

HIV and adolescents: guidance for HIV testing and counselling and care for adolescents living with HIV

ANNEX 6: GRADE Evidence profiles

GRADE evidence profiles: PICO 1a – RCTs (HTC)

Author(s): Lindegren ML, Horvath T, Anglemeyer A, Rutherford GW

Date: 2011-12-06

Question: Should HIV testing and counselling vs control be used for preventing HIV transmission and improving HIV care in Adolescents?

Settings: Settings with a generalised epidemic: Kenya, Tanzania, Trinidad & Tobago, Uganda

Bibliography: Muhamadi 2011, VCT 2000, Wanyenze 2011

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	HIV testing and counselling	Control	Relative (95% CI)	Absolute		
STI incidence (follow-up 6 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	51/1145 (4.5%) ³	62/1134 (5.5%) ³	OR 0.80 (0.53 to 1.2)	10 fewer per 1000 (from 25 fewer to 10 more) ⁴	⊕○○○ VERY LOW	CRITICAL
HIV+ alive at 6 months (follow-up 6 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	very serious ⁵	very serious ²	none	87/142 (61.3%)	49/66 (74.2%)	RR 0.83 (0.68 to 1)	126 fewer per 1000 (from 238 fewer to 0 more)	⊕○○○ VERY LOW	CRITICAL
HIV+ attended HIV clinic (follow-up 6 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	very serious ⁵	very serious ²	none	53/98 (54.1%)	39/55 (70.9%)	RR 0.76 (0.59 to 0.98)	170 fewer per 1000 (from 14 fewer to 291 fewer)	⊕○○○ VERY LOW	CRITICAL
Uptake of pre-ARV care (follow-up 5 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	serious ⁶	none	135/200 (67.5%)	77/200 (38.5%)	RR 1.75 (1.44 to 2.14)	289 more per 1000 (from 169 more to 439 more)	⊕⊕○○ LOW	CRITICAL
Unprotected sex, men, non-primary partner (follow-up 6 months)												
1	randomised	no serious	no serious	very serious ⁷	serious ⁶	none	123/768	166/766	RR 0.74	56 fewer per 1000	⊕○○○	CRITICAL

	trials	risk of bias	inconsistency				(16%)	(21.7%)	(0.6 to 0.91)	(from 20 fewer to 87 fewer)	VERY LOW	
Unprotected sex, women, non-primary partner (follow-up 6 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	very serious ⁷	serious ⁶	none	91/795 (11.4%)	125/791 (15.8%)	RR 0.72 (0.56 to 0.93)	44 fewer per 1000 (from 11 fewer to 70 fewer)	⊕○○○ VERY LOW	CRITICAL

¹ Adult population.

² Very few events

³ Numerators and denominators were back-calculated from the reported OR (95% CI) and assumed equal data availability (89.4%) for each intervention group. These estimates are only used for the absolute effect measure.

⁴ As estimated from back-calculated OR using available data reported in text.

⁵ Adult population; intervention and control groups were hospitalised inpatients.

⁶ Few events.

⁷ Adult population. Also, outcomes self-reported.

Author(s): Horvath T

Date: 2012-10-15

Question: Should four-session VCT vs wait-list control be used for preventing HIV transmission and improving HIV care in Adolescents?

Settings: Nigeria

Bibliography: Olley 2006

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Four-session VCT	wait-list control	Relative (95% CI)	Absolute		
Sexual risk behaviour at 4 weeks (Better indicated by lower values)												
1	randomised trials	serious ¹	no serious inconsistency	very serious ²	very serious ³	none	34	33	-	MD 2.47 lower (3.17 to 1.77 lower)	⊕○○○ VERY LOW	CRITICAL
Depression at 4 weeks (Better indicated by lower values)												
1	randomised trials	serious ¹	no serious inconsistency	very serious ²	very serious ³	none	34	33	-	MD 8.45 lower (9.44 to 7.46 lower)	⊕○○○ VERY LOW	IMPORTANT

¹ Randomisation process unclear, allocation not concealed, not blinded.

² Adult population, self-report

³ Very few events.

GRADE evidence profiles: PICO 1b – RCTs (HTC)

Author(s): Lindegren ML, Horvath T, Anglemyer A, Rutherford GW

Date: 2011-12-12

Question: Should HIV testing and counselling vs control be used for preventing HIV transmission and improving HIV care in Adolescents?

Settings: Key populations in settings with a low-level epidemic: United Kingdom, United States of America

Bibliography: Apoola 2011, Bolu 2004

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	HIV testing and counselling	Control	Relative (95% CI)	Absolute		
STI incidence (follow-up 12 months)												
1	randomised trials ¹	serious ²	no serious inconsistency	serious ¹	very serious ³	none	88/508 (17.3%)	68/256 (26.6%)	RR 0.65 (0.49 to 0.86)	93 fewer per 1000 (from 37 fewer to 135 fewer)	⊕○○○ VERY LOW	CRITICAL
Attended STI clinic (follow-up 1 weeks)												
1	randomised trials ⁴	very serious ⁵	no serious inconsistency	serious ⁶	very serious ³	none	9/27 (33.3%)	3/27 (11.1%)	RR 3 (0.91 to 9.88)	222 more per 1000 (from 10 fewer to 987 more)	⊕○○○ VERY LOW	CRITICAL
Uptake of HIV, HBV, and HCV testing (follow-up 1 weeks)												
1	randomised trials ⁴	very serious ⁵	no serious inconsistency	serious ⁶	very serious ³	none ⁷	79/81 (97.5%)	9/81 (11.1%)	RR 8.77 (4.73 to 16.26)	111 more per 1000 (from 111 more to 111 more)	⊕○○○ VERY LOW	IMPORTANT
Received all 3 doses of HAV and HBV vaccine (follow-up 1 weeks)												
1	randomised trials ⁴	very serious ⁵	no serious inconsistency	serious ⁶	very serious ³	none	9/27 (33.3%)	10/27 (37%)	RR 0.90 (0.43 to 1.85)	370 more per 1000 (from 370 more to 370 more)	⊕○○○ VERY LOW	IMPORTANT

¹ Counselling intervention only.

² Not blinded; Only 5833/13471 (43%) of eligibles consented.

³ Very few events

⁴ Testing intervention only

⁵ Not blinded. Sequence generation method and allocation concealment method not described. Only 11% of eligibles consented.

⁶ Pre-test discussion, not counselling per se.

⁷ Very large effect (97% vs. 11%) but not upgraded for strong association because of multiple downgradings.

GRADE evidence profiles: PICO 1a/b – observational studies

Author(s): Lindegren ML, Horvath T, Anglemyer A, Rutherford GW

Date: 2011-11-02

Question: Should HIV testing and counselling vs control be used for preventing HIV transmission and improving HIV care in Adolescents ?

Settings: Kenya, South Africa, Thailand, United Kingdom, United States of America

Bibliography: Gwadz 2010, Kabiru 2010, Müller 1995, Naughton 2011 (observational studies)

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	HIV testing and counselling	Control	Relative (95% CI)	Absolute		
Linkage to care (generalised) (follow-up 2-14 months)												
1	observational studies ¹	serious ²	no serious inconsistency	no serious indirectness	very serious ³	none	0/7 (0%)	0/7 (0%)	-	-	⊕000 VERY LOW	CRITICAL
Linkage to care (key populations)												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ⁴	very serious ³		23/89 (25.8%)	29/83 (34.9%)	RR 0.74 (0.47 to 1.17)	91 fewer per 1000 (from 185 fewer to 59 more)	⊕000 VERY LOW	CRITICAL
Concurrent sexual partnership, men (generalised) (follow-up 6 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	very serious ³	none ⁷	26/160 (16.3%) ⁸	8/159 (5%) ⁸	HR 3.18 (1.51 to 6.72)	101 more per 1000 (from 25 more to 243 more)	⊕000 VERY LOW	CRITICAL
Concurrent sexual partnership, ever pregnant women (generalised) (follow-up 6 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	very serious ³	none	7/73 (9.6%) ⁸	4/74 (5.4%) ⁸	HR 1.67 (0.51 to 5.48)	35 more per 1000 (from 26 fewer to 208 more)	⊕000 VERY LOW	CRITICAL
Concurrent sexual partnership, never pregnant women (generalised) (follow-up 6 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	very serious ³	none	1/60 (1.7%) ⁸	2/73 (2.7%) ⁸	HR 0.69 (0.07 to 7.12)	8 fewer per 1000 (from 25 fewer to 152 more)	⊕000 VERY LOW	CRITICAL
"Risky" sexual partner, men (generalised) (follow-up 6 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	very serious ³	none	20/160 (12.5%) ⁸	19/159 (11.9%) ⁸	HR 1.11 (0.61 to 2.01)	12 more per 1000 (from 45 fewer to 106 more)	⊕000 VERY LOW	CRITICAL
"Risky" sexual partner, ever pregnant women (generalised) (follow-up 6 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	very serious ³	none	6/73 (8.2%) ⁸	5/74 (6.8%) ⁸	HR 1.18 (0.33 to 4.16)	12 more per 1000 (from 45 fewer to 185 more)	⊕000 VERY LOW	CRITICAL
"Risky" sexual partner, never pregnant women (generalised) (follow-up 6 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	very serious ³	strong association ⁷	20/60 (33.3%) ⁸	7/73 (9.6%) ⁸	HR 3.54 (1.48 to 8.45)	204 more per 1000 (from 43 more to 477 more)	⊕000 VERY LOW	CRITICAL
Had unprotected sex in past 6 months after test, men (generalised) (follow-up 6 months)												

1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	very serious ³	none	60/160 (37.5%) ⁸	61/159 (38.4%) ⁸	HR 0.98 (0.75 to 1.28)	6 fewer per 1000 (from 79 fewer to 78 more)	⊕○○○ VERY LOW	CRITICAL
Had unprotected sex in past 6 months after test, ever pregnant women (generalised) (follow-up 6 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	very serious ³	none	30/73 (41.1%) ⁸	50/74 (67.6%) ⁸	HR 0.59 (0.47 to 0.75)	190 fewer per 1000 (from 105 fewer to 265 fewer)	⊕○○○ VERY LOW	CRITICAL
Had unprotected sex in past 6 months after test , never pregnant women (generalised) (follow-up 6 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	very serious ³	none	25/60 (41.7%) ⁸	19/73 (26%) ⁸	HR 1.64 (0.94 to 2.83)	130 more per 1000 (from 14 fewer to 314 more)	⊕○○○ VERY LOW	CRITICAL
Number of sexual partners (N=0-1) (concentrated) (follow-up median 23 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	serious ⁹	none ⁷	198/300 (66%)	109/300 (36.3%)	RR 1.82 (1.53 to 2.15)	298 more per 1000 (from 193 more to 418 more)	⊕○○○ VERY LOW	CRITICAL
Condom use during last three episodes of sexual intercourse (concentrated) (follow-up median 23 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{5,6}	serious ⁹	strong association ⁷	121/300 (40.3%)	32/300 (10.7%)	RR 3.78 (2.65 to 5.39)	297 more per 1000 (from 176 more to 468 more)	⊕○○○ VERY LOW	CRITICAL

¹ Relative effect not calculable.

² No control.

³ Very few events

⁴ Study limitations (testing intervention only)

⁵ Outcomes based on patient self-report.

⁶ Adult study population.

⁷ Not upgraded for large effect because of multiple downgradings.

⁸ Numerators and denominators were back-calculated from the reported HR (95% CI) and sample sizes. These estimates are only used for the absolute effect measure.

⁹ Few events.

GRADE evidence profiles: PICO 2 (training)

GRADE evidence profiles were not created for this review.

GRADE evidence profiles: PICO 3a (disclosure)

GRADE evidence profiles were not created for this review.

GRADE evidence profiles: PICO 3b (disclosure)

CONTROLLED TRIALS – ADOLESCENTS

Author(s): Mary Lou Lindegren, Gail Kennedy, Tara Horvath, Alicen Spaulding

Date: 2012-10-16

Question: Should small group discussions among adolescents be used for to support disclosure of HIV status?

Settings: United States

Bibliography: Rotheram-Borus MJ, Lee MB, Murphy DA, Futterman D, Duan N, Birnbaum JM, Lightfoot M; Teens Linked to Care Consortium. Efficacy of a preventive intervention for youths living with HIV. Am J Public Health. 2001 Mar;91(3):400-5

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Small group discussions among adolescents	Control	Relative (95% CI)	Absolute		
Disclosed to sex partners at 15 months												
1 ¹	randomised trials	serious ²	no serious inconsistency	serious ³	very serious ⁴	Pre-ART era	51/80 (63.8%)	17/30 (56.7%)	RR 1.12 (0.79 to 1.6)	68 more per 1000 (from 119 fewer to 340 more)	⊕○○○ VERY LOW	CRITICAL
Number of missed appointments at 9 months (Better indicated by lower values)												
1 ¹	randomised trials	serious ²	no serious inconsistency	serious ³	serious ⁴	Pre-ART era	80	30	-	MD 0.6 higher (0.18 to 1.02 higher)	⊕○○○ VERY LOW	CRITICAL
Emotional distress mean score at 9 months (Better indicated by lower values)												
1 ¹	randomised trials	serious ²	no serious inconsistency	serious ³	serious ⁴	Pre-ART era	80	30	-	MD 0 higher (0.42 lower to 0.42 higher)	⊕○○○ VERY LOW	CRITICAL
Emotional distress mean score at 15 months (Better indicated by lower values)												
1 ¹	randomised trials	serious ²	no serious inconsistency	serious ³	serious ⁴	Pre-ART era	80	30	-	MD 0 higher (0.42 lower to 0.42 higher)	⊕○○○ VERY LOW	CRITICAL
Physical distress mean score at 15 months (Better indicated by lower values)												
1 ^{1,5}	randomised trials	serious ²	no serious inconsistency	serious ³	serious ⁴	Pre-ART era	80	30	-	MD 0.1 lower (0.52 lower to 0.32 higher)	⊕○○○ VERY LOW	CRITICAL
Unprotected sex at 15 months												
1 ¹	randomised trials	serious ²	no serious inconsistency	serious ³	very serious ⁴	Pre-ART era	2/80 (2.5%)	5/30 (16.7%)	RR 0.15 (0.03 to 0.73)	142 fewer per 1000 (from 45 fewer to 162 fewer)	⊕○○○ VERY LOW	CRITICAL
T-cell count at 9 months (Better indicated by higher values)												
1 ¹	randomised	serious ²	no serious	serious ³	serious ⁴	Pre-ART era	80	30	-	MD 8.4 higher	⊕○○○	CRITICAL

	trials		inconsistency							(12.58 lower to 29.38 higher)	VERY LOW	
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¹ Comparison group was standard of care.

² Non-randomized comparison between intervention attendees and controls.

³ Study was conducted in the United States.

⁴ Small number of events.

⁵ Physical health distress score, calculated as a mean of the intensity (range=0-5) of each symptom from among 23 physical symptoms.

RANDOMIZED CONTROL TRIALS – ADULTS

Author(s): Mary Lou Lindegren, Gail Kennedy, Tara Horvath, Alicen Spaulding

Date: 2012-10-17

Question: Should four session one-on-one counselling intervention among mothers be used for to support disclosure of HIV status?

Settings: United States

Bibliography: Murphy, Debra A.; Armistead, Lisa; Marelich, William D.; Payne, Diana L.; Herbeck, Diane M. Pilot trial of a disclosure intervention for HIV+ mothers: The TRACK program. Journal of Consulting and Clinical Psychology, Vol 79(2), Apr 2011, 203-214.

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Four session one-on-one counselling intervention among mothers	Control	Relative (95% CI)	Absolute		
Disclosure at 9 months follow-up												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	serious ²	very serious ³	none	13/39 (33.3%)	3/41 (7.3%)	RR 4.56 (1.4 to 14.77)	260 more per 1000 (from 29 more to 1000 more)	⊕○○○ VERY LOW	CRITICAL

¹ Comparison was standard of care.

² Study conducted in the United States.

³ Very small number of events.

Author(s): Mary Lou Lindegren, Gail Kennedy, Tara Horvath, Alicen Spaulding

Date: 2012-10-09

Question: Should group sessions among HIV-positive parents and their adolescent children be used for to support disclosure of HIV status?

Settings: United States

Bibliography: Rotheram-Borus MJ, Lee MB, Gwadz M, Draimin B. An intervention for parents with AIDS and their adolescent children. American Journal of Public Health. 2001;91:1294–1302.

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Group sessions among HIV-positive parents and their adolescent children	Control	Relative (95% CI)	Absolute		
Disclosed status to all children at 12 months												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	serious ³	Pre-ART era	115/153 (75.2%)	116/154 (75.3%)	RR 1 (0.88 to 1.13)	0 fewer per 1000 (from 90 fewer to 98 more)	⊕○○○ VERY LOW	CRITICAL
Disclosed status to at least 1 adolescent at 24 months												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	serious ³	Pre-ART era	136/153 (88.9%)	131/154 (85.1%)	RR 1.04 (0.96 to 1.14)	34 more per 1000 (from 34 fewer to 119 more)	⊕○○○ VERY LOW	CRITICAL
Disclosed status to all children at 24 months												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	serious ³	Pre-ART era	130/153 (85%)	131/154 (85.1%)	RR 1 (0.91 to 1.1)	0 fewer per 1000 (from 77 fewer to 85 more)	⊕○○○ VERY LOW	CRITICAL
Parental depression score at 3 months (Better indicated by lower values)												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	no serious imprecision	Pre-ART era	153	154	-	MD 0.28 higher (0.06 to 0.5 higher)	⊕⊕○○ LOW	CRITICAL
Parental depression score at 15 months (Better indicated by lower values)												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	no serious imprecision	Pre-ART era	153	154	-	MD 0.22 lower (0.44 lower to 0 higher)	⊕⊕○○ LOW	CRITICAL
Parental depression score at 24 months (Better indicated by lower values)												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	no serious imprecision	Pre-ART era	153	154	-	MD 0.12 lower (0.34 lower to 0.1 higher)	⊕⊕○○ LOW	CRITICAL

¹ Comparison was standard of care intervention.

² HIV-infected parents of uninfected children were the study population; Study conducted in the United States.

³ Small number of events.

Author(s): Mary Lou Lindegren, Gail Kennedy, Tara Horvath, Alicen Spaulding

Date: 2012-10-17

Question: Should group counselling among MSM be used for to support disclosure of HIV status?

Settings: United States

Bibliography: Serovich JM, Reed S, Gafsky EL, Hartwell EE, Andrist D. An Intervention to Assist Men Who Have Sex with Men Disclose Their Serostatus to Family Members: Results from a Pilot Study. AIDS AND BEHAVIOR. Volume 15, Number 8 (2011), 1647-1653.

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Group counselling among MSM	Control	Relative (95% CI)	Absolute		
Number of family members disclosed to at 3 months follow-up												
1	randomised trials	serious ¹	no serious inconsistency	very serious ²	very serious ³	none	120/235 (51.1%)	98/212 (46.2%)	RR 1.1 (0.91 to 1.34)	46 more per 1000 (from 42 fewer to 157 more)	⊕○○○ VERY LOW	CRITICAL

¹ Comparison group got a delayed version of the same intervention.

² Adult population; Study conducted in the United States; self report.

³ Very small number of events.

Author(s): Mary Lou Lindegren, Gail Kennedy, Tara Horvath, Alicen Spaulding

Date: 2012-10-17

Question: Should peer led behavioral sessions among MSM be used for to support disclosure of HIV status?

Settings: United States

Bibliography: Wolitski RJ, Gomez CA, Parsons JT. Effects of a peer-led behavioral intervention to reduce HIV transmission and promote serostatus disclosure among HIV-seropositive gay and bisexual men. AIDS. 2005;19:S99–S109.

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Peer led behavioral sessions among MSM	Control	Relative (95% CI)	Absolute		
Disclosed HIV status to some partners at 6 months												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	serious ³	none	109/304 (35.9%)	101/298 (33.9%)	RR 1.06 (0.85 to	20 more per 1000 (from 51 fewer to	⊕○○○ VERY	CRITICAL

									1.32)	108 more)	LOW	
Disclosed HIV status to all partners at 6 months												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	serious ³	none	136/304 (44.7%)	128/298 (43%)	RR 1.04 (0.87 to 1.25)	17 more per 1000 (from 56 fewer to 107 more)	⊕○○○ VERY LOW	CRITICAL
Unprotected anal intercourse at 6 months												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	serious ³	none	99/373 (26.5%)	108/354 (30.5%)	RR 0.87 (0.69 to 1.1)	40 fewer per 1000 (from 95 fewer to 31 more)	⊕○○○ VERY LOW	CRITICAL
Consistent condom use during insertive anal intercourse at 6 months												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	very serious ³	none	61/121 (50.4%)	58/119 (48.7%)	RR 1.03 (0.8 to 1.34)	15 more per 1000 (from 97 fewer to 166 more)	⊕○○○ VERY LOW	CRITICAL
Intervention motivated me to tell my partners about my HIV status: mean score (Better indicated by higher values)												
1 ¹	randomised trials	no serious risk of bias	no serious inconsistency	very serious ²	no serious imprecision	none	413	398	-	MD 0.57 higher (0.41 to 0.73 higher)	⊕○○○ VERY LOW	CRITICAL

¹ Comparison group received a standard intervention that was briefer in content.

² Adult population; Study conducted in the United States; self report.

OBSERVATIONAL STUDIES – ADULTS

Author(s): Mary Lou Lindegren, Gail Kennedy, Tara Horvath, Alicen Spaulding

Date: 2012-10-17

Question: Should structured support groups among pregnant women be used for to support disclosure of HIV status?

Settings: South Africa

Bibliography: Mundell J et al. (2011): The Impact of Structured Support Groups for Pregnant South African Women Recently Diagnosed HIV Positive, Women & Health, 51:6, 546-565.

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Structured support groups among pregnant women	Control	Relative (95% CI)	Absolute		
Disclosure at 2 months follow-up												
1 ¹	observational	no serious	no serious	serious ⁴	serious ³	none	121/129	117/150	RR 1.2	156 more per	⊕○○○	CRITICAL

	studies	risk of bias	inconsistency				(93.8%)	(78%)	(1.09 to 1.32)	1000 (from 70 more to 250 more)	VERY LOW	
Disclosure at 8 months follow-up												
1 ¹	observational studies	no serious risk of bias	no serious inconsistency	serious ⁴	serious ³	none	125/129 (96.9%)	123/150 (82%)	RR 1.18 (1.09 to 1.28)	148 more per 1000 (from 74 more to 230 more)	⊕○○○ VERY LOW	CRITICAL
Depressed at 8 months follow-up												
1 ¹	observational studies	no serious risk of bias	no serious inconsistency	serious ⁴	serious ³	none	115/129 (89.1%)	134/150 (89.3%)	RR 1 (0.92 to 1.08)	0 fewer per 1000 (from 71 fewer to 71 more)	⊕○○○ VERY LOW	CRITICAL

¹ Comparison is post-intervention data.

² Small number of events.

³ Adult study population

Author(s): Mary Lou Lindegren, Gail Kennedy, Tara Horvath, Alicen Spaulding

Date: 2012-10-17

Question: Should workshops among women be used for to support disclosure of HIV status?

Settings: Mali

Bibliography: Otis J, Yattassaye A, Henry E, Diop S, Dembele B, Kassogue K, Dem R, Djemma O, Preau M, McFadyen A, Saint-Pierre-Gagne S. Effects of an empowerment program on the ability of women living with HIV (WLHIV) in Mali to manage decisions regarding whether or not to disclose HIV status. AIDS 2012 conference abstract.

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Workshops among women	Control	Relative (95% CI)	Absolute		
Weight of keeping HIV status secret mean score (Better indicated by lower values)												
1 ¹	observational studies	no serious risk of bias	no serious inconsistency	serious ³	serious ²	none	93	66	-	MD -1.07 lower (-1.3 lower to 0.81 higher)	⊕○○○ VERY LOW	CRITICAL

¹ Comparison is post-intervention data.

² Small number of events.

³ Adult study population

GRADE evidence profiles: PICO 4 (c-b services/decentralization)

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-10

Question: Should Peer health workers (PHW) vs Standard care be used for improving outcomes in adolescents with HIV infection?

Settings: Uganda

Bibliography: Chang 2010

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Peer health workers (PHW)	Standard care	Relative (95% CI)	Absolute		
Mortality (26 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	90/966 (9.3%)	31/366 (8.5%)	RR 1.1 (0.74 to 1.62)	8 more per 1000 (from 22 fewer to 53 more)	⊕○○○ VERY LOW	CRITICAL
Viral failure (>400 copies/mL) (24 weeks)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	45/462 (9.7%)	18/173 (10.4%)	RR 0.94 (0.56 to 1.57)	6 fewer per 1000 (from 46 fewer to 59 more)	⊕○○○ VERY LOW	CRITICAL
Viral failure (>400 copies/mL) (48 weeks)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	42/456 (9.2%)	18/164 (11%)	RR 0.84 (0.5 to 1.42)	18 fewer per 1000 (from 55 fewer to 46 more)	⊕○○○ VERY LOW	CRITICAL
Viral failure (>400 copies/mL) (96 weeks)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	26/398 (6.5%)	17/134 (12.7%)	RR 0.51 (0.29 to 0.92)	62 fewer per 1000 (from 10 fewer to 90 fewer)	⊕○○○ VERY LOW	CRITICAL
less than 95% adherence (26 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	12/874 (1.4%)	8/330 (2.4%)	RR 0.57 (0.23 to 1.37)	10 fewer per 1000 (from 19 fewer to 9 more)	⊕○○○ VERY LOW	CRITICAL
less than 100% adherence (26 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	223/874 (25.5%)	77/330 (23.3%)	RR 1.09 (0.87 to 1.37)	21 more per 1000 (from 30 fewer to 86 more)	⊕○○○ VERY LOW	CRITICAL

¹ Adult population

² Very few events.

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-10

Question: Should Peer health workers (PHW) w/ mobile phone support vs PHW without mobile phone support be used for improving outcomes in adolescents with HIV infection?

Settings: Uganda

Bibliography: Chang 2011

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Peer health workers (PHW) w/ mobile phone support	PHW without mobile phone support	Relative (95% CI)	Absolute		
Mortality (26 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	37/446 (8.3%)	53/524 (10.1%)	RR 0.82 (0.55 to 1.22)	18 fewer per 1000 (from 46 fewer to 22 more)	⊕○○○ VERY LOW	CRITICAL
Viral failure (>400 copies/mL) (48 weeks)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	18/201 (9%)	24/255 (9.4%)	RR 0.95 (0.53 to 1.7)	5 fewer per 1000 (from 44 fewer to 66 more)	⊕○○○ VERY LOW	CRITICAL
Viral failure (>400 copies/mL) (24 weeks)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	25/203 (12.3%)	20/259 (7.7%)	RR 1.59 (0.91 to 2.79)	46 more per 1000 (from 7 fewer to 138 more)	⊕○○○ VERY LOW	CRITICAL
less than 95% adherence (26 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	2/401 (0.5%)	10/473 (2.1%)	RR 0.24 (0.05 to 1.07)	16 fewer per 1000 (from 20 fewer to 1 more)	⊕○○○ VERY LOW	CRITICAL
less than 100% adherence (26 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	101/401 (25.2%)	122/473 (25.8%)	RR 0.98 (0.78 to 1.23)	5 fewer per 1000 (from 57 fewer to 59 more)	⊕○○○ VERY LOW	CRITICAL

¹ Adult population

² Very few events

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-10

Question: Should HIV+ mentor mother vs Standard care be used for improving outcomes in adolescents with HIV infection?

Settings: South Africa

Bibliography: Futterman 2010

Quality assessment							No of patients		Effect		Quality	Importance
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No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	HIV+ mentor mother	Standard care	Relative (95% CI)	Absolute		
Follow-up visits (6 months)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	none	23/40 (57.5%)	11/31 (35.5%)	RR 1.62 (0.94 to 2.79)	220 more per 1000 (from 21 fewer to 635 more)	⊕000 VERY LOW	IMPORTANT

¹ Very high loss to follow-up.

² Population was pregnant women.

³ Very few events.

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-10

Question: Should Patient advocates (for paed) vs Standard care be used for improving outcomes in adolescents with HIV infection?

Settings: South Africa

Bibliography: Grimwood 2012

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Patient advocates (for paed)	Standard care	Relative (95% CI)	Absolute		
Mortality (3 years)												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	12/323 (3.7%)	259/3240 (8%)	RR 0.46 (0.26 to 0.82)	43 fewer per 1000 (from 14 fewer to 59 fewer)	⊕000 VERY LOW	CRITICAL

¹ Population was children: Median baseline age was 6.3 (IQR 3.3 to 9.5)

² Very few events

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-10

Question: Should Integrated community-based services vs Standard care be used for improving outcomes in adolescents with HIV infection?

Settings: Botswana, Lesotho, Namibia, South Africa

Bibliography: Kabore 2010

Quality assessment							No of patients		Effect		Quality	Importance
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No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Integrated community-based services	Standard care	Relative (95% CI)	Absolute		
>95% adherence (12 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ¹	no serious imprecision	none	287/429 (66.9%)	250/429 (58.3%)	RR 1.15 (1.03 to 1.27)	87 more per 1000 (from 17 more to 157 more)	⊕○○○ VERY LOW	CRITICAL

¹ Adult population.

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-10

Question: Should Rural community-based ART vs Urban hospital-based ART be used for improving outcomes in adolescents with HIV infection?

Settings: Uganda

Bibliography: Kipp 2012

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Rural community-based ART	Urban hospital-based ART	Relative (95% CI)	Absolute		
Mortality (2 years)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	none	32/185 (17.3%)	23/200 (11.5%)	RR 1.5 (0.91 to 2.47)	58 more per 1000 (from 10 fewer to 169 more)	⊕○○○ VERY LOW	CRITICAL
Reduced viral load (24 months)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	none	120/129 (93%)	124/142 (87.3%)	RR 1.07 (0.98 to 1.15)	61 more per 1000 (from 17 fewer to 131 more)	⊕○○○ VERY LOW	CRITICAL

¹ Rural population probably not comparable to urban population

² Adult population

³ Very few events

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-10

Question: Should Multi-component community-based care vs Standard care be used for improving outcomes in adolescents with HIV infection?

Settings: Peru

Bibliography: Munoz 2011

Quality assessment							No of patients		Effect		Quality	Importance
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No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Multi-component community-based care	Standard care	Relative (95% CI)	Absolute		
Mortality (2 years)												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	6/60 (10%)	17/200 (8.5%)	RR 1.18 (0.49 to 2.85)	15 more per 1000 (from 43 fewer to 157 more)	⊕○○○ VERY LOW	CRITICAL
>95% adherence (2 years)												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ^{1,3}	very serious ²	none	46/52 (88.5%)	26/31 (83.9%)	RR 1.05 (0.88 to 1.27)	42 more per 1000 (from 101 fewer to 226 more)	⊕○○○ VERY LOW	CRITICAL
Reduced viral load (2 years)												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	35/52 (67.3%)	14/31 (45.2%)	RR 1.49 (0.97 to 2.29)	221 more per 1000 (from 14 fewer to 583 more)	⊕○○○ VERY LOW	CRITICAL

¹ Adult population

² Very few events.

³ Self-reported adherence.

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-10

Question: Should Peer-delivered modified DOT vs Standard care be used for improving outcomes in adolescents with HIV infection?

Settings: Mozambique

Bibliography: Pearson 2007

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Peer-delivered modified DOT	Standard care	Relative (95% CI)	Absolute		
Mortality (1 year)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	23/175 (13.1%)	32/175 (18.3%)	RR 0.72 (0.44 to 1.18)	51 fewer per 1000 (from 102 fewer to 33 more)	⊕○○○ VERY LOW	CRITICAL
>90% adherence (1 year)												
1	randomised trials	no serious risk of bias	no serious inconsistency	very serious ^{1,3}	serious ⁴	none	135/147 (91.8%)	110/130 (84.6%)	RR 1.09 (0.99 to 1.18)	76 more per 1000 (from 8 fewer to 152 more)	⊕○○○ VERY LOW	CRITICAL

- ¹ Adult population
² Very few events
³ Self-reported adherence.
⁴ Few events.

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-10

Question: Should Treatment-partner assisted therapy vs Standard care be used for improving outcomes in adolescents with HIV infection?

Settings: Nigeria

Bibliography: Taiwo 2010

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Treatment-partner assisted therapy	Standard care	Relative (95% CI)	Absolute		
Mortality (1 year)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	26/245 (10.6%)	15/246 (6.1%)	RR 1.74 (0.95 to 3.2)	45 more per 1000 (from 3 fewer to 134 more)	⊕○○○ VERY LOW	CRITICAL
>95% adherence (48 weeks)												
1	randomised trials	no serious risk of bias	no serious inconsistency	very serious ^{1,3}	serious ⁴	none	199/248 (80.2%)	169/251 (67.3%)	RR 1.19 (1.07 to 1.33)	128 more per 1000 (from 47 more to 222 more)	⊕○○○ VERY LOW	CRITICAL
Reduced viral load (24 weeks)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	serious ⁴	none	153/238 (64.3%)	126/227 (55.5%)	RR 1.16 (1 to 1.35)	89 more per 1000 (from 0 more to 194 more)	⊕⊕○○ LOW	CRITICAL
Reduced viral load (48 weeks)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	serious ⁴	none	162/234 (69.2%)	149/217 (68.7%)	RR 1.01 (0.89 to 1.14)	7 more per 1000 (from 76 fewer to 96 more)	⊕⊕○○ LOW	CRITICAL

- ¹ Adult population
² Very few events
³ Self-reported adherence.
⁴ Few events

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-10

Question: Should Socio-economic support vs No socio-economic support be used for improving outcomes in adolescents with HIV infection?

Settings: Uganda

Bibliography: Talisuna-Alamo 2012

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Socio-economic support	No socio-economic support	Relative (95% CI)	Absolute		
Mortality (10 years): one kind of support												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ¹	no serious imprecision	none	310/1971 (15.7%)	653/3985 (16.4%)	RR 0.96 (0.85 to 1.09)	7 fewer per 1000 (from 25 fewer to 15 more)	⊕○○○ VERY LOW	CRITICAL
Mortality (10 years): two or more kinds of support												
1	observational studies	no serious risk of bias	no serious inconsistency	very serious ¹	very serious ²	none ³	56/698 (8%)	653/3985 (16.4%)	RR 0.49 (0.38 to 0.64)	84 fewer per 1000 (from 59 fewer to 102 fewer)	⊕○○○ VERY LOW	CRITICAL

¹ Retrospective records review of adult patients.

² Very few events

³ Not upgraded for large effect because of multiple down-gradings

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-24

Question: Should Community-based adherence support vs standard care be used for improving outcomes for adolescents with HIV?

Settings: South Africa

Bibliography: Fatti 2012

Diagnosis: Path 2012

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Community-based adherence support	standard care	Relative (95% CI)	Absolute		
Mortality (5 years)												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ¹	no serious imprecision	none	1770/19668 (9%)	5012/47285 (10.6%)	RR 0.85 (0.81 to 0.89)	16 fewer per 1000 (from 12 fewer to 20 fewer)	⊕000 VERY LOW	CRITICAL
Retention in care (5 years)												

1	observational studies	no serious risk of bias	no serious inconsistency	serious ¹	no serious imprecision	none	15557/19668 (79.1%)	34801/47285 (73.6%)	RR 1.07 (1.07 to 1.08)	52 more per 1000 (from 52 more to 59 more)	⊕○○○ VERY LOW	CRITICAL
Virologic suppression (6 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ¹	no serious imprecision	none	7266/9481 (76.6%)	15458/21478 (72%)	RR 1.06 (1.05 to 1.08)	43 more per 1000 (from 36 more to 58 more)	⊕○○○ VERY LOW	CRITICAL
								72%		43 more per 1000 (from 36 more to 58 more)		
Virologic suppression (12 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ¹	no serious imprecision	none	4004/6087 (65.8%)	8271/14813 (55.8%)	RR 1.18 (1.15 to 1.21)	101 more per 1000 (from 84 more to 117 more)	⊕○○○ VERY LOW	CRITICAL
Virologic suppression (24 months)												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ¹	no serious imprecision	none	1724/3248 (53.1%)	4725/11183 (42.3%)	RR 1.26 (1.21 to 1.31)	110 more per 1000 (from 89 more to 131 more)	⊕○○○ VERY LOW	CRITICAL

¹ Adult population

Author(s): Butler LM, Kennedy GE, Rajan J, Wells G, Spaulding AB, Horvath T

Date: 2012-10-24

Question: Should PDA-supported home visits by PLHA vs standard care for improving outcomes in adolescents with HIV infection?

Settings: Kenya

Bibliography: Selke 2010

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	PDA-supported visits	standard care	Relative (95% CI)	Absolute		
HIV-associated mortality (12 months)												
1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ²	none	0/96 (0%)	0/112 (0%)	Not estimable	-	⊕000 VERY LOW	CRITICAL
Detectable viral load (12 months)												

1	randomised trials	no serious risk of bias	no serious inconsistency	serious ¹	very serious ³	none	9/96 (9.4%)	13/112 (11.6%)	RR 0.81 (0.36 to 1.81)	22 fewer per 1000 (from 74 fewer to 94 more)	⊕○○○ VERY LOW	CRITICAL
100% adherence (self-report)												
1	randomised trials	no serious risk of bias	no serious inconsistency	very serious ¹	serious ⁴	none	76/96 (79.2%)	95/112 (84.8%)	RR 0.93 (0.82 to 1.06)	59 fewer per 1000 (from 153 fewer to 51 more)	⊕⊕○○ LOW	CRITICAL

¹ Adult population; self-reported adherence

² No events in either group

³ Very few events

⁴ Few events