

Supplemental Digital Content

Supplemental Appendix A. Additional search and selection details

Table S1. Mass media campaigns included in the meta-analysis

Table S2. Weighted mean effect sizes, tests of heterogeneity, and tests of asymmetry

References. References for sources cited in Supplemental Digital Content

Supplemental Appendix A

Search Strategy

1. Electronic databases were searched using Boolean operators. The search strategy was as follows:

Search terms: (*HIV OR AIDS OR "human immu* virus" OR "acquired immu* syndrome"*) AND (*interven* OR prevent**) AND (*media OR campaign OR television OR radio OR "public service announcement" OR newspaper OR magazine OR "soap opera" OR drama OR "entertainment education" OR theater OR theatre OR "social market*" OR video OR film OR brochure OR leaflet OR flyer OR "educational literature" OR "IEC literature" OR poster OR sign OR billboard*)

Database: PsycINFO & CINAHL Plus via EBSCOhost

Date searched: April 9, 2013

Limited PY from January 1, 2010 to April 9, 2013

Results: 633

Date searched: December 6, 2010

Limited PY from January 1, 2005 to December 6, 2010

Results: 1001

Date searched: February 14, 2006

Limited language to English

Results: 1079

Total results: 2713

Database: Medline/PubMed

Date searched: April 9, 2013

Limited PY from January 1, 2010 to April 9, 2013

Results: 683

Date searched: December 9, 2010

Limited PY from January 1, 2005 to December 6, 2010

Results: 681

Date searched: March 9, 2006

Limited language to English

Results: 1710

Total results: 2074

Database: AIDSearch

Date searched: February 21, 2006

Total results: 3473

A total of 9966 potentially relevant abstracts were reviewed.

2. Relevant websites were hand searched September 22-29, 2013; 53 additional reports were obtained.

Centers for Disease Control, <http://www.cdc.gov>

Family Health International, <http://www.fhi360.org>

Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, <http://www.jhuccp.org>

Population Services International, <http://www.psi.org>

Population Council, <http://www.popcouncil.org/publications/index.asp>

MEASURE Evaluation, <http://www.cpc.unc.edu/measure/publications>

UNAIDS, <http://www.unaids.org/en/resources/documents>

WHO, <http://www.who.int/publications/en/>

Avert, <http://www.avert.org>

3. The University of Connecticut's Synthesis of HIV & AIDS Research Project's (SHARP) Sexual Risk Reduction database has been continuously monitored throughout the study period to identify potentially relevant reports; 33 additional reports were obtained.

4. Online issues of relevant journals were individually hand searched; 19 additional reports were obtained.

AIDS searched January 15, 2011 and September 29, 2013

AIDS & Behavior searched September 29, 2013

AIDS Care searched January 15, 2011 and September 29, 2013

AIDS Education & Prevention searched January 15, 2011 and September 29, 2013

AJPH searched January 15, 2011 and September 29, 2013

JAIDS searched September 29, 2013

Communication Quarterly searched January 15, 2011 and September 29, 2013

Communication Research searched January 15, 2011 and September 29, 2013

Journal of Health Communication searched September 29, 2013

5. Reference lists of prior review articles and included reports were searched; 91 additional reports were obtained.

6. Nine additional reports were obtained via personal communication with study authors.

Studies were included if they (1) had an HIV/AIDS prevention focus; (2) targeted youth or the general population; (3) evaluated a specific intervention delivered via an audio, visual, or printed mass media channel in a natural setting; (4) quantitatively evaluated the target population using a pre-/post-campaign design; (5) measured condom use and/or HIV/AIDS-related transmission or prevention knowledge; and (6) reported sufficient information to calculate effect sizes. Interventions that solely targeted and sampled high risk groups such as injection drug users,¹ commercial sex workers and clients,² and men who have sex with men³ were excluded; many of these interventions were largely interpersonally-delivered in controlled settings. We also excluded interventions using forced exposure⁴ or evaluations that only sampled individuals who had all been exposed to some campaign component.⁵ We included interventions that utilized interpersonal communication in conjunction with *mass media* (e.g., radio, television, mass mailings), but excluded those utilizing interpersonal communication supplemented only by *little media* (e.g., outreach delivered brochures). For example, we excluded a community-based intervention in which intervention messages were delivered by trained outreach specialists and peer volunteers in conjunction with brochures, fliers, and newsletters.⁶ By contrast, we included a comparison condition in a similar community-based intervention that was mailed brochures and condom coupons but did not receive an interpersonal component.⁷ We also included other interventions utilizing mass mailings alone,⁸ or in conjunction with other mass media such as radio or television.⁹ Several studies^{10,11} reported evaluations of both an intervention group and a comparison group that was exposed to specific components of the mass media intervention. For these studies, the comparison was included as a separate intervention.

A total of 433 reports available by September 30, 2013 were obtained and screened for study inclusion of which 379 were excluded for the following reasons:

107 No valid pre-campaign comparison group

81 No mass media channel or channel unspecified

58 No quantitative evaluation of a specific mass media campaign

53 Did not provide statistical information for key outcomes

33 Provided additional information to an included report

23 Did not target youth or general population

14 Used only interpersonal and small media channels

10 Did not have an HIV/AIDS focus

The final sample included 54 unique reports evaluating 72 interventions.

Table S1. Mass media campaigns included in the meta-analysis

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
ACQUIRE Project ¹²	Nepal Sep 2005-Oct 2007	The ACQUIRE Project	Radio, TV, newspapers, educational literature, signage, meetings, videos, theater, special events, wall paintings, flip charts, photojournals, condoms distributed	Selection of respondents from campaign areas, door-to-door household surveys	N = 960 (960) 50% female 100% married Youth	Within	T,P
Alstead et al. ¹³	US Apr-May 1995, Sep-Oct 1995	The Condom Campaign; <i>Condoms: They go where you go.</i>	Radio, educational literature, promotional materials, signage, condoms distributed	Random selection of respondents from community sites in campaign areas, interviews	N = 341 (606) 50% female M age 15.9 (15-17) 73% exposed	Between	C
ARC International ¹⁴	Sierra Leone Launch Jan 2001	Strengthening AIDS Prevention in Port Loko	Radio, educational literature, signage, meetings, condom parade, newsletter, condoms distributed	Selection of respondents from community sites in campaign areas, interviews	N = 537 (549) 46% female 19% married M age 20.3 (15-24) 80% exposed	Between	C,T,P
Askew et al. ¹⁵	Kenya (Site A) Oct 1999-Apr 2001	Kenya Adolescent Reproductive Health Project	Radio, newspaper, educational literature, promotional materials, signage, meetings, videos, theater, special events, condoms distributed	Random selection of respondents from campaign and comparison areas, door-to-door household surveys	N = 1565 (1621) 71% female Youth and adults 43% exposed	Between Control	C,P

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
	Kenya (Site B) Oct 1999-Apr 2001	Kenya Adolescent Reproductive Health Project	Radio, newspaper, educational literature, promotional materials, signage, meetings, videos, theater, special events, life skills curriculum, condoms distributed	Random selection of respondents from campaign and comparison areas, door-to-door household surveys	<i>N</i> = 1647 (1660) 72% female Youth and adults 62% exposed	Between Control	C,P
Brown ¹⁶	Malawi	The <i>Protector</i> Condom Campaign	Radio, promotional materials, signage, theater, condoms distributed	Random selection of respondents from urban and peri-urban campaign areas, door-to-door household surveys	<i>N</i> = 354 (359) 100% male (18-44) 96% exposed	Between	C,P
Caron et al. ¹⁷	US Jul 1987-Feb 1991	America Responds to AIDS	Radio, TV, newspapers, magazines, educational literature, signage	Volunteers recruited from college psychology classes, self-administered questionnaires	<i>N</i> = 125 (112) 56% female College students	Between	T
de Vroome et al. ¹⁸	The Netherlands Apr 1987-Sep 1987	<i>Practice Safe Sex. Stop AIDS.</i>	TV, educational literature, signage, hotline	Random selection of respondents from general population, telephone-based survey	<i>N</i> = 731 (978) 50% female <i>M</i> age 30.0 (15-45)	Between	C,P
	The Netherlands Sep 1987-Mar 1988	Condom Campaign	Newspaper, hotline, condoms distributed	Random selection of respondents from general population, telephone-based survey	<i>N</i> = 978 (1092) 50% female <i>M</i> age 30.0 (15-45)	Between	C,P

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
	The Netherlands Mar-Oct 1988	Safe Sex on Holiday	Newspaper, educational literature, signage, cinemas, hotline, condoms distributed	Random selection of respondents from general population, telephone-based survey	<i>N</i> = 1092 (1229) 50% female <i>M</i> age 30.0 (15-45)	Between	C,P
	The Netherlands May-Oct 1989	Excuses; <i>Sleep Well</i>	Radio, TV, newspapers, magazines, educational literature, signage, cinemas	Random selection of respondents from general population, telephone-based survey	<i>N</i> = 987 (1050) 50% female <i>M</i> age 30.0 (15-45)	Between	C,P
Duff et al. ¹⁹	India Feb 2002-Feb 2003	<i>Taru</i> radio drama	Radio	Random selection of radio listeners in campaign areas, door-to-door household surveys	<i>N</i> = 751 (764) 42% female 72% married <i>M</i> age 27.9 (15-49) 32% exposed	Between	C
Elkins et al. ²⁰	Thailand Apr-May 1992	NR	Educational literature	Random selection of respondents from campaign and comparison areas, door-to-door household surveys	<i>N</i> = 330 (654) 100% female 100% married <i>M</i> age 31.0 (16-50)	Between	T,P
Elkins et al. ²¹	Thailand 5 days in 1991	<i>On the Brink</i> audio drama	Radio, signage, meetings	Random selection of respondents from campaign and comparison areas, door-to-door household surveys	<i>N</i> = 185 (188) 100% male 100% married (16-49)	Between	C
Great Britain DHSS ²²	UK Mar-Apr 1986	<i>AIDS: Don't Die of Ignorance</i>	Newspapers, signage, hotline, condoms distributed	Random selection of respondents from census districts, probability sampling, door-to- door household surveys, selection of respondents from community sites	<i>N</i> = 697 (702) 24% female 70% married <i>M</i> age 39.4 (18-64) 54% exposed	Between	T,P

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
	UK Apr-Nov 1986	<i>AIDS: Don't Die of Ignorance</i>	TV, newspapers, signage, hotline, condoms distributed	Random selection of respondents from census districts, probability sampling, door-to-door household surveys, selection of respondents from community sites	<i>N</i> = 702 (713) 33% female 71% married <i>M</i> age 39.0 (18-64) 76% exposed	Between	T,P
	UK Nov 1986-Jan 1987	<i>AIDS: Don't Die of Ignorance</i>	TV, newspapers, educational literature, signage, hotline, condoms distributed	Random selection of respondents from census districts, probability sampling, door-to-door household surveys, selection of respondents from community sites	<i>N</i> = 713 (708) 31% female 73% married <i>M</i> age 39.0 (18-64) 94% exposed	Between	T,P
	UK Nov 1986-Jan 1987	Youth Campaign	Radio, TV, newspapers, magazines, educational literature, signage, cinemas, condoms distributed	Random selection of respondents from census districts, probability sampling, door-to-door household surveys	<i>N</i> = 584 (585) 25% female 6% married <i>M</i> age 17.0 (18-64) 90% exposed	Between	T,P
Hattori et al. ²³	Lesotho Jan 2003-May 2005	<i>Anybody can catch HIV, everybody can prevent it.</i>	Radio, TV, signage	Selection of respondents from two urban areas, representative, door-to-door household surveys	<i>N</i> = 654 (548) 53% female 0% married <i>M</i> age 19.6 (15-24) 32% exposed	Between	C
	Mozambique Jun-Nov 2004	<i>Anybody can catch HIV, everybody can prevent it.</i>	Radio, TV, newspaper, signage	Selection of respondents from an urban area, representative, door-to-door household surveys	<i>N</i> = 244 (223) 46% female 0% married <i>M</i> age 19.8 (15-24) 54% exposed	Between	C

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
	Uganda Dec 2003-Oct 2004	<i>Anybody can catch HIV, everybody can prevent it.</i>	Radio, TV, signage	Selection of nationally-representative respondents, door-to-door household surveys	<i>N</i> = 313 (345) 47% female 0% married <i>M</i> age 19.6 (15-24) 16% exposed	Between	C
	Zambia Aug-Dec 2004	<i>Anybody can catch HIV, everybody can prevent it.</i>	Radio, TV, signage	Selection of respondents from an urban area, representative, door-to-door household surveys	<i>N</i> = 527 (461) 38% female 0% married <i>M</i> age 19.6 (15-24) 39% exposed	Between	C
IRESO ²⁴	Cameroon Jul 2000-Feb 2002	Among Youth	Magazines, educational literature, meetings, videos, theater, special events	Random selection of respondents from campaign and comparison areas, probability sampling, door-to-door household surveys	<i>N</i> = 1248 (1238) 51% female 70% married (12-24) 44% exposed	Between	C,T,P
Keating et al. ²⁵	Nigeria Feb 2002-Sep 2004	The VISION Project	Radio, TV, educational literature, signage	Random selection of respondents from campaign and comparison areas, door-to-door household surveys	<i>N</i> = 3196 (3279) 57% female 60% married <i>M</i> age 28.1 (15-49) 59% exposed	Between	C
Kim et al. ¹¹	Zimbabwe (intervention area) Jul 1997- Feb 1997	<i>Have self-control, Value your body, Respect yourself.</i>	Radio, educational literature, signage, meetings, concerts, theater, special events, newsletters	Random selection of respondents from campaign areas, door-to-door household surveys	<i>N</i> = 973 (1000) 50% female 9% married (10-24) 97% exposed	Between	T
	Zimbabwe (comparison area) Jul 1997- Feb 1997	<i>Have self-control, Value your body, Respect yourself.</i>	Radio, signage	Random selection of respondents from campaign areas, door-to-door household surveys	<i>N</i> = 453 (400) 50% female 12% married (10-24) 37% exposed	Between	T

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
Lehmann et al. ⁸	Switzerland Mar 1986	NR	Educational literature	Random selection of respondents from general population, telephone-based survey	<i>N</i> = 1056 (1278) 50% female (20-69) 56% exposed	Between	T
Manafa et al. ²⁶	Nigeria May-Dec 2001	NR	Radio, TV, newspapers, promotional materials, meetings, special events	Random selection of respondents from campaign areas, door-to-door household surveys	<i>N</i> = 6000 (6000) 41% female (18-70)	Between	C,T,P
Martínez-Donate et al. ²⁷	US Jun-Dec 2006	Hombres Santos	Radio, internet, educational literature, signage, special events, DJ callouts and skits at nightclubs, condoms distributed	Random selection of respondents from community sites in campaign areas, self-administered survey	<i>N</i> = 596 (367) 100% male 62% married <i>M</i> age 28.4 (18+) 86% exposed	Between	C
McCombie & Hornik ²⁸	Uganda (Site A) Nov 1990-Oct 1991	NR	TV, meetings, videos, condoms distributed	Selection of respondents from campaign work sites	<i>N</i> = 84 (83) 17% female 60% married <i>M</i> age 28.3 35% exposed	Between	C,T,P
	Uganda (Site D) Mar 1990-Oct 1991	NR	TV, meetings, videos, condoms distributed	Selection of respondents from campaign work sites	<i>N</i> = 189 (98) 5% female 88% married <i>M</i> age 35.6 35% exposed	Between	C,T,P
	Uganda (Site E) Mar 1990-Oct 1991	NR	TV, meetings, videos, condoms distributed	Selection of respondents from campaign work sites	<i>N</i> = 102 (47) 100% female 6% married <i>M</i> age 20.4 68% exposed	Between	C,T,P
	Uganda (Site F) Nov 1990-Oct 1991	NR	TV, meetings, videos, condoms distributed	Selection of respondents from campaign work sites	<i>N</i> = 53 (55) 22% female 89% married <i>M</i> age 29.2 62% exposed	Between	C,T,P

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
	Uganda (Site H) Nov 1990-Oct 1991	NR	TV, meetings, videos, condoms distributed	Selection of respondents from campaign work sites	<i>N</i> = 91 (77) 17% female 92% married <i>M</i> age 38.8 43% exposed	Between	C,T,P
McCombie et al. ²⁹	Ghana Aug 1991-Jun 1992	<i>Don't be careless, get protection.</i>	Radio, TV, educational literature, promotional materials, signage, meetings, videos, condoms distributed	Random selection of respondents from campaign areas, urban areas overrepresented, door-to-door household surveys	<i>N</i> = 1553 (1499) 51% female 28% married <i>M</i> age 22.0 (15-30) 46% exposed	Between	C,P
Meekers et al. ¹⁰	Botswana (intervention area) Mar 1995-Oct 1995	<i>Tsa Banana; Abstain, Be faithful, and Condomize.</i>	Radio, magazines, educational literature, promotional materials, signage, meetings, concerts, theater, special events	Random selection of respondents from a town in campaign area, door-to-door household surveys	<i>N</i> = 507 (1230) 51% female <i>M</i> age 15.2 (13-18) 69% exposed	Between	T,P
	Botswana (comparison area) Mar 1995-Oct 1995		Radio, signage	Random selection of respondents from a town in campaign area, door-to-door household surveys	<i>N</i> = 495 (1166) 50% female <i>M</i> age 15.5 (13-18)	Between	T,P
Meekers ³⁰	South Africa Date NR	<i>Lovers Plus</i> condom social marketing	Radio, signage, meetings, videos, press advertisements, condoms distributed	Random selection of respondents from campaign and comparison areas, door-to-door household surveys	<i>N</i> = 928 (200) 100% male 86% married <i>M</i> age 38.0	Between	C,P
Meekers ³¹	South Africa May 1996-Apr 1997	<i>Lovers Plus</i> condom social marketing	Radio, TV, educational literature, promotional materials, signage, videos, condoms distributed	Random selection of respondents from hostels and work sites in campaign areas	<i>N</i> = 118 (101) 100% female <i>M</i> age 18.9 (17-20)	Between Control	C,T,P

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
Merritt et al. ³²	Peru Nov-Dec 1988	Proyecto SIDS; <i>AIDS, it's a matter of life or . . . Only you can prevent it.</i>	Radio, TV, meetings, cinemas	Probability sample	<i>N</i> = 1915 (1900) 50% female 50% married Youth and adults 78% exposed	Between	C,T,P
Milleliri et al. ³³	Gabon Jan 1999	NR	Educational literature	High school students, self-administered questionnaires	<i>N</i> = 964 (771) 47% female <i>M</i> age 19.1 (<35) 96% exposed	Within	T
Mills et al. ³⁴	UK Mar-Apr 1986	NR	Newspapers	Random selection of respondents from a city in campaign area, self-administered survey	<i>N</i> = 192 (198) Adults (18+) 31% exposed	Between	T
Pauw et al. ³⁵	Nicaragua Launch Aug 1991	NR	Educational literature, promotional materials, signage, meetings, videos, audio drama played through loudspeaker, condoms distributed	Random selection of respondents from campaign and comparison areas, door-to-door household surveys	<i>N</i> = 1293 (1396) 57% female <i>M</i> age 27.6 (15-45) 44% exposed	7% Mixed Control	C,T,P
Plautz & Meekers ³⁶	Rwanda Jan 2001-Feb 2002	PSI Adolescent Reproductive Health	Educational literature, signage, meetings, videos, newsletters	Random selection of respondents from campaign areas, door-to-door household surveys	<i>N</i> = 2853 (2955) 52% female <i>M</i> age 18.8 (15-24) 27% exposed	Between	C,P
Plautz & Meekers ³⁷	Cameroon Dec 2000-Jun 2003	100% Jeune	Radio, TV, magazines, educational literature, signage, meetings, concerts, theater, special events, condoms distributed	Random selection of respondents from campaign areas, door-to-door household surveys	<i>N</i> = 1956 (3370) 45% female <i>M</i> age 19.0 90% exposed	Between	C,P

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
Plautz et al. ³⁸	Madagascar Jan 2001-Dec 2002	TOP Réseau	Radio, TV, educational literature, meetings, videos	Random selection of respondents from campaign areas, door-to-door household surveys	N = 1785 (1891) 45% female M age 18.8 (15-24) 64% exposed	Between	C,P
Rigby et al. ³⁹	Australia 14 days in Apr 1987	Grim Reaper Campaign	Radio, TV, newspapers, magazines, cinemas	Selection of respondents from a city in campaign area, door-to-door household surveys	N = 305 (518) 55% female 83% married M age 36.9 (16+) 94% exposed	Between	T
Rimal & Creel ⁴⁰	Malawi 12 mos, date NR	The Bridge Project; <i>I can.</i>	Radio, signage, meetings	Random selection of respondents from campaign areas, representative of target population, door-to-door household surveys	N = 890 (881) Youth and adults 62% exposed	Between	T
Sherr ⁴¹	UK Date NR	NR	Newspapers	Selection of all consecutive attendees at an STD clinic, selection of respondents from law schools, self-administered questionnaire	N = 239 (183) Adults 43% exposed	Between	T,P
Sikkema et al. ⁷	US (comparison area) Date NR	NR	Educational literature, free condom coupons	Selection of all women living in housing developments, self-administered questionnaire	N = 637 (339) 100% female M age 35.9	Within	C
Singer et al. ⁹	US May-Jun 1988	America Responds to AIDS	Radio, TV, newspapers, magazines, educational literature, signage	Random selection of respondents from campaign areas, probability sample, door-to-door household surveys	N = 1569 (1027) Adults (18+)	Between	T

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
Sood et al. ⁴²	India 6 mos, date NR	Community Media Initiative	Radio, TV, educational literature, meetings, videos	Random selection of respondents from campaign areas, door-to-door household surveys	<i>N</i> = 864 (1029) 50% female 75% married (15-40) 89% exposed	Mixed	C,P
Sood et al. ⁴³	India Jul 2002-May 2003	BBC WITHINT Partnership Campaign	Radio, TV, condoms distributed	Stratified selection of respondents from campaign areas, probability sample, door-to-door household surveys	<i>N</i> = 4731 (4268) 43% female 64% married <i>M</i> age 29.4 (15-60) 59% exposed	Within	T,P
Tambashe et al. ⁴⁴	Burkina Faso Apr 1997-Apr 2000	Roulez Protégé	Radio, TV, signage, meetings, videos	Selection of all truckers and assistants at selected truck stops, interviews	<i>N</i> = 764 (1032) 100% male 48% married (15-49) 96% exposed	Between	C,T,P
Thompson & Harutyunyan ⁴⁵	Armenia Apr-Nov 2003	NR	Radio, TV, educational literature, promotional materials, signage, special events	Random selection of respondents from campaign areas, door-to-door household surveys	<i>N</i> = 300 (300) 100% female <i>M</i> age 23 69% exposed	Mixed	T
Tian et al. ⁴⁶	China (Mouding) Jan 2003-Jan 2004	NR	Internet	Selection of respondents from campaign and comparison areas, interviews with villagers, self-administered questionnaires for students	<i>N</i> = 879 (883) 56% female 52% married <i>M</i> age 22.8 (13+)	Between Control	T,P
	China (Nanhua) Jan 2003-Jan 2004	NR	Internet	Selection of respondents from campaign and comparison areas, interviews with villagers, self-administered questionnaires for students	<i>N</i> = 937 (932) 59% female 49% married <i>M</i> age 22.3 (13+)	Between Control	T,P

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
Trykker et al. ⁴⁷	Zambia Aug 1988-Feb 1991	NR	Radio, newspaper, educational literature, signage, meetings, theater, condoms distributed	Random selection of respondents from campaign areas, door-to-door household surveys	<i>N</i> = 427 (494) 52% female <i>M</i> age 31.9 (15-69)	Between	T,P
Tweedie ⁴⁸	Ghana 12 mos, 1994-1995	<i>AIDS: We are all at risk.</i>	Radio, TV, signage, condoms distributed	National probability sample surveys	<i>N</i> = 2000 (2000) 50% female 70% exposed	Between	C,P
Underwood et al. ⁴⁹	Zambia Date NR	Helping Each other Act Responsibly Together (HEART)	Radio, TV, signage, special events	Random selection of respondents from campaign areas, representative, door-to-door household surveys	<i>N</i> = 1156 (1239) 50% female 7% married (13-19) 46% exposed	Between	P
Underwood et al. ⁵⁰	Zambia Nov 1999-May 2000	Helping Each other Act Responsibly Together (HEART)	Radio, TV, signage	Random selection of respondents from campaign areas, representative, door-to-door household surveys	<i>N</i> = 921 (1156) 57% female 50% married <i>M</i> age 16.0 (13-19) 52% exposed	Between	C,P
Van Rossem & Meekers ⁵¹	Guinea Jul 1997-Feb 1998	<i>My Future First</i>	Radio, TV, educational literature, promotional materials, signage, meetings, concerts, videos, theater, special events, condoms distributed	Random selection of respondents from campaign and comparison areas, door-to-door household surveys	<i>N</i> = 1008 (1009) 46% female 1% married <i>M</i> age 15.8 28% exposed	Between Control	C,P

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
Van Rossem & Meekers ⁵²	Cameroon Sep 1996-Oct 1997	Horizon Jeunes	Radio, TV, educational literature, promotional materials, signage, meetings, video, theater, special events, condoms distributed	Random selection of respondents from campaign and comparison areas, probability sample, door-to-door household surveys	N = 805 (811) 51% female (12-22) 91% exposed	Between	C
Vaughan et al. ⁵³	St. Lucia Feb 1996-May 1997 Jul 1997-Sep 1998	<i>Apwe Plezi</i> radio drama	Radio, newspapers, promotional materials, signage, drama	Representative personal interviews	N = 753 (1238) 51% female 44% married M age 28.7 35% exposed	Between	C,T
Vaughan et al. ⁵⁴	Tanzania Jul 1993-1997	<i>Twende na Wakati</i> radio drama	Radio	Random selection of respondents from campaign and comparison areas, door-to-door household surveys	N = 1933 (1793) (15-60) 58% exposed	Between Control	C,P
	Tanzania (Dodoma) 1995-1997	<i>Twende na Wakati</i> radio drama	Radio	Random selection of respondents from campaign areas, door-to-door household surveys	N = 861 (624) (15-60) 75% exposed	Between	C,P
Vernon et al. ⁵⁵	Colombia Sep-Nov 1988	<i>Prepared men do not die of AIDS.</i>	Radio	Random selection of respondents from campaign areas, probability sample, door-to-door household surveys	N = 944 (1440) 60% female 54% married (15-59) 61% exposed	Between	C,P
Weir et al. ⁵⁶	Jamaica Jan-Jul 2006	Priorities for Local AIDS Control Efforts (PLACE)	Educational literature, signage, meetings, videos, theater, special events, CDs, condoms distributed	Random selection of respondents from community sites in campaign and comparison areas, interviews	N = 1556 (1535) 53% female M age 25.41 (15+) 37% exposed	Between Control	C

Report	Setting	Campaign Title or Slogan	Message Channel(s)	Sampling Method	Sample Description ^a	Design ^b	Key Outcome(s)
Wober ⁵⁷	UK Dec 1986-Feb 1987	NR	Radio, TV, educational literature, signage, press advertisements	Nationwide surveys	N = 1001 (1004) (16-54)	Between	T,P
Xiangyang et al. ⁵⁸	China Aug 1997-Dec 2000	The Health Promoting Universities Project	Internet, educational literature, meetings, hotline	Random selection of college students in campaign area, interviews	N = 2360 (2347) 40% female College students	Between	T
Yoder et al. ⁵⁹	Zambia Aug 1991-Jun 1992	<i>Nshilakamona</i>	Radio	Random selection of respondents from campaign areas, interviews	N = 1613 (1682) 49% female 55% married M age 26.9 (15-45) 45% exposed	Between	C,P
Zimmerman et al. ⁶⁰	US Jan-Mar 2003	NR	TV	Random selection of respondents from campaign and comparison areas, random selection of college students, self-administered questionnaires	N = 400 (300) 57% female M age 21.9 (18-23) 85% exposed	Between Control	C

Note. ^aPretest N is listed first; posttest N is listed second. ^bSpecifies whether data were available from the same respondents at pre- and post-campaign (Within), different respondents (Between), or a combination of old and new respondents (Within); "Control" indicates studies presented data for a no-exposure comparison group in addition to pre- and post-campaign data. NR = not reported. C = condom use. T = transmission knowledge. P = prevention knowledge.

Table S2. Weighted mean effect sizes, tests of heterogeneity, and tests of asymmetry

	Condom use	Transmission knowledge	Prevention knowledge
All included samples (k = 93)			
Overall d (95%CI)	0.25 (0.18, 0.21)	0.30 (0.18, 0.41)	0.39 (0.25, 0.52)
I^2 (95% CI)	91.70 (90.00, 93.11)	96.81 (96.28, 97.26)	99.23 (99.17, 99.29)
Egger's bias (t , P value)	1.74, (1.80, $p = .08$)	-1.20, (-0.77, $P = .44$)	6.17, (2.00, $P = .05$)
Begg's Z test (P value)	1.32 ($p = .19$)	0.34 ($P = .73$)	0.19 ($P = .85$)
k added in Trim and Fill	5	0	29
k observed	57	47	65
Samples published in journals (k = 52)			
Overall d (95%CI)	0.22 (0.12, 0.31)	0.28 (0.13, 0.44)	0.44 (0.23, 0.65)
I^2 (95% CI)	91.33 (88.79, 93.30)	97.67 (97.20, 98.06)	99.58 (99.53, 99.62)
Egger's bias (t , p value)	1.50 (1.09, $P = .29$)	1.78 (0.75, $P = .46$)	11.57 (1.78, $P = .09$)
Begg's Z test (p value)	0.56 ($P = .58$)	0.10 ($P = .92$)	0.06 ($P = .95$)
k added in Trim and Fill	0	0	13
k observed	31	27	27

Note. Positive mean effect sizes (d_s) imply reductions in risk (increased condom use or knowledge); d_s is based on random-effects assumptions. k = number of sample comparisons.

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