## Supplementary Table S3. The Association Between Health Worker Training, Perceptions of Coworker Attitudes, and Stigmatizing Attitudes with Four Stigma Outcomes for Women Who Sell Sex

Variable	Categories	I would be ashamed if a woman in my family sold sex			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			Women who sell sex 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>	$p_w^{\ddagger}$
Training on infection control <sup>a</sup>	No Yes Missing	261/334 (78.1) 789/1001 (78.8) 50/73 (68.5)	1 1.04 (0.79–1.35)	0.794	40/334 (12.0) 159/1001 (15.9) 19/73 (26.0)	1 1.36 (0.85–2.17)	0.206	27/334 (8.1) 79/1001 (7.9) 12/73 (16.4)	1 0.93 (0.59–1.46)	0.749	266/334 (79.6) 744/1001 (74.3) 52/73 (71.2)	1 0.73 (0.50–1.05)	0.092
My coworkers sometimes treat	Strongly disagree	398/524 (76.0)	1	0.048	54/524 (10.3)	1	<0.001	28/524 (5.3)	1	< 0.001		1	<0.001
people living with HIV poorly <sup>b</sup>		504/653 (77.2) 144/166 (86.7) 30/37 (81.1)	1.07 (0.82–1.40) 2.07 (1.22–3.52) 1.36 (0.61–3.00)		105/653 (16.1) 42/166 (25.3) 13/37 (35.1)	1.65 (1.10–2.48) 2.96 (1.89–4.63) 4.75 (2.68–8.41)		50/653 (7.7) 29/166 (17.5) 8/37 (21.6)	1.45 (0.97–2.16) 3.74 (2.02–6.91) 4.90 (2.00–11.96)		513/653 (78.6) 140/166 (84.3) 28/37 (75.7)	1.70 (1.32–2.18) 2.48 (1.54–3.99) 1.44 (0.61–3.41)	
My coworkers sometimes talk	Missing Strongly disagree	24/28 (85.7) 206/290 (71.0)	1	<0.001	4/28 (14.3) 28/290 (9.7)	1	<0.001	3/28 (10.7) 14/290 (4.8)	1	<0.001	24/28 (85.7) 196/290 (67.6)	1	<0.001
badly about PLHIV <sup>c</sup>	Disagree Agree Strongly	509/655 (77.7) 275/334 (82.3) 97/112 (86.6)	1.45 (1.04–2.01) 1.92 (1.30–2.83) 2.68 (1.40–5.10)		97/655 (14.8) 62/334 (18.6) 30/112 (26.8)	1.63 (0.99–2.70) 2.12 (1.36–3.32) 3.40 (2.16–5.37)		46/655 (7.0) 39/334 (11.7) 18/112 (16.1)	1.51 (1.04–2.18) 2.59 (1.60–4.20) 3.76 (1.73–8.16)		476/655 (72.7) 289/334 (86.5) 89/112 (79.5)	1.28 (0.92–1.80) 3.08 (1.99–4.77) 1.86 (1.21–2.86)	
I would be ashamed if someone in my	agree Missing Strongly disagree	13/17 (76.5) 539/704 (76.6)	1	0.103	1/17 (5.9) 73/704 (10.4)	1	<0.001	1/17 (5.9) 29/704 (4.1)	1	<0.001	12/17 (70.6) 518/704 (73.6)	1	0.364
family had HIV <sup>d</sup>	Disagree Agree Strongly agree	492/614 (80.1) 31/39 (79.5) 30/40 (75.0)	1.23 (1.03–1.46) 1.18 (0.51–2.70) 0.89 (0.42–1.89)		114/614 (18.6) 14/39 (35.9) 16/40 (40.0)	1.95 (1.60–2.38) 4.81 (2.45–9.42) 5.59 (2.69–11.64)			2.56 (1.88–3.49) 11.49 (6.13–21.53) 9.56 (4.36–20.94)		476/614 (77.5) 30/39 (76.9) 31/40 (77.5)	1.22 (0.97–1.55) 1.16 (0.57–2.35) 1.23 (0.62–2.47)	
PLHIV engage in irresponsible	Missing Strongly disagree	8/11 (72.7) 255/346 (73.7)	1	0.008	1/11 (9.1) 36/346 (10.4)	1	<0.001	2/11 (18.2) 12/346 (3.5)	1	0.001	7/11 (63.6) 231/346 (66.8)	1	<0.001
behaviors <sup>e</sup>	Disagree Agree Strongly	487/630 (77.3) 242/299 (80.9) 91/106 (85.8)	1.22 (0.83–1.79) 1.51 (0.98–2.32) 2.16 (1.36–3.41)		97/630 (15.4) 62/299 (20.7) 19/106 (17.9)	1.57 (0.99–2.49) 2.20 (1.57–3.10) 1.83 (1.19–2.82)		54/630 (8.6) 36/299 (12.0) 13/106 (12.3)	2.63 (1.22–5.68) 3.74 (1.78–7.87) 3.85 (1.40–10.62)		476/630 (75.6) 249/299 (83.3) 87/106 (82.1)	1.55 (1.09–2.20) 2.51 (1.68–3.74) 2.36 (1.33–4.19)	
Other people deserve access to	agree Missing Strongly disagree	25/27 (92.6) 387/490 (79.0)	1	0.621	4/27 (14.8) 24/490 (4.9)	1	<0.001	3/27 (11.1) 17/490 (3.5)	1	<0.001	19/27 (70.4) 357/490 (72.9)	1	0.278
services more than PLHIV <sup>f</sup>	Disagree Agree Strongly	442/570 (77.5) 182/229 (79.5) 61/82 (74.4)	0.91 (0.68–1.22) 1.02 (0.67–1.55) 0.77 (0.46–1.29)			2.00 (1.18–3.41) 16.02 (10.93–23.48) 12.23 (6.78–22.06)		38/570 (6.7) 47/229 (20.5) 9/82 (11.0)	1.93 (1.02–3.62) 6.98 (3.85–12.64) 3.34 (1.90–5.85)		432/570 (75.8) 185/229 (80.8) 61/82 (74.4)	1.14 (0.86–1.51) 1.54 (0.93–2.54) 1.07 (0.56–2.04)	
Prefer not to provide services to PLHIV <sup>g</sup>	agree Missing Strongly disagree	28/37 (75.7) 574/740 (77.6)	1	0.798	4/37 (10.8) 71/740 (9.6)	1	<0.001	7/37 (18.9) 31/740 (4.2)	1	<0.001	27/37 (73.0) 546/740 (73.8)	1	0.283
	Disagree Agree Strongly	447/568 (78.7) 43/53 (81.1) 30/39 (76.9)	1.06 (0.88–1.28) 1.22 (0.56–2.66) 0.94 (0.49–1.83)		105/568 (18.5) 26/53 (49.1) 13/39 (33.3)	2.10 (1.50–2.95) 8.88 (5.46–14.44) 4.56 (2.21–9.39)		53/568 (9.3) 23/53 (43.4) 8/39 (20.5)	2.28 (1.27–4.11) 16.84 (8.38–33.83) 5.65 (2.13–14.98)		441/568 (77.6) 38/53 (71.7) 31/39 (79.5)	1.21 (0.94–1.57) 0.87 (0.42–1.81) 1.35 (0.76–2.39)	
	agree Missing	6/8 (75.0)			3/8 (37.5)			3/8 (37.5)			6/8 (75.0)		

(continued)

## SUPPLEMENTARY TABLE S3. (CONTINUED)

Variable	Categories	I would be ashamed if a woman in my family sold sex			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			Women who sell sex 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 if a man in my	Strongly disagree	35/80 (43.8)	1	<0.001	12/80 (15.0)	1	0.426	6/80 (7.5)	1	0.603	46/80 (57.5)	1	<0.001
family had sex with other men <sup>h</sup>	Disagree Agree Strongly agree	105/220 (47.7) 464/557 (83.3) 489/539 (90.7)	1.15 (0.69–1.94) 6.40 (4.50–9.11) 12.62 (7.09–22.49)		26/220 (11.8) 97/557 (17.4) 81/539 (15.0)	0.77 (0.35–1.71) 1.18 (0.63–2.18) 0.99 (0.55–1.78)		13/220 (5.9) 50/557 (9.0) 49/539 (9.1)	0.79 (0.27–2.29) 1.18 (0.48–2.89) 1.22 (0.51–2.89)		110/220 (50.0) 449/557 (80.6) 452/539 (83.9)	0.73 (0.50–1.05) 3.05 (2.04–4.57) 3.85 (2.28–6.50)	
MSM engage in irresponsible	Missing Strongly disagree	7/12 (58.3) 61/91 (67.0)	1	<0.001	2/12 (16.7) 8/91 (8.8)	1	<0.001	0/12 (0.0) 2/91 (2.2)	1	0.089	5/12 (41.7) 32/91 (35.2)	1	<0.001
behaviors <sup>i</sup>	Disagree Agree Strongly	204/313 (65.2) 539/647 (83.3) 259/302 (85.8)	0.91 (0.42–1.97) 2.44 (1.13–5.28) 2.97 (1.24–7.08)		38/313 (12.1) 110/647 (17.0) 58/302 (19.2)	1.47 (0.44–4.87) 2.09 (0.75–5.82) 2.47 (0.95–6.42)		25/313 (8.0) 52/647 (8.0) 34/302 (11.3)	4.07 (0.78–21.38) 3.81 (1.04–13.88) 5.65 (1.24–25.77)			1.73 (1.05–2.85) 12.59 (8.14–19.48) 21.24 (12.30–36.65)	
Other people deserve access to	agree Missing Strongly disagree	37/55 (67.3) 340/445 (76.4)	1	0.177	4/55 (7.3) 14/445 (3.1)	1	<0.001	5/55 (9.1) 6/445 (1.3)	1	<0.001	33/55 (60.0) 314/445 (70.6)	1	0.061
services more than MSM <sup>j</sup>	Disagree Agree Strongly agree	561/720 (77.9) 135/163 (82.8) 47/59 (79.7)	1.08 (0.80–1.46) 1.47 (1.00–2.14) 1.20 (0.50–2.88)			2.65 (1.22–5.75) 54.16 (26.03–112.67) 51.61 (21.47–124.02)			5.69 (2.54–12.73) 23.95 (10.19–56.30) 24.44 (10.26–58.21)		560/720 (77.8) 127/163 (77.9) 46/59 (78.0)	1.43 (1.09–1.88) 1.44 (0.94–2.19) 1.44 (0.78–2.67)	
Prefer not to provide services to MSM <sup>k</sup>	Missing	17/21 (81.0) 365/486 (75.1)	1	0.008	5/21 (23.8) 46/486 (9.5)	1	<0.001	3/21 (14.3) 12/486 (2.5)	1	<0.001	15/21 (71.4) 340/486 (70.0)	1	0.008
	Disagree Agree Strongly agree	613/768 (79.8) 77/90 (85.6) 34/48 (70.8)	1.31 (0.98–1.74) 1.93 (1.04–3.59) 0.79 (0.43–1.45)		106/768 (13.8) 42/90 (46.7) 22/48 (45.8)	1.50 (0.93–2.42) 8.20 (5.21–12.92) 7.94 (4.24–14.90)			2.09 (0.91–4.82) 36.90 (18.56–73.35) 30.41 (17.85–51.81)		605/768 (78.8) 70/90 (77.8) 39/48 (81.3)	1.57 (1.18–2.08) 1.47 (0.75–2.90) 1.84 (0.70–4.88)	
I would be ashamed if a young woman	Missing	11/16 (68.8) 146/239 (61.1)	1	<0.001	2/16 (12.5) 19/239 (7.9)	1	0.017	1/16 (6.3) 15/239 (6.3)	1	0.039	8/16 (50.0) 150/239 (62.8)	1	<0.001
in my family became pregnant before marriage <sup>1</sup>	Disagree Agree Strongly agree	372/508 (73.2) 400/450 (88.9) 166/191 (86.9)	1.75 (1.28–2.41) 5.17 (3.65–7.32) 4.28 (2.70–6.78)		75/508 (14.8) 83/450 (18.4) 38/191 (19.9)	2.03 (1.10–3.78) 2.61 (1.35–5.05) 2.85 (1.39–5.84)		34/508 (6.7) 47/450 (10.4) 20/191 (10.5)	1.08 (0.54–2.20) 1.72 (1.04–2.86) 1.71 (0.83–3.52)		361/508 (71.1) 381/450 (84.7) 153/191 (80.1)	1.45 (1.00–2.09) 3.26 (2.03–5.23) 2.38 (1.28–4.41)	
Young women who become pregnant	Missing Strongly disagree	16/20 (80.0) 101/156 (64.7)	1	<0.001	3/20 (15.0) 15/156 (9.6)	1	<0.001	2/20 (10.0) 8/156 (5.1)	1	0.001	17/20 (85.0) 82/156 (52.6)	1	<0.001
before marriage engage in irresponsible behaviors <sup>m</sup>	Disagree Agree Strongly agree	415/574 (72.3) 467/543 (86.0) 102/118 (86.4)	1.43 (0.82–2.49) 3.40 (1.92–6.02) 3.55 (1.63–7.72)		68/574 (11.8) 101/543 (18.6) 30/118 (25.4)	1.27 (0.64–2.56) 2.16 (1.09–4.27) 3.24 (1.59–6.64)		35/574 (6.1) 62/543 (11.4) 11/118 (9.3)	1.23 (0.55–2.73) 2.42 (1.25–4.66) 1.94 (0.93–4.05)		382/574 (66.6) 479/543 (88.2) 106/118 (89.8)	1.80 (1.20–2.69) 6.80 (4.47–10.33) 8.19 (4.12–16.27)	
Other people deserve access to	Missing Strongly disagree	15/17 (88.2) 372/476 (78.2)	1	0.045	4/17 (23.5) 14/476 (2.9)	1	<0.001	2/17 (11.8) 16/476 (3.4)	1	<0.001	13/17 (76.5) 334/476 (70.2)	1	0.016
services more than young women who	Disagree Agree Strongly	521/676 (77.1) 155/182 (85.2) 39/57 (68.4)	0.94 (0.66–1.33) 1.60 (0.99–2.58) 0.60 (0.37–0.97)			3.03 (1.75–5.28) 49.53 (24.49–100.18) 45.24 (21.33–95.94)		42/676 (6.2) 41/182 (22.5) 15/57 (26.3)	1.86 (1.02–3.38) 8.08 (3.99–16.38) 9.88 (5.65–17.29)		530/676 (78.4) 142/182 (78.0) 43/57 (75.4)	1.53 (1.11–2.09) 1.48 (1.00–2.17) 1.27 (0.67–2.43)	
become pregnant before marriage <sup>n</sup>	agree Missing	13/17 (76.5)	(3.2. (3.7.)		5/17 (29.4)	(22.00 / 20//)		4/17 (23.5)	(2.22 2.12)		13/17 (76.5)	(3.3)	

(continued)

## SUPPLEMENTARY TABLE S3. (CONTINUED)

Variable	Categories	I would be ashamed if a woman in my family sold sex			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			Women who sell sex 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>	$p_w^{\ddagger}$	
Prefer not to provide services to young	Strongly disagree	492/624 (78.8)	1	0.427	59/624 (9.5)	1	<0.001	20/624 (3.2)	1	<0.001	458/624 (73.4)	1	0.516	
women who	Disagree	544/701 (77.6)	0.92 (0.69-1.24)		116/701 (16.5)	1.87 (1.36-2.58)		62/701 (8.8)	2.85 (1.48-5.48)		540/701 (77.0)	1.20 (0.92-1.55)		
become pregnant	Agree	42/52 (80.8)	1.10 (0.52–2.32)					25/52 (48.1)			40/52 (76.9)	1.16 (0.61–2.19)		
before marriage <sup>o</sup>	Strongly	19/27 (70.4)	0.62 (0.32–1.20)		11/27 (40.7)			10/27 (37.0)	17.03 (6.42–45.14)		22/27 (81.5)	1.59 (0.50–5.08)		
	agree Missing	3/4 (75.0)			2/4 (50.0)	7.21 (3.60–14.47)		1/4 (25.0)			2/4 (50.0)			

<sup>\*</sup>Proportion of health workers responding strongly agree or agree.  $^{\dagger}$ 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.  $^{\ddagger}$ A p value of <0.05 indicates that the predictor creates a statistically significant improvement in the fit of the model.

<sup>&</sup>lt;sup>a</sup>Infection control and universal precautions (including postexposure prophylaxis and waste management). <sup>b</sup>My coworkers sometimes treat people living with HIV poorly when providing them.

<sup>&</sup>lt;sup>c</sup>My coworkers sometimes talk badly about people thought to be living with HIV.

<sup>&</sup>lt;sup>d</sup>I would be ashamed is a woman in my family was PLHIV.

<sup>&</sup>lt;sup>e</sup>PLHIV 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 man in my family was MSM.

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

<sup>&</sup>lt;sup>j</sup>Other people deserve access to health services more than MSM.

kIf I had a choice, I would prefer not to provide services to MSM.

I would be ashamed if a young woman in my family became pregnant before marriage.

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

<sup>&</sup>lt;sup>n</sup>Other people deserve access to health services more than YW.

<sup>&</sup>lt;sup>o</sup>If I had a choice, I would prefer not to provide services to YW.

aOR, adjusted odds ratio; CIs, confidence intervals; MSM, men who have sex with men; n, number of individuals experiencing the three types of stigma within groups; N, total number of individuals within groups; PLHIV, people living with HIV;  $p_w$ , p value of the Wald test; YW, young women who become pregnant before marriage.

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