Open Access

SCHOLARENA

Journal of Psychiatry Studies

RESEARCH ARTICLE

Intimate Partner Violence and Social Demographic Characteristics as Correlates for the Development of Post-Traumatic Stress Disorder among Female Survivors in a Nairobi Sub-County, Kenya

Anthony BKA[1], Michael K[2], Oscar G[3] and Lincoln K[4*]

[1]*Doctorate in Clinical Psychology (Psy. D) Studentat USIU-Africa*

[2]*Lecturer, Department of Psychology, School of Humanities and Social Sciences and Deputy Vice Chancellor-Academics and Student Affairs, USIU-Africa, Kenya*

[3]*Lecturer, Department of Psychology, School of Humanities and Social Sciences, USIU-Africa, Kenya*

[4]*Senior Lecturer, Department of Psychiatry, School of Medicine, University of Nairobi and a Consultant Clinical Psychologist, Nairobi Kenya*

[*]**Corresponding author:** Lincoln K, Senior Lecturer, Department of Psychiatry, School of Medicine, University of Nairobi and a Consultant Clinical Psychologist, Nairobi Kenya, Tel: +254.722860485, E-mail: khaimbugwa@gmail.com

Citation: Anthony BKA, Michael K, Oscar G, Lincoln K (2018) Intimate Partner Violence and Social Demographic Characteristics as Correlates for the Development of Post-Traumatic Stress Disorder among Female Survivors in a Nairobi Sub-County, Kenya. J Psychiatry Stu 1:107

Abstract

Studies on the social demographic data and Intimate Partner Violence (IPV) as significant correlates for the development of Post-Traumatic Stress Disorder (PTSD) in the Kenyan society are minimal. However, a number of research has been done on IPV. This research identified specific social demographic data and IPV as significant correlates to the development of PTSD among 193 female survivors. The Hurt Insult Threaten and Scream (HITS) screen was used to determine those who had experienced or are experiencing IPV and PTSD check list- 5 (PCL-5) for DSM-5 disorders administered to determine presence of PTSD. The result showed high percentage of the participants had PTSD 114 (59.1%) presenting with moderate to severe symptoms. The PCL-5 and HITS scores were positively correlated indicating that increase in HITS scores as a severity of IPV was significantly correlated to increase in PTSD symptoms. It would be concluded therefore that some social demographic qualities and IPV are precursor of PTSD among female survivors.

Keywords: Female Survivor; Gender Role; Intimate Partner; Violence; Posttraumatic Stress Disorder; Educational Attainment

Introduction

Intimate Partner Violence (IPV) is a common worldwide phenomenon [1,2]. It is a form of violence within relationships, between dating partners, husband and wife, ex-spouses, and boyfriend and girlfriend [3]. This violence could be physical, sexual, psychological or economical and World Health Organization estimates that one in every three women the world over, experiences physical or sexual violence by a partner in their lifetime [4,5]. One, who lives in such violent relationship for a long period of time, believes the violence will subside. Unfortunately, it escalates and the survivor experiences different types and multiple episodes of abuses that greatly impacts on her physical and mental health [6].Ward (2002) acknowledges that IPV is not a natural or biological phenomenon but it is part of the historical process in Kenya and there are factors documented to trigger IPV that include sexual infidelity, financial instability within the relationship, family settings, and gender roles [7]. Affirm this outcome of in relation to IPV as a longstanding problem in Kenya [8,7]. Male dominance in the Kenyan society is very obvious and patriarchal standards and attitudes pervade every level of the society [4]. Violence against women is a form of discipline within the Kenyan society and women are socialized to anticipate it [8]. IPV has therefore been constituted as a form of transmission from one generation to the next, in terms of values, beliefs, and behaviors, setting the tone for the origin of a patriarchal society [3].

The most prevalent psychological effect of IPV among affected female survivors are depression, anxiety, post-traumatic stress disorder (PTSD), and substance use [3,9,10]. According to the American Psychiatric Association (2013), IPV is associated with Post traumatic stress disorder (PTSD) and traumatic grief [11]. This study examines on how social demographic data and severity of IPV correlates with PTSD symptom severity as one of the mental health outcomes among female survivors of IPV.

Methodology

Research Design and Ethical Consideration

The study adopted a cross-sectional design, using quantitative research data collection methods. The information gathered from the data was critically analyzed using SPSS version 23 to arrive at the severity of the PTSD, giving descriptions of socio-demographic characteristics and forms of IPV. These three variables were finally correlated to determine their relationship. The five APA ethical principles in human research were applied namely: signing of informed consent, anonymity, no coercion, beneficence and confidentiality as presented in the American Psychological Association Code of Conduct and Ethical Principles (2010)[12].

Study setting and population

Kayole residence was the study site, a suburb of Nairobi, the capital city of Kenya. This residence site is densely populated habituating approximately185, 948 people [13]. The women population according to Kenya National bureau of Statistics (2009) is 90,089, half the estimated population. Kayole, though densely populated, falls neither within a slum nor affluent community [14]. It falls within the lower socio-economic class.

This study recruited 193 female adults aged 18 to 60 years old who were residing within Kayole residency. These female participants were all in heterosexual relationship for at least two years. The participants were either married officially, co-habiting or in a boyfriend/girlfriend relationship.

Sampling Technique and Instruments for data collection

The participants were identified purposefully at the beginning of the study by recruiting females who were experiencing IPV and had come to sort help at the Catholic Church or Primary Health Care outlets within the residency. Snowball sampling as a second step of sampling was further used in this research whereby the purposefully recruited participants referred their friends whom they knew were having or had separated or divorced as a result of IPV. The target population of the IPV female survivors was considered "hidden" due to the sensitive nature of the IPV, which was often concealed within the family setting [15]. The instruments used for data collection were Socio-demographic questionnaire (SDQ), Hurt, Insult, Threaten and Scream (HITS) screen and Posttraumatic stress disorder checklist-5 (PCL-5). The SDQ was used to collect data relating to participants' background and the variables were associated with the types of IPV and the severity of psychological effects. The information gathered from the SDQ brought out the age brackets that are more likely affected by IPV, the level of education of those severely affected by the intimate violence and their marital status and type of employment in relation to their livelihoods. The HITS screen is an IPV screening questionnaire for screening violence in a relationship and it was utilized to capture forms of IPV [16]. It has four questions to assess risk for Intimate Partner Violence (IPV). The questions asked are used to determine the frequency of violence such as hurts, insults, threatens or screams, in a relationship. The answers are set on a Likert scale ranging from never (1), rarely (2), sometimes (3), fairly often (4) to frequently (5). The scores are range between 4-20 points. Any score above 9 points indicated severe suffering from abuse. It is globally used and has been used in Europe, South and North America, China, the Middle East and Africa.

The third instrument used was the PCL-5 for measuring the severity of PTSD that fits very well into the DSM-5[17]. This PTSD check list tool gives symptom criteria and at the same time the underlying construct of PTSD in order to establish a provisional diagnosis of PTSD [18]. In the research by Blevin et al., investigating the psychometric properties of the PCL-5, they indicated that the tool has excellent test-retest reliability with high internal consistency [18]. This 20 items tool is rated on a 5-point scale (0= Not at all; 1= A little bit; 2= moderately; 3= Quite a bit, and 4= extremely). There are three ways of interpreting the results but in this study, the option made is the use of the DSM-5 symptoms cluster which was obtained by summing the scores within a given cluster, that is, cluster with items 1-5, cluster with items 6-7, cluster with items 8-14, and cluster with items 15-20. Consistently high scores on a particular cluster indicated significant and problematic areas for the individual, to warrant further assessment, treatment, and follow-up [19].

Data management and analytical plan

The data was sorted, coded and entry template formulated with assistance of a data analyst. The two research assistants made double entry using access package of windows XP version 10. Data cleaning was done before the data was exported to the SPSS version 23 analysis packages. Using exploratory data analysis techniques, the outputs were analyzed according to variables: forms of IPV, SDQ and psycho-trauma symptoms of PTSD. The psycho-trauma related symptoms in the criterion for PTSD were also analyzed. Frequencies and percentages were used to describe the demographic data and psycho-trauma symptoms of IPV of female survivors. Correlations and chi-square bivariate statistics were used to assess the relationships between socio-demographics and PTSD. An inferential statistics approach using correlation statistics was applied to ascertain the distribution of the variables and to compare them within the study participants as a group. Inferential analyses were run to determine the relationships and predictors among affected survivors who develop PTSD using correlational, chi square and logic regression model.

Results

The study recruited 193 female survivors of IPV residing in Kayole who responded to the three questionnaires administered and all participants except one had formal education. Table1 presents highest levels of education attained by participants. The lowest formal educational was attaining primary school level of education and the highest level was graduate education. A high number, 81 (42.0%) of the participants, had attained secondary level of education followed by 65 (33.7%) who had attained college level of education, while 28 (14.5%) and 18 (9.3%) had primary and University education respectively.

Level of education attained	Frequency	Percent
No education	1	0.5
Primary education	28	14.5
Secondary education	81	42
College education	65	33.7
University education	18	9.3
Total	**193**	**100**

Table 1: Levels of education attained

The marital status of the participants ranged from being single, married, divorced or separated to being a widow. More than half, 105 (54.4%) were married, while a quarter, 47 (24.4%) indicated to be single. A number of the participants were employed either permanently or on casual basis.About half of the participants 95 (49.2%) indicated that they were casual workers while 56 (29.0%) were in formal employment Cumulatively 151 (78.2%) of the participants.

Prevalence of IPV

The forms of IPV were captured with the help of the HITS questionnaire which served as an entry point for those who had met the inclusion criteria for the study. Though getting a score below 10 points on the HITS scale does not qualify one as not severely experienced IPV, it however indicates that there has been a form of violence in participant's heterosexual relationship. Community settings represent important sites for IPV screening and intervention particularly for females who are vulnerable as there is insufficient evidence to recommend for or against routine screening of women for IPV and thereafter refer them for treatment. The HITs questionnaire results showed a mean score of 9.78 with a standard diversion of 4.4; all females recruited had experienced IPV. Using a cutoff point of 10 on this scare, the prevalence of severe IPV needing a referral was shown to be 46.6%.

Levels of PTSD

Post-Traumatic Stress Disorder (PTSD) is one of the psychological consequences associated with IPV (WHO, 2013), using the quantitative research methods, this study examined the symptoms of PTSD among female survivors which included re-experiencing, avoidance, emotional reaction and hyper-arousal. As delineated in Table 2, the participants re-experiencing symptoms of PTSD are tabulated. Over half of participants had moderate to extreme re-experiencing PTSD related symptoms. Some 116 (60.1%) had repeated, disturbing, and unwanted memory symptoms while 101 (52.3%) had repeated, disturbing dream symptoms and another 102 (52.8%) had sudden feelings or acting as if the IPV were actually happening again (as if reliving the violence). About 144 (74.6%) who form the majority of the participants had repeated very upsetting feelings when something reminded them about the IPV and 119 (61.7%) had repeated strong physical reactions when something reminded them of the IPV.

Types of re-experiencing symptoms	Severity of the symptom occurrence					
	Not at all	Rarely	Moderately	Quite a bit	Extremely	Total
Repeated, disturbing, and unwanted memories of the stressful experiences.	32 (16.6%)	45 (23.3%)	39 (20.2%)	26 (13.5%)	51 (26.4%)	193 (100%)
Repeated, disturbing dreams of the stressful experience	61 (31.6%)	31 (16.1%)	39 (20.2%)	29 (15.0%)	33 (17.1%)	193 (100%)
Suddenly feeling or acting as if the stressful experience were actually happening again (as if reliving the event)	51 (26.4%)	40 (20.7%)	36 (18.7%)	35 (18.1%)	31 (16.1%)	193 (100%)
Feeling very upset when something reminded you of the stressful experience	29 (15.0%)	20 (10.4%)	32 (16.6%)	45 (23.3%)	67 (34.7%)	193 (100%)
Having strong physical reactions when something reminded you of the stressful experience`	41 (21.2%)	43 (22.3%)	31 (16.1%)	35 (18.1%)	43 (22.3%)	193 (100%)

Table 2: Re-experiencing symptoms

Avoidance PTSD symptoms as was delineated from participants are tabulated in Table 3. Over half of participants had moderate to extreme avoidance PTSD related symptoms. Some 120 (62.2%) participants avoided memories, thoughts, or feelings related to the IPV, 105 (54.4%) had trouble remembering important parts of the IPV experiences and 121 (62.7%) avoided external reminders of the stressful IPV experiences (for example, people, places, conversations, activities, objects, or situations).

Types of avoidance symptoms	Severity of the symptom occurrence					
	Not at all	Rarely	Moderately	Quite a bit	Extremely	Total
Avoiding memories, thoughts, or feelings related to the stressful experience	34 (17.6%)	39 (20.2%)	42 (21.8%)	36 (18.7%)	42 (21.8%)	193 (100%)
Trouble remembering important parts of the stressful experience	47 (24.4%)	42 (21.2%)	32 (16.6%)	29 (15.0%)	44 (22.8%)	193 (100%)
Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)	31 (16.1%)	41 (21.2%)	32 (16.6%)	34 (17.6%)	55 (28.5%)	193 (100%)

Table 3: Avoidance symptoms

In the emotional reaction picked out as PTSD symptoms is tabulated in Table 4, over half of participants had moderate to extreme emotional reaction to IPV. Some 119 (61.2%) had strong negative beliefs about themselves, others or about the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me). A majority 137 (71.0%) blamed themselves or someone else for the stressful (IPV) experience or what happened after intimate violence occurred, another 85 (44.0%) had strong negative feelings such as fear, horror, anger, guilt, or shame, while 118 (61.1%) had lost interest in activities that they used to enjoy. A further 115 (59.6%) had feelings of distant or cutting off from other people or isolation, 108 (56.0%) had trouble experiencing positive feelings like being unable to feel happiness or have loving feelings for people close to them, a further 106 (54.9%) had irritable behavior, angry outbursts, or acted aggressively and 83 (43.0%) took too many risks or did things that could cause them harm. Table 4 presents the hyper-arousal PTSD symptoms of the participants of which over half of participants had moderate to extreme hyper-arousal PTSD related symptoms. Some 104 (53.9%) were "super alert"or watchful or on guard, another 91 (47.2%) had jumpy or easily startled feelings, while 109 (56.9%) had difficulty in concentrating and 102 (52.8%) had trouble falling or staying asleep

Types of hyper-arousal symptoms	Severity of the symptom occurrence					
	Not at all	Rarely	Moderately	Quite a bit	Extremely	Total
Being "super alert" or watchful or on guard	47 (24.4%)	42 (21.8%)	22 (11.4%)	38 (19.7%)	44 (22.8%)	193 (100%)
Feeling jumpy or easily startled	56 (29.0%)	46 (23.8%)	27 (14.0%)	26 (13.5%)	38 (19.7%)	193 (100%)
Having difficulty concentrating	53 (27.5%)	31 (16.1%)	23 (11.9%)	43 (22.3%)	43 (22.3%)	193 (100%)
Trouble falling or staying asleep	66 (34.2%)	25 (13.0%)	26 (13.5%)	38 (19.7%)	38 (19.7%)	193 (100%)

Table 4: Hyper-arousal symptoms

In the emotional reaction picked out as PTSD symptoms is tabulated in Table 5, over half of participants had moderate to extreme emotional reaction to IPV. Some 119 (61.2%) had strong negative beliefs about themselves, others or about the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me). A majority 137 (71.0%) blamed themselves or someone else for the stressful (IPV) experience or what happened after intimate violence occurred, another 85 (44.0%) had strong negative feelings such as fear, horror, anger, guilt, or shame, while 118 (61.1%) had lost interest in activities that they used to enjoy. A further 115 (59.6%) had feelings of distant or cutting off from other people or isolation, 108 (56.0%) had trouble experiencing positive feelings like being unable to feel happiness or have loving feelings for people close to them, a further 106 (54.9%) had irritable behavior, angry outbursts, or acted aggressively and 83 (43.0%) took too many risks or did things that could cause them harm.

In-depth analysis was done to assess the severity of PTSD and results are tabulated in Table 6. The level of PTSD was very high; using a cutoff point of 30 for a respondent to meet the full criterion for PTSD. The mean score was 39.9 which are much higher than the cutoff point with a standard deviation of 20.7. This result cumulatively indicated that 128 (66.3%) participants had symptoms that meet the DSM 5 criterion for PTSD. The level of PTSD was extremely high. Some 14 (7.3%) participants had mild PTSD symptoms, 25 (13.0%) moderate and 89 (46.1%) severe PTSD symptoms that meet DSM-5 criterion for PTSD. This result cumulatively indicates that 114 (59.1%) participants had PTSD symptoms that met the DSM criteria for moderate to severe clinical PTSD.

Types of emotional reaction symptoms	Severity of the symptom occurrence					
	Not at all	Rarely	Moderately	Quite a bit	Extremely	Total
Having strong negative beliefs about self, other people, or the world	37 (19.2%)	34 (17.6%)	22 (11.4%)	43 (23.8%)	54 (28.0%)	193 (100%)
Blaming self or someone else for the stressful (IPV) experience or what happened after it IPV	29 (15.0%)	41 (21.2%)	36 (18.7%)	47 (24.4%)	54 (28.0%)`	193 (100%)
Having strong negative feelings such as fear, horror, anger, guilt, or shame	35 (18.1%)	38 (19.7%)	19 (9.8%)	35 (18.1%)	31 (16.1%)	193 (100%)
Loss of interest in activities that you used to enjoy	45 (21.8%)	33 (17.1%)	24 (12.4%)	40 (20.7%)	54 (28.0%)	193 (100%)
Feeling distant or cut off from other people or isolated	45 (23.3%)	33 (17.1%)	28 (14.5%)	41 (21.2%)	46 (23.8%)	193 (100%)
Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you	44 (22.8%)	41 (21.2%)	26 (13.5%)	37 (19.2%)	45 (23.3%)	193 (100%)
Irritable behavior, angry outbursts, or acting aggressively	52 (26.9%)	35 (18.1%)	37 (19.2%)	30 (15.5%)	39 (20.2%)	193 (100%)
Taking too many risks or doing things that could cause you harm	78 (40.4%)	32 (16.6%)	25 (13.0%)	25 (13.0%)	33 (17.1%)	193 (100%)

Table 5: Emotional reaction symptoms

PTSD symptoms severity	Frequency	Percent
0-29 Normal	65	33.7
30-35 Mild	14	7.3
36-44 Moderate	25	13.0
45 and above – Severe	89	46.1
Total	193	100

Table 6: Levels of PTSD symptoms severity

Social demographics and PTSD

Table 7 tabulates association between participants who meet the criterion of PTSD and socio-demographic characteristics. A cross tabulation between highest education attained socio-demographic characteristics indicated a statistically significant relationship; participants who had severe trauma related that met PTSD criterion 79.3% (23) had no education or primary education, this was statistically significant (p=0.012). This indicated lower education attainment could be likely cause of respondent being abused by their intimate partner causing the development of PTSD as compared to those who had attained higher education levels, particularly university education.

Covariate	Covariate		x^2 statistics	p-value
	No	Yes		
Age				
18-27years	50.0% (17/34)	50.0% (17/34)	2.2	0.546
28-37 years	35.2% (25/71)	64.8% (46/71)		
38-47 years	41.2% (21/51)	58.8% (30/51)		
48-60 years	43.2% (16/37)	56.8% (21/37)		
Type of work				
Permanent	42.9% (21/56)	57.1% (32/56)	1.020	0.600
Causal	41.1%(39/95)	58.9%(58/95)		
Unemployed	38.1% (16/42)	61.9% (26/42)		
Marital status				
Married	46.7% (49/105)	53.3% 56/105)	6.476	0.091
Divorced/Separated	26.5%(9/34)	73.5%(25/34)		
Single	42.6%(20/47)	57.4%(27/47)		
Widow	14.3% (1/7)	85.7% (6/7)		

Education level				
Primary/no education	20.7% (6/29)	79.3% (23/29)	11.032	0.012*
Secondary	45.7% (37/81)	54.3% (44/81)		
College	36.9% (24/65)	63.1% (41/65)		
University	66.7% (12/18)	33.3% (6/18)		

Table 7: PTSD and Associated Socio-demographic Characteristics

Relationship between HITS scores and PTSD

Table 8 presents the association between HITS scores that indicate severe IPV problem and PTSD according to DSM-5 criterion. DSM-5 diagnosis of clinical PTSD was higher in proportion of participants with high score on HITS (above 9) indicating clients with severe IPV experiences 72/90 (80.0%) had PTSD compared to a lower proportion of participants with a lower score on the HITS indicating no IPV 42/103 (40.8%) who had PTSD, p<0.001. This indicated that participants who had severe IPV relationships were more likely to develop PTSD.

Covariate	**PTSD**		**x^2 statistics**	**p-value**
	No (n=79)	**Yes (n=114)**		
Intimate Partner Violence				
No IPV	59.2% (61/103)	40.8% (42/103)	30.563	**<0.001**
Yes presence of IPV	20.0% (18/90)	80% (72/90)		

Table 8: IPV and Associated PTSD

Factors that predict persistence of PTSD symptoms

Results computed by use of logistic regression to predict the risk factors for development of PTSD are presented in Table 9. Participants who had severe IPV occurrences as scored on HITS scale were 5.459 times more likely to have PTSD than those with no occurrences of IPV (OR=5.459; 95% CI: 2.725-10.937; p<0.001). This means that participants with severe IPV incidences were more likely to have PTSD.

Covariate	**OR**	**(95% CI)**	**p=value**
	OR	**95% CL**	**p-value**
Age	0.860	0.614-1.206	0.383
Educational level	0.929	0.621-1.390	0.721
Marital status	1.428	0.973-2.097	0.049
Employment status	0.970	0.610-1.541	0.896
IPV severity	5.459	2.725-10.937	<0.001**
Social Support	0.998	0.983-1.012	0.743
Reference	1.099		0.49

Table 9: Multivariable Analysis of PTSD and the associated trauma related disorders

Discussion

Intimate partner violence (IPV) is a major public health issue associated with adverse health consequences for survivors such as PTSD. The social demographic responses vis-à-vis IPV revealed that older age categories had more participants meeting the HITS criterion indicating high IPV as compared to the younger age category. This finding compares to the studies in the United States by Zink *et al.*, which showed that IPV is prevalent among older aged women than younger aged women [20]. Whereas the older aged categories, 38-47, 48-60 years had more participants meeting the IPV criterion compared to the younger age criterion, the highest number of participant in the current research was in age group of 28-37 years old representing 37%. The results in this study indicate that the society has socialized females to accept and anticipate violence as a form of discipline. This finding is similar to the study by Kiprotich and Ngenowhich indicated that the IPV is a form of socialization in the Kenyan society [8]. Further, related to the current study findings are the collectivist cultures, which are patriarchal, exhibit strong gender roles which gives the men power to control women's behavior. This affirms Stewart,*et al.* research, that most collectivist cultures link masculinity to dominance, honor and aggression [2].

Most, 76.5% of the participants in this study were either divorced or separated and they had a higher prevalence of meeting severe IPV experience. This result could be postulated to mean that separation or divorce was the strongest predictor for the development of PTSD among survivors of IPV. This finding is similar to a US courts study of 1986 on 129 women who were

divorced in Philadelphia and Pennsylvania, where it was found that violence was the significant determining factor for divorce [21]. Married female members of the Kenyan society are more respected than the non-married members and therefore losing a marriage could mean losing the respect one had within the community and that could be a strong predictor of severe PTSD. Valdez,*et al.* indicated that a belief system where a woman may hold prior to the onset of abuse may lead to an increased vulnerability once the violence occurs and this may lead to the survivor staying in the relation. The societal expectations make the women stay in such relationships [22]. The survivors who were employed either permanently or on casual basis were 151(78.2%). They could take care of their economic needs and yet they kept staying in the abusive relationships. There could be many reasons for them to stay in abusive relationships despite their economic power. Some of the reason shared included the fear associated with their traumatic experience; being anxious about the partner following them, stalking and attacking them if they left. These traumatic experiences that the survivors were exposed to were too threatening and disturbing but they gradually surface later and are fully integrated. This finding is supported by Kendall's (1989) findings with a postulation that this is a natural process of self-healing [23]. This is because when fear is activated by a dangerous situation, it will lead to adaptive maneuvering by the individual to safety. In this study with the survivors of IPV, a pathological fear structure arises where the associations of the stimulus response, and meaning become a distorted reality. As argued by Foa and Kozak (1986), pathological fear structures are resistant to modification causing persistence of cognitive avoidance [24]. This explains why despite their academic and economic backgrounds; survivors still stayed in the relations that was continually traumatizing. This also affirms the Psychodynamic theory of Sigmund Freud. The survivor goes through a helpless experience and obsessive repetition of trauma that occurred, that is re-experiencing symptoms (Freud, 1939) [25]. The effects can persist long after the violence has stopped, depending on the severity of the individual's experiences of the abuse during or shortly after the incident, as reported by WHO (2012) [6].

Employment status was negatively correlated with age, the older the respondent the more likelihood of not being employed. Not being employed meant dependence on the partner economically. Participants who were either unemployed or have low income were (39) and were completely dependent on their partners. As a result, their partners used their economic power as a means to threaten the survivors who accepted the violence as a norm in the relationship. This study strengthens the point made by Stewart,*et al.* (2013) that those with low income, together with a society that is stuck to traditional gender norms or a community which has women as dependents economically, form economic status of men as social norms that are supportive of violence against women[2]. One other aspect that keeps the survivor in the relationship is the insecure attachment patterns that are linked to IPV as has been evaluated by Shurman&Rodriguez (2006) [26]. Many of the participants could not leave their relationship and this could be occasioned by insecure attachment which made it difficult for the IPV survivor to leave the abusive relationship. Downey, *et al.* (2004) confirms this that the childhood exposure to maltreatment and early rejection leads the victim to become extra vigilant to rejection from others [27]. With respect to attachment anxiety, IPV and symptoms of PTSD have a stronger relation in conditions where there is high fear of being unloved or rejected by the intimate partner [28]. This implies that those who go through IPV with high attachment anxiety have the greater risk of developing more severe PTSD symptoms. Unfortunately, some women go into the relationship expecting to be abused stemming from their childhood. They may have experienced their mothers going through the abusive relations and so grow up expecting the same within their romantic relationships. These survivors in this study might have internalized negative views of themselves, mistrusting others and opening up to tolerate abuses within romantic relations reasoning that romantic relations should always be abusive. This point is strengthened by Valdez,*et al.* (2013) and Barner and Carney (2011) who indicated that the abuse is accepted and expected by the survivors because of learnt helplessness in the face of abuse stemming from their childhood [22,29]. This also confirms what was narrated in Beck's (1967) theory of cognitive behavioral, which states that psychological issues arise as a result of maladaptive, faulty or irrational belief about ourselves, our world and others leading to distorted thoughts and judgments [30]. Thus, some of the female may venture into the relationship with the distorted belief that violence is part of the love relationship. Some of the female survivors also may go into the relationship carrying with them the early maladaptive schemas as described in Beck's (1967) cognitive theory [30]. Schemas can be defined broadly as core beliefs of self, others and the world developed during childhood which guides one's life today and it could be dysfunctional to a significant degree [31]. The schema that marriage will and should always has violence. In the area of education, all the participants had formal education except one. This meant that 99.5% of the participants were educated and 90.2% of them had achieved higher formal education from secondary school to University level. Attaining higher education as a female is an important component of marital power and yet it does not deter IPV. This point is attested to by Jin, *et al.* concerning the women of Karala who are better educated and well employed than the average Indian woman yet despite the advancement in education, IPV remains high [32].

Though education does not prevent violence, the level of education had significant relationship with reduced IPV behavior. The participants with no education or primary education had a higher prevalence of meeting IPV criterion. Education status was negatively correlated with type of employment. The participants with no education or primary education also had higher scores in PCL-5 that met the DSM-5 criterion for PTSD, as compared to those with higher education like University. This indicated lower education attainment is more likely to cause of respondent being abused by the intimate partner and develop PTSD as compared to higher education attainment, particularly university education.

The marital status of the participants ranged from single, married, divorce or separated to being a widow. More than half of the participants 105 (54.4%) were married while the rest 88 (45.6%) were either single, separated, divorced or widowed. Despite the

violence in the relationship, more than half of the participants were still living in the abusive marriage, and had no intension of getting out. This affirms the assertion by Barnett (2000) that abusive relationships are governed by patriarchal values which gives little or no power to women [33]. The women will therefore remain in the abusive relationship because of the children. Being a patriarchal society, social observance shows that children belong to the husband's family and therefore a woman separating from her husband meant she is leaving her children in the hands of her in-laws. In the case the husband remarries, these children then suffer under the care of a stepmother.

In a patriarchal society, dowry in form of a bride price paid to the woman's family seals the relationship. These survivors of IPV are likely to feel guilt, shame and even blame themselves for separating from their abusive husbands as was indicated by Karakurt, Smith & Whiting (2014) [34]. Furthermore, cultural factors play an essential role in these women staying on in the abusive marriage relationship. Women in patriarchal cultures are urged to endure rather than reject IPV since the men have power to control the behavior of the women [2]. Another factor that may make the women stay in abusive relationships is the status of marriage within the Kenyan communities. The Kikuyus among the participants reported that to be divorced or being separated from one's marriage was not accepted lightly in the Kikuyu culture. The community calls those women names such as "guchokio" (loosely interpreted as a "returnee"). The woman would thus opt to stay in the abusive relationship rather than getting out and be looked down upon by the society.

About 88 (45.6%) of the participants in the study were in the single state of life (single, separated, divorced or widows). With the exception of the widows, the rest could be staying in the single state due to the violence involved in the relationship. It was also realized that with the violence eliminated due to the separation, the physical and psychological health improve. However, even with the absence of violence, these survivors carry with them the wounds and scares of the violence they have gone through. A number of the participants had deep knife wounds, scares and bruises. One of the respondents had even been stabbed by the partner and had to be admitted and stitched several times on her belly.

The level of PTSD was very high among the participants at 66.3% and the symptoms met the DSM-5 criterion for PTSD. The HITS scores that assessed IPV, were positively correlated with PTSD scores. Increase in HITS scores were significantly related to increase in PTSD symptoms. Therefore, high scores on HITS indicated severe IPV incidences leading to the development of PTSD. The high prevalence of PTSD confirmed the psychological scars carried by the participants. This is affirmed by Stewart, *et al*. that when the relationship ends, the IPV will end with it [2]. However, the wounds and scars of domestic violence runs deep as the traumatic experience of what one has gone through can stay with one for a very long time [35]. This study, at the same time, affirms the point by Frías and Agoff (2015) that gender inequality in the social structure also condones violence because it holds the woman responsible for keeping the family together [36]. There is inequality in that these ladies earn very little and depend on their partners who may be the major breadwinners of the family.

Level of education attained was a statistically significant factor as participants who had no education or primary education (15%) had a higher prevalence of meeting IPV criterion. With higher education, the survivor improves her cognitive skills and employment chances. This raises the chances of gaining some employment, thus reducing the economic burden and dependence on the male partner. This indicates that lower education attainment, could mean no job opportunities leading to the female partner depending solely on the male partner and this could likely be the cause of the respondent being abused by the intimate partner as compared to those with higher education attainment. The female partner's physical and economic dependency on her male partner makes it hard for her to leave the abusive relationship increasing vulnerability for continued abuse. Kalmuss and Straus (1982) confirm this postulation as they indicated that the female partner's dependency on the male partner economically and emotionally increases the likelihood of violence in the relationship [37]. There are a multitude of reasons and challenges that asurvivor of IPV faces which makes her remain in the relationship. From these study findings, it would be said that oppression from the partner, social isolation from the community, fear of not being able to support herself financially, the constant violence coupled with the negative psychological sequelae, negative belief system, insecure attachment pattern and low education make it hard for the female survivors of IPV to extricate herself from IPV.

The forms of violence that the survivors go through according to WHO (2012) often exist side by side. The prevalent abuse among the participants was the verbal abuse, 81.3%, which can be traumatizing [6]. According to Hartwell-Walker (2016), it causes the self-esteem to erode and at the same time, Schumacher and Leonard (2005) have documented that verbal abuse earlier in the relationship becomes a precursor for subsequent physical abuse later in the relationship [38,39]. Physical violence constituted 67.9% of the participants and was the second highest. This result is consistent with previous studies by Torres, *et al.* (2013) and WHO (2012) which indicated that physical, sexual, and psychological abuse of women by their intimate partners is common the world over [40,6]. The third highest form of violence among the participants was threats. More than half (53.4 %) of the participants had been threatened by their intimate partners with dire consequences. The current research found the abuses in this order from the highest as verbal, followed by physical and then threats. This descending order in this study is an incidental finding.

In the area of psycho-trauma symptoms among survivors of IPV in Kayole, theparticipants showed evidence of re-experiencing, avoidance, emotional reaction and hyper-arousal attitude towards the painful incidents in their life and these symptoms meet the full criteria for PTSD in the DSM-5, pointing to the fact that the study is conforming to the American Psychiatric Association (2013), which documents that IPV is associated with PTSD [11]. The detailed symptoms according to DSM-5 include intrusive memories of the event, intense physiological distress, i.e. struggling with emotional upsets when exposed to cues that resemble

the event, difficulty falling asleep, feelings of detachment, exaggerated startle response, and hyper vigilance. These symptoms were exhibited in the participants pointing to the fact that women abused by their partners suffer higher levels PTSD, an accession supported by WHO (2012) and Karakurt, *et al.* (2014) [6,34].

Identifying the emotional symptoms related to psycho-traumatic event was done across a wide spectrum and over half of the participants in the study had moderate to extreme forms of PTSD. Even those who did not meet full criteria for PTSD, results indicated that they may suffer symptoms that strongly impact their behavior, judgment, work performance, and ability to connect with others. The emotional symptoms related to the traumatic events caused by their partners were difficult because of the various ways by which "trauma" was expressed by the survivors. Torres,*et al.* (2013) affirmed that IPV has a significant impact on mental health, especially in the areas of post-traumatic stress disorder (PTSD) [40]. Clearly evidenced in the study was the fact that over half of the participants had the symptoms of PTSD confirming the study by Rogers and Follingstad (2014), that the most commonly mental health issue that comes out of IPV is PTSD especially when there is direct relation to more severe physical abuse[41].

Conclusions and Clinical Implications

The study findings indicate that social demographic data in relation to IPV revealed that older age categories had more participants meeting the IPV criterion as compared to the younger age categories. A postulation that can be made is that older clients have experienced IPV for a longer period without intervention. Therefore, awareness creation on the effects of IPV and earlier intervention may be helpful in minimizing prolonged effects of IPV.

Divorced/Separated participants had a higher prevalence of meeting IPV criterion. This indicated IPV could be the likely cause of divorce or separation. Psychologists and clinicians working with this group must probe into the cause of the divorce or separation. Serious consideration be given to psychological education to help make her aware of the total dependence on the man and a possibly attachment negotiated wrongly from infancy and to help correct such tendencies.

Education attained plays an important role since participants with no education or primary education had a higher prevalence of meeting IPV criterion. This indicated lower education attainment could lead to no work opportunities and so tend to rely solely on the partner for daily living, causing the respondent to be abused by the intimate partner as compared to those with higher education attainment leading to work opportunities. Clients need to be encouraged to be self-sufficient; thus girl child need to be encouraged to avoid early intimate relationships but in turn complete at least secondary school education first. Some of those who have attained higher education are also stuck in the abusive relations due to attachment issue. Women with attachment issues are prone to IPV and eventually end up with psychological issues such as PTSD. The clinical and psycho-trauma issues would then need to be addressed prior to the IPV problem to be able to help the client effectively. The other area that the therapists need to assess is the attachment style of the client.PCL-5 and HITS scores in the current study are positively correlated indicating that increase in HITS (IPV) scores were significantly related to increase in PTSD symptoms. Therefore, high scores in HITS indicate severe IPV incidences which cause the development of both PTSD.

Gathering from the social demographic information of the participants revealed a number of key findings and factors compelling the survivor to continue to stay in the relationship. It was revealed that the survivors stay in the relationship even though the violent relationship leads to adverse mental effect such as PTSD which is very prevalent in the Kayole society. From the study it is realized that the violence within the relation is the precursor for the mental health outcome of PTSD.

Acknowledgement

I would like to acknowledge Dr. Michael Kihara, who was one of my supervisors, for the unreserved commitment, help and sacrificial support he gave in the creation and completion of my Doctoral Dissertation where this document has been extracted. I also want to thank Dr. Oscar Githua who was the other supervisor, for also playing an important role through his guidance at various stages of this project. Lastly, Dr. Lincoln Khasakhala, who has edited and guided my final version of my Dissertation and this paper for publication.

Funding

The study was part of my Doctoral dissertation at United States International University-Africa (USIU-Africa).

Availability of data and materials

The dataset analyzed during the current study is available with the First Author, the Corresponding Author.

Authors contributions

Anthony B. K. Amissah designed and performed the research, collected and interpreted the data, and critically revised the manuscript for important intellectual content. Michael Kihara and Oscar Githua assisted as supervisors for the research work. Finally, Anthony B. K. Amissah and Lincoln Khasakhala analyzed and interpreted the data, and wrote the manuscript. All authors have approved the final manuscript.

Ethics Approval and Consent to Participate

The USIU-Africa in Kenya IRB approved the research to be undertaken and the all participants were provided written informed consent.

References

1. Garcia-Moreno C, Jansen HA, Ellsberg M, Heise L, Watts CH (2006). Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. Lancet 368: 1260-9.

2. Stewart DE, MacMillan H, Wathen N (2013) Intimate Partner Violence. Can J Psychiatry 58: 496.

3. Martins H, Assunção L, Morais I, Magalhaes C, Magalhães T (2014) Victims of Intimate Partner Violence.The Physician's Intervention in the Portuguese National Health Service. J Family Violence 29: 315-22.

4. Swart E (2012) Gender-Based Violence in a Kenyan Slum: Creating Local, Woman-Centered Interventions. J Social Serv Res, 38: 427-38.

5. World Health Organization (2013) Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence.World Health Organization, 9789241564625, Geneva.

6. World Health Organization (2012) Understanding and addressing violence against women: Intimate Partner Violence. WHO RHR 12: 36.

7. Ward T (2002) The Management of Risk and the Design of Good Lives. Austrialian Psychologist 37.

8. Kiprotich JC, Ngeno KG (2010) The Effect of Domestic Violence in the family in Kenya.Kenya Association of Professional Counsellors Conference in Safari Park.

9. Rees S, Silove D, Chey T, Ivancic L, Steel Z, et al. (2011) Lifetime prevalence of gender-based violence in women and the relationship with mental disorders and psychosocial function. JAMA 306: 513-21.

10. Trevillion K, Oram S, Feder G, Howard LM (2012) Experiences of domestic violence and mental disorders: a systematic review and meta-analysis. PloS One 7: e51740.

11. American Psychiatric Association (2013) Diagnostic and Statistical Manual of Mental Disorders in Fifth Edition, (DSM-V). Am Psychiatric AssocWashington.

12. American Psychological Association (2010) Ethical principles of Psychologists and Code of Conduct. Retrieve from APA.

13. Softkenya.com (2012) Constituencies of Kenya.

14. Kenya National Bureau of Statistics (2009) Extracted June 2016.

15. Browne K (2007) Snowball sampling: using social networks to research non-heterosexual women. Int J Social Res 47: 60

16. Clinical Research and Methods (1998). Fam Med 30: 508-12.

17. National Center for PTSD (2013) U S Department Veterans Affairs.

18. Blevins CA, Weathers FW, Davis MT, Witte TK, Domino J L (2015) The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): Development and initial psychometric evaluation. J Trauma Stress 28: 489-98.

19. Kilpatrick D, ResnickH, Friedman M (2013) Severity of post traumatic stress symptoms- Adult. Am Psychiatric Assoc, Washington.

20. Zink T, Fisher BS, Regan S, Pabst S (2005) The Prevalence and Incidence of Intimate Partner Violence in Older Women in Primary Care Practices. J Gen Internal Med 20: 884-8.

21. Kurz D (1996) Separation, Divorce, and Woman Abuse. Violent Against Women.

22. Valdez CE, Lim BH, Lilly MM (2013) It's Going to Make the Whole Tower Crooked: Victimization Trajectories in IPV. J Family Violence 28: 131-40.

23. Kendall J (1989) Trauma in the lives of children. MacMillian Education Ltd, London.

24. Foa EB, Kozak MJ (1986) Emotional processing of fear: Exposure to corrective information. Psychological Bull 99: 20-35

25. Freud S, Moses, Monotheism, Strachey A, Tyson A (1939) The standard Edition of the complete Psychological Works of Sigmund Freud. Hogarth press and Inst Psycho Anal 18, London.

26. Shurman L, Rodriguez C (2006) Cognitive-affective predictors of women's readiness to end domestic violence relationships. J Interpersonal Violence 21: 1417-39.

27. Clinical Research and Methods (1998) Family Medicine 30: 508-12.

28. Scott S, Babcock JC (2010) Attachment as a Moderator between Intimate Partner Violence and PTSD Symptoms. J Fam Violence 25: 1-9.

29. Barner JR, Carney MM (2011) Interventions for Intimate Partner Violence: A Historical Review. J Fam Violence 26: 235-44.

30. Beck AT (1967) Depression: Causes and treatment. University of Pennsylvania Press, Philadelphia.

31. Padesky CA (1994) Schema change processes in cognitive therapy. ClinPsychol Psychotherapy 1: 267-78.

32. Jin X, Doukas A, Beiting M, Viksman A (2014) Factors Contributing to Intimate Partner Violence among Men in Kerala, India. J Fam Violence 29: 643-52.

33. Barnett OW (2000) Why battered women do not leave, part 1: External inhibiting factors within society. Trauma, Violence, & Abuse 1: 343-72.

34. Karakurt G, Smith D, Whiting J (2014) Impact of Intimate Partner Violence on Women's Mental Health. J Fam Violence 29: 693-702.

35. Walker L E (2009) The Battered Woman Syndrome (3rdedn) Springer Publishing Company New York.

36. Frías SM, Agoff MC (2015) Between Support and Vulnerability: Examining Family Support Among Women Victims of Intimate Partner Violence in Mexico. J Family Violence 30: 277-91.

37. Kalmuss DS, Straus M (1982) Wife's Marital Dependency and Wife Abuse. J Marriage Fam 44: 277-86.

38. Hartwell-Walker M (2016) Signs You Are Verbally Abused: Part I. Psych Central.

39. Schumacher JA, Leonard KE (2005) Husbands' and wives' marital adjustment, verbal aggression, and physical aggression in early marriage. J Consult ClinPsychol 73: 28-37.

40. Torres A, Garcia-Esteve L, Navarro P,Tarragona MJ, Imaz MJ, et al. (2013) Relationship between Intimate Partner Violence, Depressive Symptomatology, and Personality Traits. J Fam Violence 28: 369-79.

41. Rogers MJ, Follingstad DR (2014) Women's Exposure to Psychological Abuse: Does That Experience Predict Mental Health Outcomes?. J Fam Violence 29: 595-611.

42. Bernard HR (2002) Research methods in anthropology: Qualitative and quantitative approaches (3rd edn) Walnut Creek, CA: Altamira Press.

43. Black MC, Basile KC, Breiding MJ, Smith SG, Walters ML, et al. (2010) The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention Atlanta, Georgia.

44. Bovin MJ, Marx BP, Weathers FW, Gallagher MW, Rodriguez P, et al. (2015) Psychometric properties of the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (PCL-5) in Veterans. Psychol Assess 28: 1379-91.

45. Campbell JC (2002) Health consequences of intimate partner violence.Lancet 359: 1331-6.

46. Cramer D, Howitt DL (2004) The Sage dictionary of statistics: a practical resource for students in the social sciences. Sage Publication, London.

47. Lewis JL, Sheppard RJS (2006) Culture and communication: can landscape visualization improve forest management consultation with indigenous communities? Landscape and Urban Planning 77: 291-313.

48. Mugenda OM, Mugenda AG (2003) Research methods: Quantitative and qualitative Approaches. Nairobi: African Centre for Technology Studies.

49. Sherin KM, Sinacore JM, Li X, Zitter RE, Shakil A (1998) HITS: a short domestic violence screening tool for use in a family practice setting. Fam Med 30: 508-12.