

Chronic PTSD and HIV in Rwanda

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Background

- The Rwandan genocide in 1994 resulted in more than 800,000 massacred and 535,000 women raped.
- The Harvard Trauma Questionnaire (HTQ), a cross-culturally validated instrument measuring trauma events, head injury, trauma symptoms, and torture events has been administered to 20 different post-trauma populations.
- This study describes the first adaptation of the HTQ into Kinyarwanda and preliminary data on trauma and post-traumatic stress disorder (PTSD) in a cohort of Rwandan women.

Methods

- In accord with WHO guidelines for cross-cultural adaptation, the HTQ was translated into French then Kinyarwanda, followed by blind back-translation into French then English.
- Three focus groups comprised of 6-8 trauma counselors, each from different Rwandan women's association reviewed the questionnaire item-by-item, adapting the trauma items to the Rwandan experience.
- The instrument was piloted and revised prior to administration in the Rwandan Women's Interassociation Study and Assessment, a cohort study of HIV infected and uninfected women who had lived in Rwanda during the 1994 genocide.

Study Demographics

		HIV -	HIV +
Number of Subjects (Total: 949)		227 (23.9%)	722 (76.1%)
Age, years	Median (IQR)	42.33 (34-49)	34.91 (30-39)
Marital status	Married or with partner	80 (35.2%)	258 (35.7%)
	Widowed	107 (47.1%)	302 (41.8%)
	Other	40 (17.6%)	162 (22.4%)
Monthly Income	< 10,000 FRW (US\$18)	94 (41.4%)	258 (35.7%)
	10,001-35,000 FRW	78 (34.4%)	355 (49.2%)
	> 35,000 F	55 (24.2%)	109 (15.1%)
Employed	Yes	50 (24.4%)	173 (24.9%)
Schooling	None	67 (29.5%)	159 (22.0%)
	Some or completed	121 (53.3%)	482 (66.8%)
	Primary School		
	Some Secondary	39 (17.2%)	81 (11.2%)
	School & Up		
Ability to read	None or A little bit	143 (66.84%)	464 (65.0%)
	Can read most or all written materials	71 (33.2%)	250 (35.0%)
BMI	Kg/m ²	20.6 (18.5-23.4)	21.0 (19.1-23.4)
C D4 cell count	Cells/μL	828 (680-1028)	257 (167-354)

Frequency of Trauma Events

	HIV -	HIV +
Number of Subjects (n=921)	225 (24.4%)	696 (75.6%)
Situation of War	212 (94.6%)	653 (94.0%)
Lack of Food or Water	188 (83.6%)	563 (80.9%)
Lack of Access to Medical Care	187 (83.1%)	508 (73.3%)
Murder of Relative or Friend	167 (76.2%)	475 (68.7%)
Forced Evacuation	129 (57.6%)	462 (66.5%)
Extortion or Robbery	170 (75.6%)	448 (64.4%)
Lack of Shelter	135 (60.0%)	439 (63.2%)
Eyewitness Beating	136 (60.7%)	434 (62.5%)
Loss of Property	164 (72.9%)	407 (58.6%)
Disappearance of Relative or Friend	137 (61.7%)	363 (53.1%)
Rape	103 (45.8%)	352 (49.8%)
Serious Physical Injury Relative or Friend	126 (56.2%)	325 (47.0%)
Forced Separation from Family	93 (41.3%)	296 (42.5%)
Forced to Hide	102 (45.3%)	301 (43.2%)
Someone Forced to Betray You	96 (44.0%)	293 (42.7%)
Forced Isolation	98 (44.0%)	273 (40.0%)
Beating	91 (40.4%)	270 (38.6%)
Cutting with Machete, Other Sharps	18 (8.4%)	73 (10.9%)
Total Number of Events*	14.4	13.4

*p=.035

Head Injury

Number of Subjects		946
Starvation		637 (67.7%)
Beatings to Head		174 (18.4%)
Suffocation		121 (12.8%)
Immersion in Water or Drowning		27 (2.9%)
Other		28 (3.0%)

Frequency of Torture Events

	HIV -	HIV +
Number of Subjects (n=921)	225 (24.4%)	696 (75.6%)
Threats and Humiliation	168 (76.4%)	495 (71.3%)
Sleep Deprivation	162 (73.6%)	405 (58.4%)
Starvation	155 (70.4%)	387 (55.8%)
Being Isolated from Others	120 (54.5%)	315 (45.5%)
Beating, Kicking, Knifing	92 (41.8%)	276 (39.8%)
Forced to Witness Others Being Tortured	83 (37.7%)	267 (38.5%)

PTSD Symptoms

		All	HIV -	HIV +
Number of Subjects		917		
Re-experiencing	Recurrent intrusive thoughts or memories	2.64		
	Feeling as though the event is happening again	2.47		
	Recurrent nightmares	2.26		
	Sudden emotional or physical reactions when reminded	2.66		
Avoidance	Feeling detached or withdrawn	2.25		
	Unable to feel emotions	2.26		
	Avoiding activities that remind you of the trauma	2.24		
	Inability to remember parts of the traumatic events	2.81		
	Less interest in daily activities	1.77		
	Feeling as if you don't have a future	2.02		
	Avoiding thoughts and feelings associated with trauma	2.16		
Arousal	Feeling jumpy or easily startled	2.44		
	Trouble sleeping	2.23		
	Feeling on guard	2.31		
	Feeling irritable or having angry outbursts	2.35		
Mean PTSD Symptom Score		2.33	2.38	2.31
% With PTSD Symptom Score > 2.0		59.9	65.2	58.2

The scoring scheme for the PTSD symptoms is:

1 = Not at all, 2 = A little, 3 = Quite a bit, 4 = Extremely

Discussion: Trauma Events In HTQ

Study Population	# Symptoms	Comments
Indochinese Refugees, 1992	15.2	17 events; heard about, witnessed, or experienced
Cambodian Refugees, 2005	15.0	35 events
Guatemalan Refugees, 2003	8.3 – Experienced 9.7 – Observed	19 trauma events
Bosnian Refugees, 1999	6.5	38 trauma events or 19 torture events
Rwandan HIV+ Women, 2006	13.4	38 trauma events

Discussion: HTQ PTSD Scores

Study Population	Score
Vietnamese Political Detainees, 1998	1.89
Nangarhar Province, Afghanistan, 2004	1.92
Rwandan HIV+ Women, 2006	2.31

Discussion: PTSD Diagnoses

Study Population	PTSD Dx	Comments
Cambodian Refugees, 2005	62%	Composite International Diagnostic Interview
Bosnian Refugees, 1999	26.2%	HTQ Diagnostic Algorithm
Post – Conflict, Settings, 2001	Algeria – 37.4% Cambodia – 28.4% Ethiopia – 17.8% Gaza – 17.8%	Composite International Diagnostic Interview
South Africa, HIV+, 2005	14.8%	MINI International Neuropsychiatric Interview
USA, HIV+ Women, 2002	42%	PTSD Checklist – Civilian Version
Rwanda Communities, 2004	24.8%	PTSD Checklist – Civilian Version
Rwandan HIV+ Women, 2006	58.2%	HTQ > 2.0

Conclusions

- Rwandan women with HIV:
 - Are young, under-employed, frequently widowed, and poor women with little formal education
 - Experienced multiple traumatic events, including head injury and torture
 - Have high rates of PTSD symptoms
- The HIV negative women experienced more traumatic events, which likely reflects the widespread experience of trauma and may reflect a referral bias of the women's associations.

- The ongoing health care of Rwandan women with HIV will have to include psychologically oriented services, sensitive to trauma and PTSD.
- The well-being of Rwandan women in general is a public health concern with a need to address chronic trauma issues existing 13 years post-genocide.