

An Analysis of Gender difference in Traumatic Experiences and PTSD Severity among Children Survivors of Post -Election Violence in Nakuru County, Kenya

Jacinta Nduta King'ori, Ph.D., The Cooperative University of Kenya

Abstract

Gender differences have been observed in children's experience of traumatic events as well in development of PTSD. Males have commonly been found to experience more traumas except for sexual assault while the female are more likely to develop PTSD after a traumatic event. In the 2007/2008 post-election violence in Kenya, both female and male and children were exposed to and witnessed various traumatic events. The purpose of this study was to investigate the traumatic experiences of children during post-election violence and the possibility of development of post-traumatic stress disorder among children survivors of 2007/2008 post-election violence in Nakuru County. The study sought to determine gender difference in traumatic experiences and PTSD severity. The study utilized ex post facto and correlational research designs. The study was guided by Cognitive Behavioral Theory. A sample size of 400 respondents was derived from areas affected by post-election violence in Nakuru County. A multi-stage sampling approach was used to derive the sample. Data for the study was obtained using questionnaires. Data was analyzed using descriptive and inferential statistics. Independent t-test was used to test the hypotheses. The hypotheses were tested at significance level of 0.05. Male survivors were found to have experienced more traumatic experiences but the female survivors higher in PTSD scores. Significant gender difference was established in traumatic experiences and level of PTSD severity among children survivors of post-election violence.

Key word: Post-Traumatic Stress Disorder, post-election violence of 2007/2008, gender, traumatic experiences.

Introduction and Background

Violence puts women at risk for short- and long-term consequences involving their psychological, physical, economic and social well-being. Males have commonly been found to experience more traumas except for sexual assault while the females are more likely to develop PTSD after a traumatic event. Gender differences have been observed in childhood traumatic experiences and predicting PTSD. A study by Alamura, Damiere, Maes and Mylte

(2001) in a study to establish pre and post disaster negative events in relation to PTSD severity found sexual abuse to be more associated with PTSD among female children and physical abuse for male gender. In a study conducted in South Africa and Nigeria, although boys were found to have experienced more traumatic events, girls were more likely to have met criteria for full and partial PTSD (Njenga, Nyamai & Seedat, 2004).

Individual risk factors most consistently related to developing PTSD are gender and history of exposure before the focal trauma especially violence in childhood. Women are twice at risk of developing PTSD following trauma compared to men. This finding has been replicated across most studies in trauma and PTSD, including a study involving survivors of the September 11, 2001 terrorist attack in the United States (Schlenger, 1992), and among former children soldiers in Northern Uganda (Broakaet, Derlugh & Schuyten, 2004).

Culture and gender appear to interact to influence vulnerability to PTSD. A study among survivors of hurricane in Mexico & Florida in 1992, rates of PTSD were higher in both countries but effects of gender were greatest within samples from traditional cultures (Green, 1992). In addition, panel studies indicate that psychological effects are not only stronger among women but longer lasting as well. A study among homeless children reported that risk for PTSD following traumatic experiences was two-fold higher in women than in men and duration of PTSD was higher among women (Breslau, 2012).

Further, the risk of developing PTSD differs according to the type of trauma experience. PTSD is most often associated with rape for women followed by sexual molestation, physical attack, being threatened with a weapon and childhood physical abuse (Barlow, 1998). In a study by Hossain (2021) on gender-based violence and its association with mental health among Somali women in Kenyan refugee camps indicate that women victims of sexual abuse had higher PTSD rates. Further, a study by Nyambane (2009) in a study on prevalence of PTSD and depression among women at Ekerenyo camp for internally displaced persons in Kisii County revealed high levels of PTSD among women who had experienced sexual abuse.

A study to examine gender differences in combat exposure indicated that although men reported greater exposure to high-intensity combat experiences than women, PTSD levels were higher in women than men. While sexual trauma was associated with high levels of

PTSD among women, injury during combat was associated with high levels of PTSD among men (Shira, Luxton & Sknopp, 2012).

In Kenya, few studies carried out with regard to development of PTSD indicate that women are at a higher risk of developing PTSD. Ethieno (2015) in a household survey in Kenya on prevalence of PTSD and its associated risk factors found higher rates of PTSD among women than men. In another a study by Anyango (2008) among sexually abused children found females to be higher in PTSD scores than their male counterparts.

Kenya's 2007 general election was accompanied by violent conflicts which affected parts of Western, Coast, Nyanza and Rift Valley regions. In Nakuru County in the Rift Valley region, the conflicts were accompanied by breakdown of law and order. According to Waki report (2008), gender violence was perpetrated against innocent victims. This was not just one of the tragedies but major life changing events where women and girls were raped. Moreover, men underwent forced circumcision which was described as traumatic circumcision.

In view of this, the researcher set out to investigate gender differences in traumatic experiences and PTSD among children survivors of post- election violence of (2007/2008) in Nakuru County. The study objective was to establish gender difference in traumatic experiences and level of PTSD among the survivors in areas affected by the post-election of 2007/2008 in Nakuru County.

Methodology

The study employed ex-post facto and correlational research designs. The study was carried out in Nakuru County in the Rift Valley region of Kenya. The county has an area of 74,905 km² and administratively divided into four sub counties namely: Nakuru North, Nakuru Central, Molo and Naivasha. The study used a study population of 77,768 students in private and public secondary schools in Nakuru County. A sample of 400 children survivors of the post-election violence were used in the study. To get the sample, multi stage sampling strategies were adopted. The study was carried out two years after the post-election violence. A questionnaire was used to collect data from children survivors. Ethical approval was sought from Egerton University Ethics Review Board and a psychological debriefing was conducted among the children after filling in the questionnaires to assist them process their issues. Descriptive analysis was used to establish the mean and standard deviation of survivors'

scores on the Impact of Event Scale while independent t-test was used to test the hypothesis. Results were based on information 400 children survivors.

Results

This study aimed at establishing gender difference in traumatic experiences and level of PTSD severity among children survivors in areas affected by the post-election of 2007/2008 in Nakuru County. It was hypothesized that there is no gender difference in traumatic experiences and level of PTSD severity. An analysis of items of traumatic experiences was carried out from 400 children survivors. According to the findings, the key traumatic experiences of the male survivors during the post- election violence included; displacement from home (48.5%), sleeping in the cold (47.0%), and seeing property being destroyed (46.7%), hearing people crying for help (46.5%), going without food and hearing yells of gangs as they attacked people. On the other hand, the female survivors had the following key experiences; hearing people crying for help (49.5%), seeing property being looted (46.1%), seeing people sleeping in the cold (44.8%), seeing people being beaten (41.8%), and seeing other people's property looted (41.2%). It is therefore evident from the study that both the male and female survivors had encountered various traumatic experiences as indicated on table 1.

Table 1: Traumatic Experiences of Male and Female Survivors during Post-election Violence

Traumatic Experience	Male (N=200)		Female (N=194)	
		M %		F %
Seeing killing of people	48	24.0	39	20.3
Physically injured	21	10.6	8	4.4
Their house burnt	61	30.7	62	32.6
Parents lost property and livelihoods	80	40.4	71	37.2
Saw peoples' property being destroyed	94	47.5	88	46.1
Saw armed gangs	78	41.1	51	27.3
Heard people crying for help	93	46.5	96	49.5
Saw dead bodies and dead body parts	29	15.8	23	13.3
Witnessed rape or sexual harassment	16	8.3	15	8.1
Parent was killed	7	3.5	9	4.6
Brother or sister was killed	2	1.0	1	0.5
Other relatives killed	15	7.5	22	11.3
Relative injured	25	12.6	19	9.8
Brother or sister injured	4	2.0		
Someone knowing to you was injured (not a relative)	52	26.3	54	27.8
Friend was killed	28	14.1	29	14.9
Some known to you disappeared (not a relative)	36	18.0	44	27.7
Parent disappeared	6	3.0	2	1.0
Have a relative who disappeared	11	5.6	11	5.7
A friend who disappeared	13	6.5	19	9.8
Displaced from home	96	48.5	76	41.8
Staged in IDP camp	44	22.0	28	15.1
Went without food for long hours	70	35.4	48	26.1
Stopped going to school for sometime	85	42.9	85	44.3
Slept in the cold	93	47.0	78	40.8
Someone known to you was killed (not a relative)	58	29.3	60	30.9

relative)				
Saw property being looted	91	46.7	77	41.2
Detected small of dead bodies	80	40.4	63	33.3
Saw people being beaten	80	40.0	81	41.8
Saw people sleeping in the cold	85	42.5	87	44.8
Heard yells of gangs as they attacked people	73	39.5	65	33.5

Further analysis was performed to establish gender difference in number of traumatic experiences among the children studied. On the overall, the mean score of male children was higher than that of female children. While the mean score of male children was (23.6) and standard deviation of (9.0), that of female children was (19.1) with a standard deviation of (10.2). An independent t - test for equality of means revealed significant difference between the females and males' children in the number of traumatic experiences during the post-election violence. The female children average (M=19.06, S=9.0) was lower than the male children average (M=23.6, S=10.20), $t(388) = 4.7, p < 0.001, \alpha = 0.05$.

Level of PTSD Severity among Male and Female Children

This study further assessed the level of PTSD among survivors based on gender. It was hypothesized that there is no significant gender difference in level of PTSD severity. To assess the level of PTSD severity, the impact of event revised scale was utilized. It has twenty 22 items adapted from Weiss Impact of Event Scale. The scale considered the three cluster symptoms of PTSD namely; re-experiencing, avoidance and hyper arousal. The Impact of Events Scale tool was used to determine the level of PTSD severity among children. The test is constructed on a 5-point Likert Scale with scores ranging from Zero (0) to four (4). The scoring range is from 0 – 88. A score of 0-23 indicates absence of PTSD while a score of 24 – 32 is of clinical concern with partial PTSD. A score between 33 and above means confirmed PTSD.

Analyses were carried out to establish whether there were gender differences in level of PTSD severity among children studied. The study found the mean score of female children on PTSD to be higher than that of male children. The mean on the female children was (M=39.2, S=18.2), while that of male children was (M= 37.7, S=18.2). A t-test revealed significant difference between male and female children on the Impact of Event Scale Scores with female children being higher $t = (392) = 0.841, P < 0.001, \alpha = .05$. (Table 2).

Table 2: Level of PTSD Severity among Male and Female Children

		Independent Samples Test							
		Levene's Test for Equality of Variances				t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
								Lower	Upper
Impact of events scores	Equal variances assumed	.579	.447	.841	392	.401	1.551	1.844	-2.074 5.175
	Equal variances not assumed			.841	391.780	.401	1.551	1.843	-2.074 5.175

Discussion

This study aimed at establishing gender difference in key traumatic experiences of children survivors of post-election violence of 2007/2008 in Nakuru County, Kenya. The key traumatic experiences of the male survivors during the post- election violence included; displacement from home, sleeping in the cold and seeing property being looted. On the other hand, the female survivors had the following key experiences; hearing people crying for help property being destroyed and seeing sleeping in the cold. This finding is consistent with findings of studies of Ovuga & Oyok (2008) who found gender difference in key traumatic experiences among former children soldiers in Northern Uganda where the key traumatic experiences for the male children was being forced to kill someone in the bush and being forced to kill a close relative while among female children, witnessing someone being tortured and personally being torture were the key traumatic experiences. The study also found the male children to have higher number of traumatic experiences than the female. This was consistent with studies by Aziz, Ahmed, Tawahina & Vostanis (2016) in a study to

establish exposure to war trauma and PTSD growth among children in the Gaza Strip where boys were significantly exposed to trauma than girls.

Statistically significant gender difference was established with female children having higher scores in PTSD severity. This finding is consistent with past studies. A study by Ford (1999) among victims of community violence indicated that on the overall, 8% of men and 20% of women who experience community violence go on to develop PTSD and 30% of those individuals develop chronic form of PTSD which may persist through their lives. A study by Green, Korrol & Grace (1991) among children survivors of dam collapse found PTSD symptoms to be higher in females than in males. A study by Ovuga & Oyok (2008) to establish sex difference in PTSD reported that females are more likely to develop PTSD than males after exposure to a traumatic event. Berton & Stabb (2007) in a study to investigate variables with incidences of PTSD in adolescents in a metropolitan area found that girls obtained the highest PTSD scores among all participants of the study.

Conclusion

The findings of the study confirmed gender difference in key traumatic experiences, number of traumatic experience and level of PTSD severity. Male children reported more traumatic experiences than female children. However, female children reported higher levels of PTSD.

References

- Anyango, G. (2008). "Prevalence of Post-traumatic stress disorder among sexually abused children and adolescents". An unpublished Master of Medicine (MMed) Thesis University of Nairobi.
- Barlow, H. (1998). *Abnormal psychology*, State University Press, New York.
- Berton, M. & Stabb, S. (2007). Exposure violence & PTSD in urban adolescent: *Department of psychiatry and philosophy*; 3(12), 484-498.
- Breslau, N. (2002). Gender differences in traumatic events and PTSD. *Journal of Gender specific medicine*, 5(1) 34-40.
- Commission of inquiry on Post-election Election violence (2008). *The Waki Report; Post-election in Kenya*.
- Ford, J. (1999). Disorders of Extreme stress following War-zone military trauma, *Journal of Consulting and Clinical psychology*, 67, 3-12
- Green, B. (1991). Gender and parental effects on PTSD symptoms. *Journal of the American Academy of child & adolescent psychiatry*, 3(1), 945-951.
- Green, B., Korol, M. & Grace, M. (1991). Age, gender, and parental effects on PTSD symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry*, 30, 945-951
- Hossain, Rachel, P. (2021) Gender based violence and its association with mental health among Somali women in Kenya refugee camp. *Journal of epidemiology and community health*, 75:4
- Lukonye, A. (2006). "Post-traumatic stress disorder among Mau Mau Concentration Camps Survivors in Kenya". An unpublished Master of Medicine (MMed) Thesis, University of Nairobi.
- Maes, M. Demeire, L. Mylte, J. Altamura. (2001). Risk and Preventive factors of Posttraumatic Stress Disorder (PTSD). *Journal of Affect Disorder*, 63(1-3):113-121
- Norris, F. & Unl, G. (1997). Chronic stress as a mediator of acute stress: *Journal of Applied Social Psychology*, 23, 126 –1284.
- Nyambane J. (2009). The prevalence of PTSD and depression among women at Ekerenyo camp for the internally displaced persons in Kisii District. Unpublished MSC. Thesis in Clinical Psychology, University of Nairobi
- Osofsky, J, Wewers, S, Hanns, D, & Fick, A. (1993). Chronic community violence: *What is happening to our children? Psychiatry*, 56, 36-45.
- Ovuga, E. & Oyok. T. (2008). Post-traumatic stress disorder among child soldiers attending a rehabilitative service in Northern Uganda. *African Health Sciences*, 8(3), 136-141.

- Schlenger, W. (1992). *The influence of stress and other psychological factors on human immunity: Paper presented at 36th Annual meeting of the psychosomatic society, Dallas, TX.*
- Seedat, S., Nyamai, C., Njenga, B. (2004). Trauma Exposure and Post-traumatic stress symptoms in urban African school: Survey in Cape Town and Nairobi. *British Journal of psychiatry*, 18, 169-175.
- Seedat, S., Nyamai, C., Njenga, B. (2004). Trauma Exposure and Post-traumatic stress symptoms in urban African school: Survey in Cape Town and Nairobi. *British Journal of psychiatry*, 18, 169-175.
- Shira, M., Luxton, D. & Sknopp, N. (2012). Gender differences in traumatic experiences and mental health in active soldiers deployed in Iraq and Afghanistan (2006 - 2009). *Journal of psychiatric Research*, 46(3), 311–316.
- Shira, M., Luxton, D. & Sknopp, N. (2012). Gender differences in traumatic experiences and mental health in active soldiers deployed in Iraq and Afghanistan (2006 - 2009). *Journal of psychiatric Research*, 46(3), 31–316.
- Thabet, A., Abed, Y. & Vostanis, P. (2002). *Emotional problems in Palestinian Children Living in a War Zone: A cross sectional study.* *Lancet*, 359, 1801-1804.