Supplement B – Summary of RCT studies on the Effect of Psychosocial Interventions on Medication Adherence in PLWH.

Study	Population	Intervention	Study Design	Outcome
First author, year **Country**	**Randomized sample** **Mean age and % female** **Screening and risk type (when applicable)**	**Name** **Provider** **Type and techniques used** **Duration and setting**	**Study Aim** **Control Group** **Analysed sample (when applicable)**	**Measure type**
Basso, 2013 Brazil	$N = 121$ PLWH Mean age: 43 years; 37% female Screened on detectable viral load (DG).	*Human Right- Based Intervention* Provider: healthcare professional Categorized as: counselling Length: 4 hrs; Setting: individual	Aim: increasing adherence. CG: SC	MEMS
Carrico, 2006 USA	$N = 130$, male PLWH Mean age: 42 years; 0% female	*Cognitive Behavioural Stress Management* Provider: psychologist/psychiatrist Categorized as: CBT (CB, REL) Length: 22.5 hrs; Setting: group	Aim: improving health. CG: SC	ACTG, self-report, 4 days recall.
Chung, 2011 Kenya	$N = 200$ PLWH Mean age: 36 years; 66% female Screened on initiating ART (RG)	*Adherence Counselling* Provider: counsellor Categorized as: counselling (CB) Length: 1.9 hrs; Setting: individual	Aim: increasing adherence. CG: SC	Pill-Count
Claborn, 2014 USA	$N = 97$ PLWH Mean age: 44 years; 16% female Screened on adherence $\leq$ 95% (DG)	*eLifeSteps* Provider: computer Categorized as: CBT (CB) Length: 1 hour; Setting: individual	Aim: increasing adherence. CG: SC	ACTG, self-report, 4 days recall.
De Bruin, 2010 The Netherlands	$N = 133$ PLWH Mean age: 48 years; 10% female	*Adherence Improving Self-Management Strategy* Provider: HIV-nurse Categorized as: counselling (MI) Length: 1 hour; Setting: individual	Aim: increasing adherence. CG: SC	MEMS
DiIorio, 2008 USA	$N = 247$ PLWH Mean age: 42 years; 28% female Screened on initiating or changing ART (RG)	*Motivational Interviewing* Provider: HIV-nurse Categorized as: counselling (MI) Length: 2.8 hrs; Setting: individual	Aim: increasing adherence. CG: SC	MEMS

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Duncan, 2012 USA	N = 76 PLWH Mean age: 48 years; 16% female Screened on experiencing distress from side effects (RG)	"FOCUS" MBSR Provider: MBSR (healthcare) professional Categorized as: CBT (CB, REL) Length: 30 hrs; Setting: group	Aim: improving health CG: SC	VAS, self-report, 30 days recall
Goggin, 2013 USA	N = 135 PLWH Mean age: 40.6 years; 26% female Screened on adherence problems, initiating or changing ART (DG)	Motivational Interviewing - CBT Provider: psychologist Categorized as: counselling (CB, MI) Length: 4.2 hrs; Setting: individual	Aim: increasing adherence CG: SC	MEMS
Golin, 2006 USA	N = 155 PLWH Mean age: 40 years; 34% female Screened on detectable or increased viral load or initiating ART (DG)	Motivational Interviewing Provider: healthcare professional Categorized as: counselling (MI) Length: 2.3 hrs; Setting: individual	Aim: increasing adherence CG: Active control group: PE	MEMS
Hersch, 2013 USA	N = 168 PLWH Mean age:46 years; 24% female Screened on detectable viral load(DG)	eLifeSteps Provider: computer Categorized as: CBT (CB, REL) Length: 1 hour; Setting: individual	Aim: increasing adherence CG: WLC	MEMS
Holstad, 2011 USA	N = 207, female PLWH Mean age: 44 years; 100% female	KHARMA – Motivational Interviewing Provider: nurse Categorized as: counselling (MI) Length: 14 hrs; Setting: group	Aim: improving health CG: Active control group: PE Analysed if ≥ 7 of 8 sessions were followed	MEMS
Holstad, 2012 Nigeria	N = 60, female PLWH Mean age: 31 years; 100% female	KHARMA – Motivational Interviewing Provider: healthcare professional Categorized as: counselling (MI) Length: 14 hrs; Setting: group	Aim: improving health CG: Active control group: PE Analysed if ≥ 7 of 8 sessions were followed	AGAS, self-report, 30 days recall
Horvath, 2013 USA	N = 145, gay or bisexual PLWH Mean age: 43 years; 0% female Screened on adherence problems (DG)	Thrive With Me - online social support Provider: peer Categorized as: peer support Length: NR; Setting: individual	Aim: increasing adherence CG: WLC	Self-report item, 30 days recall

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Ingersoll, 2011 USA	*N* = 56, crack cocaine using PLWH Mean age: 45 years; 52% female Screened on adherence problems (DG)	*Motivational Interviewing* Provider: psychologist Categorized as: counselling (CB, MI) Length: 6 hrs; Setting: individual	Aim: improving health CG: Active control group: PE	TLB, self-report, 14 days recall
Johnson, 2007 USA	*N* = 204 PLWH Mean age: 40 years; 22% female (DG; see analysed sample)	*The Healthy Living Project* Provider: healthcare professional. Categorized as: counselling (CB) Length: 22.5 hrs; Setting: individual	Aim: improving health CG: WLC Analysed if ≤ 85% adherence	ACTG, self-report, 3 days recall
Johnson, 2011 USA	*N* = 249 PLWH Mean age: 46 years; 9% female Screened on side effect distress (RG)	*The Balance Project* Provider: healthcare professional. Categorized as: counselling (CB) Length: 5 hrs; Setting: individual	Aim: increasing adherence CG: WLC	VAS, self-report, 30 days recall
Kalichman, 2011 USA	*N* = 41 PLWH Mean age: 51 years; 35% female Screened on ≤ 95% adherence (DG)	*Cell Phone Adherence Counselling* Provider: counsellor Categorized as: counselling (CB) Length: 3.75 hrs; Setting: individual	Aim: increasing adherence CG: Active control group: pill-count calls	Pill-count
Konkle-Parker, 2012 USA	*N* = 56 PLWH Mean age: 35 years; 38% female Screened on initiating or changing ART (RG)	*Motivational Interviewing* Provider: nurse Categorized as: counselling (MI) Length: 2.5 hrs; Setting: individual	Aim: increasing adherence CG: SC	VAS, self-report, 21-28 days recall
Konkle-Parker, 2014 USA	*N* = 100 PLWH Mean age: 37 years; 51% female Screened on adherence problems (DG)	*Motivational Interviewing* Provider: other (research coordinator) Categorized as: counselling (MI) Length: 2.5 hrs; Setting: individual	Aim: increasing adherence CG: SC	VAS, self-report, 21-28 days recall
Kurth 2014 USA	*N* = 240 PLWH Mean age: 45 years; 9% female	*CARE+: online counselling* Provider: computer Categorized as: counselling (MI) Length: NR; Setting: individual	Aim: increasing adherence CG: SC	VAS, self-report, 30 days recall

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Margolin, 2003 USA	N = 90 PLWH in a methadone maintenance program Mean age: 41 years; 30% female Screened on injection drug use (RG)	HIV+ Harm Reduction Program Provider: counsellor Categorized as: CBT (CB) Length: 104 hrs; Setting: group (inpatient)	Aim: improving health CG: SC	TLB, self-report, 7 days recall
Murphy, 2002 USA	N = 52 PLWH Mean age: 39 years; 12% female Screened on missing ≥ 1 dose per week (DG)	CBT Provider: psychologist Categorized as: CBT (CB) Length: NR; Setting: group & individual	Aim: increasing adherence CG: SC	ACTG, self-report, 3 days recall
Nyamathi, 2012 India	N = 68, female PLWH, aged 18-45 Mean age: 31 years; 100% female Screened on CD4 count ≥ 100	ASHA-life Provider: peer Categorized as: peer support Length: NR; Setting: group & individual	Aim: increasing adherence CG: Active control group: PE	Pill-Count
Parsons, 2007 USA	N = 143 PLWH Mean age: 44 years; 21% female Screened on hazardous drinking (RG)	Project PLUS – CBT and MI Provider: healthcare professional Categorized as: CBT (CB, MI) Length: 8 hrs; Setting: individual	Aim: improving health CG: Active control group: PE	Self-report item, 14 days recall
Rathbun, 2005 USA	N = 33 PLWH Mean age: 38 years; 15% female Screened on initiating ART (RG)	Psycho-educative counselling Provider: healthcare professional Categorized as: counselling Length: NR; Setting: individual	Aim: increasing adherence CG: SC	MEMS
Remien, 2005 USA	N = 215 PLWH in relationship with seronegative partner (≥ 6 months) Mean age: 42 years; 46% female Screened on ≤ 80% adherence (DG)	SMART Couples Support Study Provider: nurse Categorized as: social support (CB) Length: 3.3 hrs; Setting: individual	Aim: increasing adherence CG: SC	MEMS
Reynolds, 2008 USA	N = 109 PLWH Mean age: 37 years; 15% female Screened on initiating ART (RG)	Telephone Adherence Counselling Provider: nurse Categorized as: counselling Length: 1.5 hrs; Setting: individual	Aim: increasing adherence CG: SC	ACTG, self-report, 4 days recall

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Rosen, 2007 USA	*N* = 56 PLWH Mean age: 44 years; 41% female Screened on ≤ 80% adherence (DG)	*Contingency Management and counselling* Provider: psychologist Categorized as: CBT (CB) Length: NR; Setting: individual	Aim: increasing adherence CG: Active control group: counselling	MEMS
Safren, 2001 USA	*N* = 56 PLWH Mean age: 41 years; 13% female Screened on adherence problems (DG)	*Life-Steps: CBT for Adherence* Provider: healthcare professional Categorized as: counselling (CB, MI) Length: NR; Setting: individual	Aim: increasing adherence CG: SC	ACTG, self-report, 14 days recall
Safren, 2009 USA	*N* = 45 PLWH Mean age: NR; 16% female Screened on mood disorder (RG)	*Life-Steps: CBT for Adherence* Provider: psychologist Categorized as: CBT (CB, MI, REL) Length: 9.2 hrs; Setting: individual	Aim: improving health. CG: Enhanced SC	MEMS
Safren, 2012 USA	*N* = 89 PLWH Mean age: 47 years; 39% female Screened on opioid dependence & mood disorder (RG)	*Life-Steps: CBT for Adherence* Provider: psychologist Categorized as: CBT (CB, MI, REL) Length: 7.5 hrs; Setting: individual	Aim: improving health CG: Enhanced SC	MEMS
Samet, 2005 USA	*N* = 151 PLWH Mean age: 43 years; 46% female Screened on alcohol problems (RG)	*ADHERE – Motivational Interviewing* Provider: nurse Categorized as: counselling (MI) Length: 2.4 hrs; Setting: individual	Aim: increasing adherence CG: SC	ACTG, self-report, 30 days recall
Simoni, 2007 USA	*N* = 136 PLWH Mean age: 43 years; 45% female	*Peer Support* Provider: peer Categorized as: peer support Length: 6 hrs; Setting: group & individual	Aim: increasing adherence CG: SC	MEMS
Simoni, 2009 USA	*N* = 114 PLWH Mean age: 40 years; 24% female Screened on initiating or changing ART (RG)	*Peer Support* Provider: peer Categorized as: peer support Length: 6 hrs; Setting: group & individual	Aim: improving health CG: SC	MEMS

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First author, year **Country**	**Randomized sample** **Mean age and % female** **Screening and risk type (when applicable)**	**Name** **Provider** **Type and techniques used** **Duration and setting**	**Study Aim** **Control Group** **Analysed sample (when applicable)**	**Measure type**
Simoni, 2013 USA	*N* = 40 PLWH of Mexican descent Mean age: 46 years; 28% female Screened on depressive complaints & non-adherence or detectable viral load (DG)	*CBT for Depression & Life-Steps* Provider: psychologist Categorized as: CBT (CB, MI, REL) Length: 9.17 hrs; Setting: individual	Aim: improving health CG: SC	MEMS
Sorensen, 2007 USA	*N* = 66 PLWH Mean age: 43 years; 41% female Screened on receiving methadone treatment and ≤ 80% adherence (DG)	*Contingency Management and Counselling* Provider: other (not specified) Categorized as: CBT (CB) Length: NR; Setting: individual	Aim: increasing adherence CG: Active control group: counselling and reward	MEMS
Tuldra, 2000 Spain	*N* = 116 PLWH Mean age: 39 years; 24% female Screened on initiating ART (RG)	*Psycho-educative Counselling* Provider: psychologist Categorized as: counselling Length: NR; Setting: individual	Aim: increasing adherence CG: SC	Self-report item, 30 days recall
Wagner, 2006 USA	*N* = 230 PLWH Mean age: 39 years; 20% female Screened on adherence problems & initiating or changing ART (DG)	*CBT or CBT plus Adherence Practice Trial* Provider: nurse Categorized as: CBT (CB) Length: 3.1 hrs; Setting: individual	Aim: improving health CG: SC	MEMS
Wagner, 2013 USA	*N* = 60 PLWH Mean age: 39 years; 6% female Screened on initiating or changing ART (RG)	*Adherence Readiness Program* Provider: counsellor Categorized as: counselling (CB, MI) Length: 3.5 hrs; Setting: individual	Aim: increasing adherence CG: SC	MEMS
Webel, 2010 USA	*N* = 89, female and transgender (identifying female), PLWH Mean age: 47 years; 100% female	*Peer-Supported Self-management* Provider: peer Categorized as: peer support (CB, REL) Length: 14 hrs; Setting: group	Aim: improving health CG: WLC	ACTG, self-report, 7 days recall
Weber, 2004 Switzerland	*N* = 60 PLWH Mean age: 41 years; 17% female Screened on detectable viral load	*CBT* Provider: psychologist Categorized as: CBT (CB)	Aim: improving health CG: SC	MEMS

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Country	Mean age and % female	Provider	Control Group	
	Screening and risk type (when applicable)	Type and techniques used	Analysed sample (when applicable)	
		Duration and setting		
	(RG)	Length: 18.8 hrs; Setting: individual		
Williams, 2014 China	*N* = 110 PLWH Mean age: 38 years; 29% female Screened on ≤ 90% adherence and detectable viral load (DG)	*Ai Sheng Nuo (Love, Life, Hope)* Provider: peer Categorized as: counselling Length: NR; Setting: individual	Aim: increasing adherence CG: SC	VAS, self-report, 30 days recall
Wyatt, 2004 USA	*N* = 147, female, PLWH Mean age: 41 years; 100% female Screened on childhood sexual abuse history (RG)	*ESHI: Enhanced Sexual Health Intervention* Provider: peer Categorized as: counselling (CB, REL) Length: 27.5 hrs; Setting: group	Aim: increasing adherence CG: WLC	Self-report item, 14 days recall

Note. ACTG = AIDS Clinical Trials Group adherence questionnaire; AGAS = Antiretroviral General Adherence Scale; ART = antiretroviral therapy; CB = cognitive and/or behavioural techniques; CBT = cognitive behavioural therapy; CD4 = cluster of differentiation 4 (immune parameter); CG = control group; DG = difficulties group; IG = intervention group; MBSR = mindfulness based stress reduction; MEMS = Medication Event Monitoring System; MI = motivational interviewing techniques; NR = not reported; PE = psychoeducation; PLWH = people living with HIV; REL = relaxation techniques; RG = risk group; SC = standard care; TLB = Time-Line Back; VAS = Visual Analogue Scale; WLC = waiting-list condition.