## Supplementary Table S7. The Association Between Health Workers' Training, Perceptions of Coworker Attitudes, and Stigmatizing Attitudes with Four Stigma Outcomes for Young Women Who Become Pregnant Before Marriage

Variable		I would be ashamed if a young woman in my family became pregnant before marriage						If I had a choice, I would prefer not to provide services to young women who become pregnant before marriage			Young women who become pregnant before marriage engage in irresponsible behaviors		
	Categories	n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$	n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$	n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$	n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$
Training on infection control <sup>a</sup>	No Yes Missing	158/342 (46.2) 458/1011 (45.3) 37/79 (46.8)	0.93 (0.70–1.24)	0.635	53/342 (15.5) 172/1011 (17.0) 18/79 (22.8)	1 1.08 (0.79–1.47)	0.616	16/342 (4.7) 55/1011 (5.4) 6/79 (7.6)	1 1.11 (0.62–2.00)	0.726	167/342 (48.8) 473/1011 (46.8) 33/79 (41.8)	0.89 (0.71–1.13)	0.340
My coworkers sometimes treat	Strongly disagree	207/539 (38.4)	1	<0.001	64/539 (11.9)	1	<0.001		1	<0.001			<0.001
people living with HIV poorly <sup>b</sup>	Disagree Agree Strongly agree	108/171 (63.2)	1.34 (1.06–1.70) 2.70 (2.02–3.61) 1.75 (0.79–3.87)		108/659 (16.4) 55/171 (32.2) 12/35 (34.3)	1.43 (1.02–2.01) 3.44 (2.32–5.11) 3.82 (2.15–6.79)		30/659 (4.6) 20/171 (11.7) 6/35 (17.1)			102/171 (59.6)	1.79 (1.42–2.26) 2.48 (1.70–3.61) 3.04 (1.43–6.45)	
My coworkers sometimes talk	Missing Strongly disagree	17/28 (60.7) 104/295 (35.3)	1	<0.001	4/28 (14.3) 32/295 (10.8)	1	<0.001	4/28 (14.3) 8/295 (2.7)	1	<0.001	15/28 (53.6) 100/295 (33.9)		<0.001
badly about PLHIV <sup>c</sup>	Disagree Agree Strongly	180/337 (53.4)	1.41 (1.06–1.86) 2.01 (1.56–2.59) 2.56 (1.58–4.15)		90/668 (13.5) 86/337 (25.5) 29/112 (25.9)	1.27 (0.85–1.91) 2.77 (2.00–3.84) 2.81 (1.73–4.57)		24/668 (3.6) 32/337 (9.5) 13/112 (11.6)	1.36 (0.90–2.05) 3.73 (2.00–6.96) 4.68 (2.61–8.39)		189/337 (56.1)	1.50 (1.13–2.00) 2.36 (1.64–3.41) 4.01 (2.78–5.79)	
I would be ashamed if someone in my	agree Missing Strongly disagree	5/20 (25.0) 278/718 (38.7)	1	<0.001	6/20 (30.0) 92/718 (12.8)	1	<0.001	0/20 (0.0) 20/718 (2.8)	1	<0.001	8/20 (40.0) 295/718 (41.1)	1	<0.001
family had HIV <sup>d</sup>	Disagree Agree Strongly agree	33/40 (82.5)	1.49 (1.24–1.79) 7.38 (3.68–14.80) 5.82 (2.82–12.02)		115/629 (18.3) 17/40 (42.5) 18/38 (47.4)	1.50 (1.14–1.96) 4.81 (2.76–8.39) 6.20 (2.81–13.70)			1.70 (1.16–2.51) 18.04 (9.63–33.80) 15.56 (7.51–32.23)		26/40 (65.0)	1.54 (1.26–1.88) 2.57 (1.23–5.38) 1.98 (0.87–4.55)	
PLHIV engage in irresponsible	Missing Strongly disagree	5/7 (71.4) 147/355 (41.4)	1	<0.001	1/7 (14.3) 43/355 (12.1)	1	<0.001	1/7 (14.3) 11/355 (3.1)	1	<0.001	3/7 (42.9) 114/355 (32.1)		<0.001
behaviors <sup>e</sup>	Disagree Agree Strongly	173/306 (56.5)	0.93 (0.70–1.24) 1.74 (1.19–2.55) 1.93 (1.32–2.83)		92/650 (14.2) 79/306 (25.8) 26/105 (24.8)	1.20 (0.77–1.87) 2.49 (1.79–3.48) 2.39 (1.36–4.21)		24/650 (3.7) 31/306 (10.1) 11/105 (10.5)			183/306 (59.8)	1.81 (1.32–2.49) 3.02 (2.25–4.06) 3.22 (1.95–5.29)	
Other people deserve access to	agree Missing Strongly disagree	7/16 (43.8) 194/501 (38.7)	1	<0.001	3/16 (18.8) 21/501 (4.2)	1	<0.001	0/16 (0.0) 7/501 (1.4)	1	<0.001	7/16 (43.8) 200/501 (39.9)		<0.001
services more than PLHIV <sup>f</sup>	Disagree Agree Strongly	134/232 (57.8)	1.33 (1.06–1.67) 2.18 (1.56–3.05) 1.68 (1.20–2.37)		110/232 (47.4)	2.87 (1.74–4.72) 20.35 (11.75–35.24) 20.22 (10.56–38.72)		23/589 (3.9) 34/232 (14.7) 10/78 (12.8)	2.77 (0.98–7.82) 11.70 (4.79–28.62) 9.80 (3.34–28.81)		139/232 (59.9)	1.36 (1.02–1.80) 2.28 (1.62–3.22) 1.37 (0.88–2.15)	
Prefer not to provide services to PLHIV <sup>g</sup>	agree Missing Strongly disagree	13/32 (40.6) 326/751 (43.4)	1	0.004	8/32 (25.0) 87/751 (11.6)	1	<0.001	3/32 (9.4) 13/751 (1.7)	1	<0.001	15/32 (46.9) 311/751 (41.4)	1	<0.001
	Disagree Agree Strongly	30/52 (57.7)	1.08 (0.85–1.39) 1.77 (1.09–2.88) 2.36 (1.21–4.60)		112/584 (19.2) 27/52 (51.9) 16/39 (41.0)	1.79 (1.27–2.52) 7.99 (4.70–13.59) 5.24 (2.35–11.69)			3.46 (1.73–6.90) 34.11 (16.75–69.48) 18.64 (6.12–56.81)		34/52 (65.4)	1.50 (1.15–1.95) 2.70 (1.76–4.13) 1.89 (0.99–3.62)	
	agree Missing	3/6 (50.0)			1/6 (16.7)			0/6 (0.0)			4/6 (66.7)		

(continued)

## SUPPLEMENTARY TABLE S7. (CONTINUED)

Variable	Categories	I would be ashamed if a young woman in my family became pregnant before marriage			Other people deserve access to health services more than young women who become pregnant before marriage			If I had a choice, I would prefer not to provide services to young women who become pregnant before marriage			Young women who become pregnant before marriage engage in irresponsible behaviors		
		n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$	n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$	n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$	n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$
I would be ashamed		23/84 (27.4)	1	<0.001	11/84 (13.1)	1	0.469	7/84 (8.3)	1	0.432	23/84 (27.4)	1	<0.001
if a woman in my family sold sex <sup>h</sup>	disagree Disagree Agree Strongly agree	295/625 (47.2)	0.76 (0.46–1.27) 2.36 (1.66–3.36) 3.79 (2.59–5.53)		32/225 (14.2) 111/625 (17.8) 87/474 (18.4)	1.06 (0.62–1.82) 1.38 (0.83–2.29) 1.45 (0.78–2.73)		11/225 (4.9) 37/625 (5.9) 22/474 (4.6)	0.56 (0.18–1.75) 0.67 (0.30–1.48) 0.53 (0.23–1.21)		309/625 (49.4)	1.19 (0.77–1.84) 2.57 (1.53–4.33) 3.34 (2.00–5.57)	
Women who sell sex engage in	Missing	6/24 (25.0) 31/87 (35.6)	1	<0.001	2/24 (8.3) 12/87 (13.8)	1	0.625	0/24 (0.0) 2/87 (2.3)	1	0.573	6/24 (25.0) 15/87 (17.2)	1	<0.001
irresponsible behaviors <sup>i</sup>	Disagree Agree Strongly	354/732 (48.4)	0.83 (0.53–1.32) 1.74 (1.04–2.93) 2.67 (1.49–4.78)		39/255 (15.3) 130/732 (17.8) 56/310 (18.1)	1.11 (0.49–2.50) 1.30 (0.59–2.86) 1.35 (0.66–2.77)		15/255 (5.9) 40/732 (5.5) 18/310 (5.8)	2.59 (0.68–9.83) 2.34 (0.65–8.46) 2.54 (0.63–10.31)		385/732 (52.6)	1.63 (0.75–3.53) 5.59 (3.12–10.00) 9.22 (5.04–16.86)	
Other people deserve access to	agree Missing Strongly disagree	10/48 (20.8) 174/449 (38.8)	1	<0.001	6/48 (12.5) 19/449 (4.2)	1	<0.001	2/48 (4.2) 9/449 (2.0)	1	<0.001	13/48 (27.1) 167/449 (37.2)	1	<0.001
services more than women who sell sex <sup>j</sup>	Disagree Agree Strongly	97/168 (57.7)	1.34 (1.13–1.59) 2.09 (1.47–2.99) 1.92 (1.00–3.72)			2.53 (1.51–4.22) 39.85 (20.93–75.86) 60.21 (34.84–104.03)		29/757 (3.8) 29/168 (17.3) 10/44 (22.7)	1.88 (0.94–3.75) 9.61 (3.91–23.62) 14.31 (7.58–26.99)		103/168 (61.3)	1.59 (1.29–1.95) 2.62 (1.91–3.60) 3.02 (1.91–4.76)	
Prefer not to provide services to	agree Missing Strongly disagree	8/14 (57.1) 231/546 (42.3)	1	0.021	6/14 (42.9) 61/546 (11.2)	1	<0.001	0/14 (0.0) 10/546 (1.8)	1	<0.001	6/14 (42.9) 212/546 (38.8)	1	<0.001
women who sell sex <sup>k</sup>	Disagree Agree Strongly	49/85 (57.6)	1.14 (0.95–1.36) 1.81 (1.23–2.66) 2.27 (0.94–5.47)		122/764 (16.0) 38/85 (44.7) 18/27 (66.7)	1.47 (1.09–1.98) 6.12 (3.56–10.53) 15.40 (7.13–33.27)			2.37 (1.05–5.37) 18.90 (10.48–34.08) 34.38 (15.88–74.43)		51/85 (60.0)	1.61 (1.35–1.91) 2.33 (1.60–3.39) 3.80 (2.16–6.70)	
I would be ashamed if a man in my family had sex with other men <sup>1</sup>	agree Missing Strongly disagree	6/10 (60.0) 26/82 (31.7)	1	<0.001	4/10 (40.0) 12/82 (14.6)	1	0.597	0/10 (0.0) 4/82 (4.9)	1	0.915	4/10 (40.0) 22/82 (26.8)	1	<0.001
	Disagree Agree Strongly	265/555 (47.7)	0.70 (0.41–1.19) 1.95 (1.08–3.54) 2.73 (1.54–4.84)		35/233 (15.0) 101/555 (18.2) 93/534 (17.4)	1.02 (0.52–2.02) 1.26 (0.55–2.86) 1.20 (0.55–2.66)		11/233 (4.7) 34/555 (6.1) 27/534 (5.1)	0.99 (0.31–3.21) 1.24 (0.41–3.69) 1.01 (0.33–3.15)		271/555 (48.8)	1.04 (0.50–2.20) 2.58 (1.49–4.47) 3.69 (2.20–6.19)	
	agree Missing	7/28 (25.0)			2/28 (7.1)			1/28 (3.6)			8/28 (28.6)		

(continued)

## SUPPLEMENTARY TABLE S7. (CONTINUED)

Variable	Categories	I would be ashamed if a young woman in my family became pregnant before marriage			Other people deserve access to health services more than young women who become pregnant before marriage			If I had a choice, I would prefer not to provide services to young women who become pregnant before marriage			Young women who become pregnant before marriage engage in irresponsible behaviors		
		n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$	n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$	n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$	n/N (%)*	aOR (95% CIs) <sup>†</sup>	$p_w^{\ddagger}$
MSM engage in irresponsible	Strongly disagree	35/93 (37.6)	1	<0.001	14/93 (15.1)	1	0.153	5/93 (5.4)	1	0.910	20/93 (21.5)	1	<0.001
behaviors <sup>m</sup>	Disagree	97/321 (30.2)	0.75 (0.49-1.16)		46/321 (14.3)	0.94 (0.48-1.85)		15/321 (4.7)	0.87 (0.26-2.93)		94/321 (29.3)	1.56 (0.67-3.63)	
	Agree	329/644 (51.1)	1.73 (1.19–2.52)		113/644 (17.5)	1.16 (0.69–1.96)		35/644 (5.4)	0.96 (0.34–2.71)		352/644 (54.7)	4.44 (2.27–8.69)	
	Strongly agree	169/295 (57.3)	2.20 (1.52–3.19)		59/295 (20.0)	1.38 (0.83–2.28)		18/295 (6.1)	1.11 (0.37–3.35)		189/295 (64.1)	6.42 (3.09–13.34)	
	Missing	23/79 (29.1)			11/79 (13.9)			4/79 (5.1)			18/79 (22.8)		
Other people deserve access to	Strongly disagree	183/457 (40.0)	1	<0.001	23/457 (5.0)	1	<0.001	7/457 (1.5)	1	<0.001	172/457 (37.6)	1	< 0.001
services more	Disagree	331/735 (45.0)	1.21 (0.97-1.51)		65/735 (8.8)	1.76 (1.04-2.97)		30/735 (4.1)	2.65 (1.45-4.84)		358/735 (48.7)	1.55 (1.24-1.95)	
than MSM <sup>n</sup>	Agree	101/159 (63.5)	2.59 (1.88–3.58)		110/159 (69.2)	42.66 (19.34–94.06)		28/159 (17.6)	13.00 (4.52–37.35)		93/159 (58.5)	2.34 (1.58–3.47)	
	Strongly agree	30/57 (52.6)	1.56 (1.00–2.42)		33/57 (57.9)	25.14 (13.40–47.17)		9/57 (15.8)	11.55 (3.73–35.80)		42/57 (73.7)	4.39 (2.30–8.38)	
	Missing	8/24 (33.3)			12/24 (50.0)			3/24 (12.5)			8/24 (33.3)		
Prefer not to provide services to MSM <sup>o</sup>		204/505 (40.4)		< 0.001	56/505 (11.1)	1	<0.001	10/505 (2.0)	1	<0.001	190/505 (37.6)	1	< 0.001
	Disagree	358/778 (46.0)	1.22 (0.97-1.53)		121/778 (15.6)	1.43 (0.94-2.18)		27/778 (3.5)	1.71 (0.78-3.76)		397/778 (51.0)	1.68 (1.34-2.12)	
	Agree	57/87 (65.5)	2.78 (1.70–4.55)		44/87 (50.6)	8.06 (4.04–16.09)		28/87 (32.2)	22.55 (9.96–51.05)		48/87 (55.2)	2.04 (1.44–2.90)	
	Strongly agree		2.08 (1.17–3.71)		18/48 (37.5)	4.76 (2.93–7.72)		11/48 (22.9)	14.34 (4.69–43.85)			3.79 (1.95–7.37)	
	Missing	5/14 (35.7)			4/14 (28.6)			1/14 (7.1)			4/14 (28.6)		

<sup>\*</sup>Proportion of health workers responding strongly agree or agree.

The aOR for sex is adjusted for age group; the aOR for age group is adjusted for sex; the aOR for all other predictor variables is adjusted for sex and age group. A p value of <0.05 indicates that the predictor creates a statistically significant improvement in the fit of the model.

aInfection control and universal precautions (including postexposure prophylaxis and waste management).

bMy coworkers sometimes talk badly about people thought to be living with HIV.

dI would be ashamed if a woman in my family was PLHIV.

ePLHIV engage in irresponsible behaviors.

Other people deserve access to health services more than PLHIV.

gIf I had a choice, I would prefer not to provide services to PLHIV.

<sup>&</sup>lt;sup>h</sup>I would be ashamed if a woman in my family was a woman who sells sex.

<sup>&</sup>lt;sup>i</sup>Women who sell sex engage in irresponsible behaviors.

Other people deserve access to health services more than women who sell sex.

If I had a choice, I would prefer not to provide services to women who sell sex.

<sup>&</sup>lt;sup>1</sup>I would be ashamed if a member of my family was a man who has sex with men.

<sup>&</sup>lt;sup>m</sup>MSM engage in irresponsible behaviors.

<sup>&</sup>quot;Other people deserve access to health services more than MSM.
"If I had a choice, I would prefer not to provide services to MSM.

aOR, adjusted odds ratio; CIs, confidence intervals; MSM, men who have sex with men; n, number of individuals reporting the four stigmas within groups; N, total number of individuals within groups; PLHIV, people living with HIV:  $p_{w}$ , p value of the Wald test.

p-Values marked in bold indicate numbers that are significant on the 95% confidence limit.