et al.</i> , 2009 [149] (Saberi and Johnson, 2011 [147])	109	2003–2007	NRCT	USA (Seattle, WA)	General	Community-based (urban)
Simoni <i>et al.</i> , 2011 [150] (Saberi and Johnson, 2011 [147])	110	2006–2008	RCT	China (Beijing)	General	Community-based (urban)
Wu <i>et al.</i> , 2006 [151] (Saberi and Johnson, 2011 [147])	111	1999–2001	Before-after	USA (Baltimore, MD)	General	Community-based (urban)
Frick <i>et al.</i> , 2006 [152] (Saberi <i>et al.</i> , 2012 [153])	112	1998–1999	RCT	USA (Seattle, WA)	General	Community-based (urban)
Hirsch <i>et al.</i> , 2011 [154] (Saberi <i>et al.</i> , 2012 [153])	113	2005	RCT	USA (California)	General	Community-based (urban)
Horberg <i>et al.</i> , 2007 [155] (Saberi <i>et al.</i> , 2012 [153])	114	1997–2002	Cohort	USA (California)	General	Community-based (both)
March <i>et al.</i> , 2007 [156] (Saberi <i>et al.</i> , 2012 [153])	115	2003–2004	RCT	USA (Los Angeles, CA)	General	Community-based (urban)
Pirkle <i>et al.</i> , 2009 [157] (Saberi <i>et al.</i> , 2012 [153])	116	2003–2004	Before-after	Ouagadougou (Burkina Faso), Mali (Bamako)	General	Hospital clinic and community-based (urban)
Rotheram-Borus <i>et al.</i> , 2004 [158] (Simoni <i>et al.</i> [159])	117	1999–2002	RCT	USA (various)	PWUD	Community-based (urban)
Byron <i>et al.</i> , 2008 [160] (Tirivayi and Groot [161])	118	2005–2006	Before-after	Kenya (various)	General	Community-based (both)
Feaster <i>et al.</i> , 2010 [162] (Wechsberg <i>et al.</i> [163])	119	NR	RCT	USA (Miami, FL)	PWUD and women	Community-based (urban)
Ingersoll <i>et al.</i> , 2011 [164] (Wechsberg <i>et al.</i> [163])	120	NR	RCT	USA (Virginia)	PWUD	Community-based

Page <i>et al.</i> , 2003 [165] (Wong <i>et al.</i> [166])	121	1999	RCT	Switzerland (Zurich)	General	(urban) Community-based (urban)
Igumbor <i>et al.</i> , 2011 [167] (Wouters <i>et al.</i> [168])	122	2007	Before-after	South Africa (variable)	General	Hospital clinic and community-based (both)
Kunutsor <i>et al.</i> , 2011 [169] (Wouters <i>et al.</i> [168])	123	2010	RCT	Uganda (Jinja)	General	Hospital clinic (rural)
Rich <i>et al.</i> , 2012 [170] (Wouters <i>et al.</i> [168])	124	2005–2006	Before-after	Rwanda (Eastern Rwanda)	General	Community-based (rural)

RCT, randomized controlled trial; RCT-SWD, randomized controlled stepped wedge trial; NR, not reported; NRCT, non-randomized controlled trial; cRCT, cluster-randomized controlled trial; PWUD, people who use drugs; both, urban and rural settings.

*Review author(s) listed when a study was identified through review of an existing systematic review.