

Impact of a Self-management Telephone Support Program for Older People Living With HIV on Antiretroviral Adherence and Quality Of Life

Sheryl Catz and Benjamin Balderson
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Background

- **Proportion of people aged 50 years and older living with HIV/AIDS has been increasing over past 2 decades (Mack & Ory, 2003; CDC, 2008)**
- **CDC projected half of U.S. HIV+ population could be 50 years or older by 2015**

Background

- **Key issues highlighted in a 2012 HIV and Aging Work Group report on directions for NIH research included:**
 - multimorbidity
 - polypharmacy
 - maintaining function as a treatment goal
 - the complexity of attributing effects to HIV, treatment, aging or concurrent diseases
 - utility of multivariable prognostic indices
 - need for community support and integrated care

Background

- **People living with HIV aged 50 and older have**
 - increased rates of chronic health conditions and polypharmacy
 - unique social and health related quality of life (QOL) concerns
- **However, HIV support programs have not traditionally targeted this rapidly growing age group**
 - the “graying of HIV” has important implications for disease management and services

Methods

- **The PRIME randomized controlled trial evaluated the efficacy of a telephone-delivered individual self-management intervention for older PLWH.**
- **452 PLWH aged 50 and older, currently prescribed ART, and reporting adherence lapses in the past 30 days were recruited from AIDS Service Organizations in 9 cities, and randomized to one of three interventions (Individual, Group, Information) after completing baseline telephone surveys.**

Have you celebrated your 50th birthday?



* Photos shown are models not actual patients.

Are you HIV positive?

Thanks to advances in treatment, more people with HIV are living longer . . . and living well.

PRIME is a study about living well with HIV as you age.
We need to hear from the growing community of people 50 and up who know what it's like to live with HIV.

Call PRIME
today at
1-800-859-5811

Please tear off paper and call today.

Can I join this study?

You may be eligible, if you are:

- ✓ 50 years old and up
- ✓ able to talk on the phone
- ✓ taking medication for HIV

If I join, will I get anything for taking part?

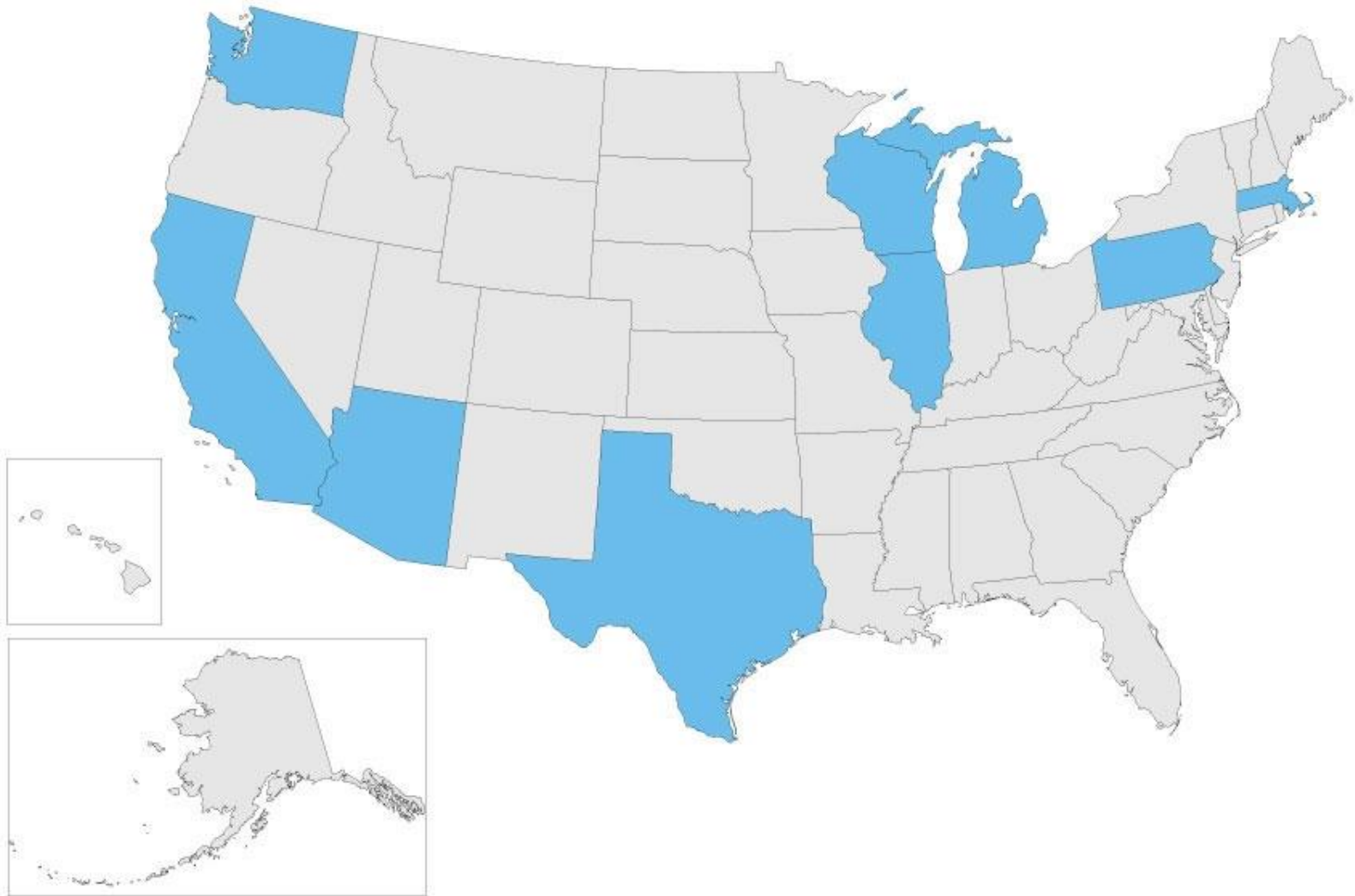
If eligible, you will get:

- A **free book** about living well with HIV.
- **\$150** for doing four surveys by phone.
- For some people, extra support from a wellness coach or group.

PRIME is a national study based in Seattle at the Group Health Center for Health Studies. It is paid for by the National Institutes of Health.

ASO Recruitment Partners

- AIDS Action Committee of Massachusetts (Boston, MA)
- AIDS Foundation of Chicago (Chicago, IL)
- AIDS Partnership Michigan (Detroit, MI)
- AIDS Project East Bay (Oakland, CA)
- AIDS Resource Center of Wisconsin (Milwaukee, WI)
- Lifelong AIDS Alliance (Seattle, WA)
- Philadelphia FIGHT (Philadelphia, PA)
- Southwest Center for HIV/AIDS (Phoenix, AZ)
- Resource Center of Dallas & AIDS Arms (Dallas, TX)



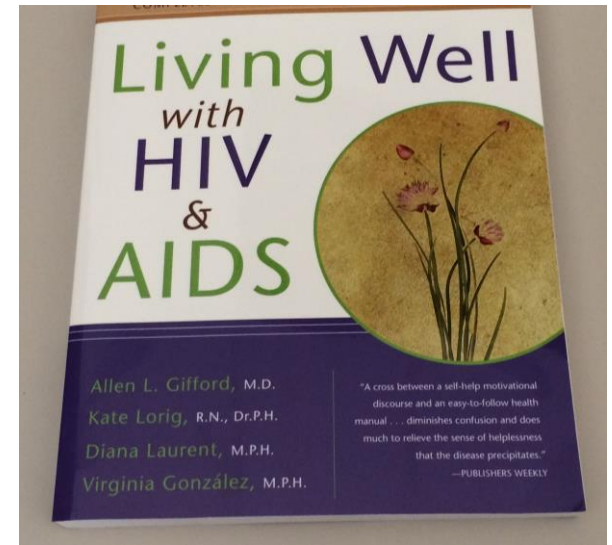
PRIME Eligibility Criteria

1102 callers were screened; final sample = 452

- 50 years or older
- HIV-positive
- Currently prescribed antiretroviral medications
- Report < 95% ART adherence in past 30 days
- Able to hear well enough to communicate by telephone
- Pass a brief cognitive screen (Callahan et al, 2002; TMMSE)

Methods

- All participants received a book on living well with HIV.
- Information participants received a book only.

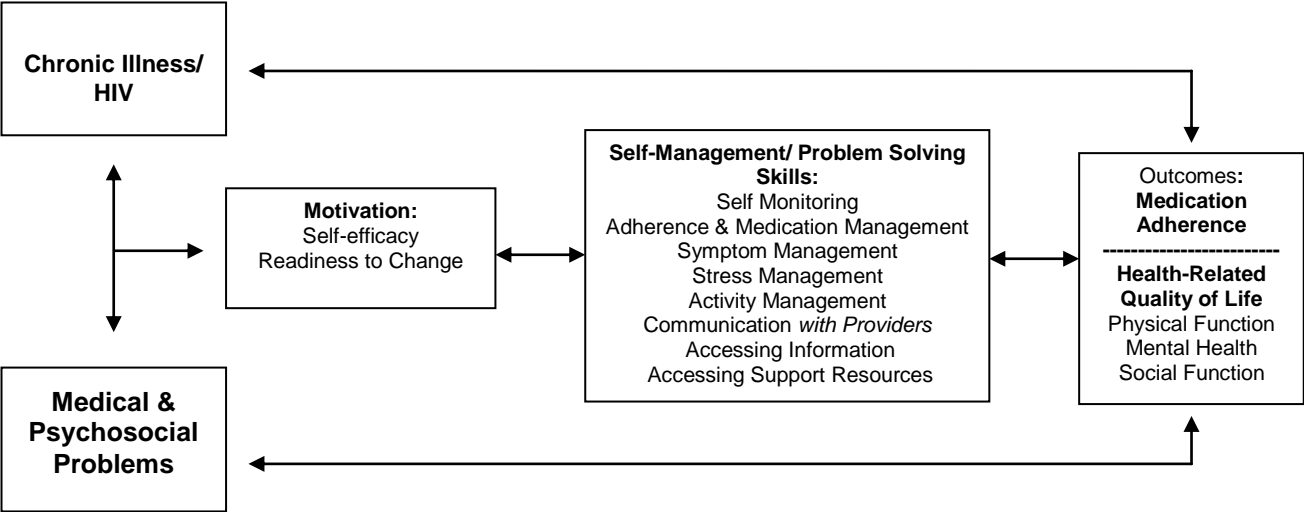


Methods

- Individual intervention participants also received up to 10 30-minute telephone calls that integrated chronic disease and HIV self-management skills training with motivational and problem-solving counseling.
- Group participants received access to 10 time-matched self-management support group calls.



Intervention Model



Self-management topics

- **Personal values and goal-setting**
- **Readiness to change health behaviors**
- **HIV treatment knowledge**
- **Problem solving**
- **Medical self-monitoring**
- **Symptom management**
- **Stress and depression**
- **Physical and social activity**
- **Health related communication**
- **Prioritizing health problems**
- **Accessing care resources**

Methods

- **Adherence was assessed via a composite score of “best practice” self-report items**
- **Physical, Mental and Social functioning was measured via the SF-36**

Antiretroviral Adherence Measures

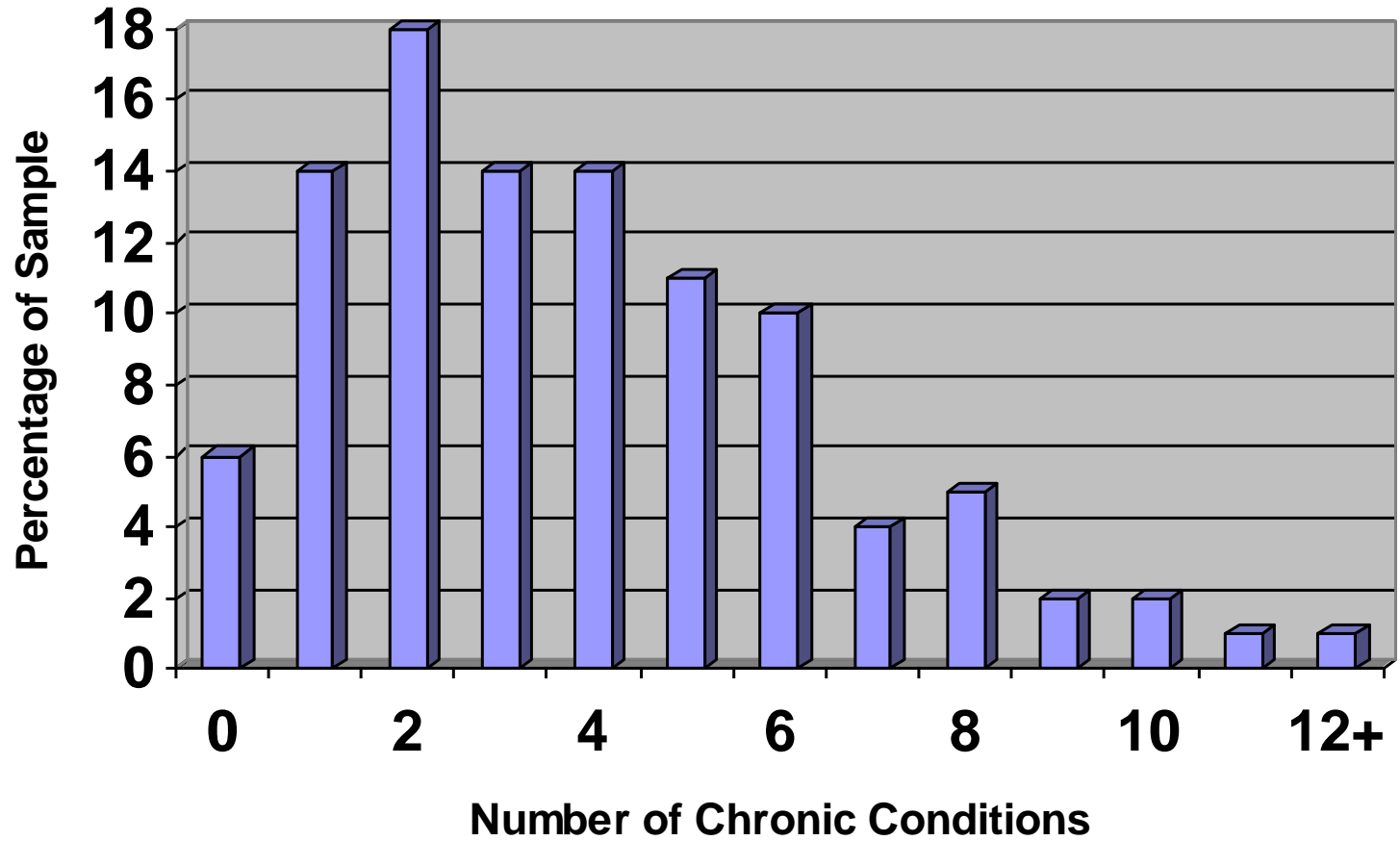
- Composite Antiretroviral Adherence Scale (6-items; $\alpha = .79$)
 - Combines missed and off schedule doses for 7-day and 30-day periods
 - 0-100 scale, with 100 reflecting greatest adherence
- ART Doses Taken scale (4 items; $\alpha = .82$)
 - Items include a 30-day rating scale (Lu, Safren et al, 2007), 30-day percentage of doses taken (Walsh et al, 2002) 7-day number of doses taken (Golin et al, 2002), 30-day number of days missed (Catz et al, 2007)
- ART Dose Timing (2 items; $\alpha = .62$)
 - Items include 7-day number of doses off schedule (at least 2 hours late or 2 hours early) and 30-day number of days off schedule
- Scales derived from Principle Components Analysis

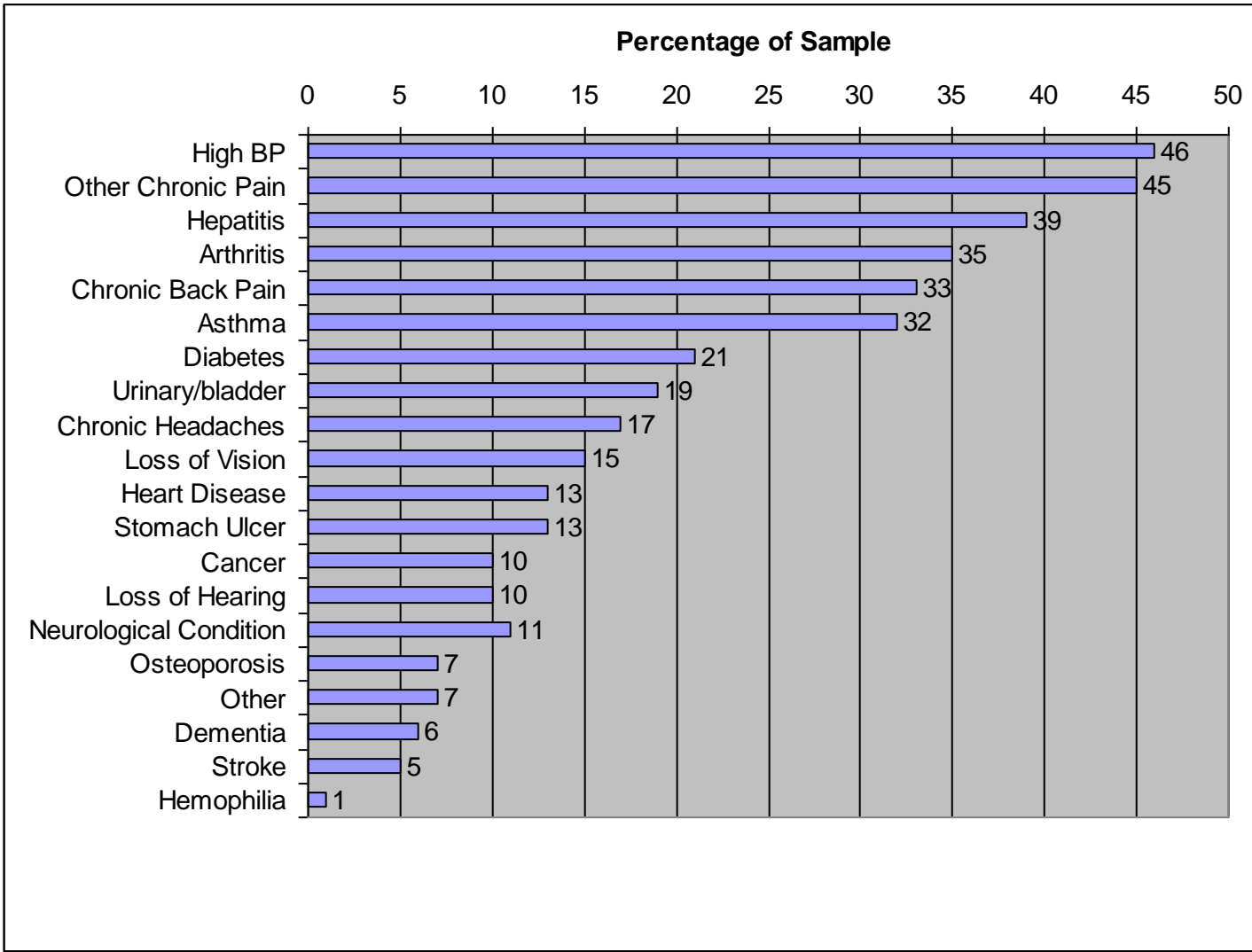
Age

- Mean age = 55.8 years
- 50-54 years old (59%)
- 55- 59 years old (29%)
- 60-75 years old (12%)

PRIME Baseline Participant Characteristics (N=452)

	M (SD)	n (%)
Sex		
Male		327 (72%)
Female		125 (28%)
Ethnicity		
African-American		255 (56%)
White / non-hispanic		173 (38%)
Hispanic / Latino		30 (7%)
Native American		11 (2%)
Asian		2 (0.4%)
Education		
Less than High School		81 (18%)
High School		142 (31%)
Some College / College Degree		186 (41%)
Post-graduate Degree		53 (10%)
Relationship		
Single		213 (47%)
Married / Partnered		107 (24%)
Divorced / Separated		95 (21%)
Widowed		37 (8%)
Sexual Orientation		
Heterosexual		248 (55%)
Homosexual		157 (35%)
Bisexual		39 (9%)
Other		8 (2%)
Ever injected drugs		160 (35%)
Self-reported undetectable viral load		298 (66%)
Duration of ART (years)	11.8 (5.6)	
Number of current medications (All)	7.6 (4.7)	
Recent CD4 Count	514 (328)	



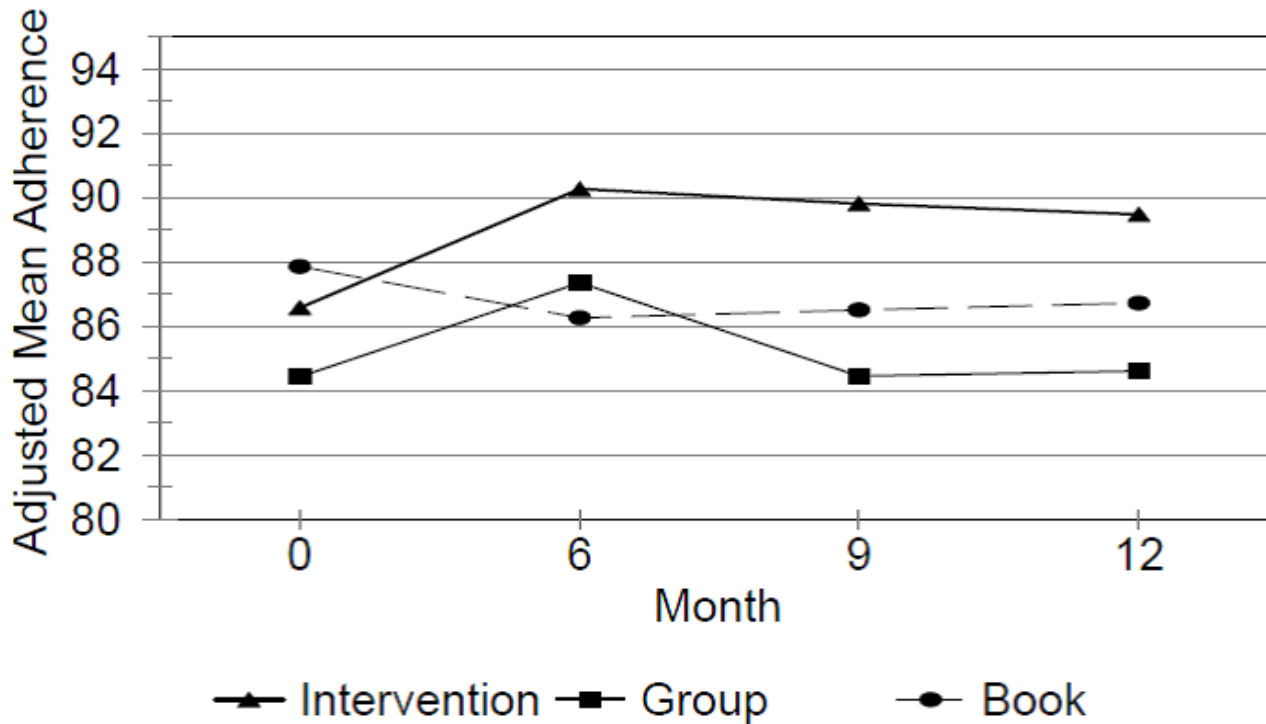


Results

- **Individual telephone counseling significantly improved ART adherence as compared to Group and Information, and these differences were maintained at 12-month follow-up in intent-to-treat (ITT) analyses.**

Adherence Outcomes

Mean Adherence Scale (Missing Doses)
By Treatment Group (adjusted)



Results

- **At 6 month, ITT analyses showed the Individual arm had significantly higher Social Functioning than Group or Information arms, significantly higher Mental Health Functioning than Information, and no differences in Physical Functioning.**
- **Mental Health Functioning for Individual intervention participants remained higher than Information controls at 9 months, but there were no differences by 12 months.**

Intervention effects on Quality of Life

			Follow-up Means		
			Individual	Group	Book
				Control	Control
Primary Outcomes for Quality of Life					
SF-36 Physical Functioning (mean)					
	Baseline		55.51	56.27	62.71
	Month 6		58.06	55.33	62.09
	Month 9		55.71	55.44	61.98
	Month 12		58.50	54.21	62.91
SF-36 Mental Health (mean)					
	Baseline		59.28	59.60	61.19
	Month 6		62.53	60.36	60.66
	Month 9		61.69	60.79	60.06
	Month 12		62.40	59.82	63.19
SF-36 Social Functioning (mean)					
	Baseline		63.83	65.17	68.87
	Month 6		70.71	65.39	66.21
	Month 9		67.07	66.86	68.61
	Month 12		69.90	65.38	70.96

Conclusions

- **PRIME trial results suggest that individual telephone counseling that is wellness-focused and recognizes the unique needs and comorbidities of the aging HIV population represents a promising intervention model for supporting self-management and maintaining treatment adherence among older PLWH.**

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