A Comparative Study between Abused and Non-abused Women on some Clinical and Psychological Variables

Abuhegazy H [1]***, Ibrahim H*** [2]

[1]Department of Clinical Psychology, Faculty of Arts, El Menia, Egypt.

[2]Department of Psychiatry, Al Azhar University, Cairo, Egypt.

ABSTRACT

Background: Domestic violence has been recognized as both a public health issue and a health care priority. **Objective:** The study aims investigating the differences between abused and non abused women on some clinical and psychological variables: somatization, obsessive compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, psychological adjustment, and social competence. This study focused on examining the relationship between psychological abuse, physical abuse, and sexual abuse with the above mentioned variables. **Subjects and methods:** The sample consisted of (196) Saudi women, (98 abused women and 98 non abused women) the sample of abused women was drawn from king Fahad hospital, social counseling centers and units in Jeddah. All the abused women reported experiencing physical and psychological abuse from their husbands during the past year. The control group consisted of non abused women. The ages of abused women and non abused women ranged from 35-45 years. The authors used the following tools: Women abuse scale, Symptom check list, Psychological adjustment scale, and Social competence test. **Results:** There were statistically significant differences between abused women and non-abused women on somatization, depression, anxiety, obsession, interpersonal sensitivity, hostility, phobic anxiety, paranoid ideation and psychoticism in favor of abused women, and on psychological adjustment, social competence in favor of non-abused women. Results revealed positive correlation between psychological abuse on one hand and sexual abuse, somatization, obsession, interpersonal sensitivity, depression, anxiety hostility, phobic anxiety paranoid ideation, psychoticism on the other hand, negative correlation between psychological abuse and psychological adjustment.

Key words: Abused women, Non-abused women, psychological adjustment, Egypt.

(Current Psychiatry 2009;16(3):303-19)

INTRODUCTION

Domestic violence has been recognized as both a public health issue (World Health Organization 1997) and a health care priority (World Medical Association, 1996).

Within the UK, the link between domestic violence and health has been acknowledged in terms of cost implications for the National Health Service and for the individuals (Department of health, 1997). Yet clinical experience of mental health

practice suggests that it is seldom acknowledged or simply overlooked issue.

Domestic violence can occur at any age and occurs among socioeconomic, Cultural, ethnic, racial and religious groups[1]. It includes behaviors such as pushing, grabbing, kicking, slapping and punching[2], verbal abuse and threats, isolation from family and friends, control of finances and constant criticism as well as sexual abuse and marital rape[3].

Even though there is a plethora of data on domestic violence, there are only a small number of studies on the mental health effects of domestic violence. Yet the psychological impact of domestic violence can be more debilitating than physical injuries[4-5].

Therefore the present study aims at investigating:

a. Differences between abused and non abused women in some clinical and psychological variables: somatization, obsessive compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, psychological adjustment, and social competence.

b. Relationship between psychological abuse and the above variables.

c. Relationship between physical abuse and the above variables.

d. Relationship between sexual abuse and the above variables.

Prevalence of domestic violence: Intimate partner violence (IPV) against women in the United States is a pervasive public health problem. The national violence against women survey[6] suggests that 1.5 million women are assaulted by an intimate partner each year in the United States. Estimates from other population based surveys[7-8] suggest that 5-7 million women may experience partner violence overall, and nearly 2 million women are severely abused annually. Women are likely to be victimized more frequent and for longer periods of time. And they are more likely to obtain a protective or restraining order against their male partners[6].

Estimates suggest that over one fourth of the 5 million IPV incidents perpetrated against women each year result in some type of mental health counseling[9] further, the total number of mental health care visits by female victims each year is estimated by more than 18 million, representing multiple visits per woman. The economic burden of IPV is estimated at more than $6 billion/year, the majority of which is for direct medical and health care services.

***The impact of domestic violence*:** The impact of domestic violence on women's health is divesting and results in poor general, reproductive, and psychological health[10]. The effects are thought to be long-term and continue even after the violence has ended[11]. The physical impact of domestic violence is numerous including an array of trauma injuries, cardiovascular, gastrointestinal, and pregnancy and child birth complications[12-15].

The psychological consequence that result from domestic violence have the greatest impact on women's health often women who have experienced domestic violence have negative mental health issues such as depression, anxiety, substance use[17-20], post traumatic stress disorder (PTSD), suicide, phobias, dysthymia, somatization and eating disorders[15, 18, 20].

Partner abuse and mental health: Depression, anxiety and PTSD are common psychological symptoms among victims of violence. Victims of marital abuse had reported 4 times the rate of depression and 5.5 times suicidal attempts compared to their non victimized counterparts[22].

Psychological abuse has been associated with negative psychological sequel and ineffective coping[23]. Because physical abuse is often accompanied by psychological abuse, the victim self esteem gradually deteriorates, leading to a distortion of reality and an increased vulnerability to anxiety, depression and somatic symptoms[24]. Also 64% of women who had experienced severe domestic violence had one or more mental disorder[25] and women who experienced domestic violence were 4.7 times more likely to have anxiety compared to women with no experience of abuse, 3 times more likely to have depression and 2.7 times more likely to have phobias[26]. A Meta analysis of mental disorders among abused women revealed a weighted mean prevalence of 47.6% for depression and 63.8% for PTSD[27]. Emotional distress was reported by 90% of women experiencing chronic domestic violence and 75% of those experiencing intermittent abuse. Annually, 45% of female homicide victims in England and Wales are killed by a current or former partner[2].

Significant amount of the variances in women's low self esteem, depression, and anxiety are explained by their experiences with abuse[28]. Stein and Kennedy examined 3 mental health conditions among women who were victims of Intimate partner violence (IPV). Of these, 18% reported having major depressive disorder, 32% had PTSD, and 16% were comorbid for PTSD and MDD[29].

The New Jersey Domestic violence fatality review board recorded 27.3% of victims of domestic violence homicide-suicide as having contact with health care providers[30]. Interestingly, 21.3% saw mental health providers in the last 5 years. Further 12.1% of the perpetrators saw mental health professionals especially about the violence in the relationship[30]. Also, 21% of abused women had no depression or PTSD, 28% had PTSD alone and 51% had both depression and PTSD[31].

Types of abuse:

a) Psychological abuse:

Practitioners and researchers are paying increasing attention to the psychological abuse of women[32-34]. A major reason for this focus is the realization that psychological abuse may be just as detrimental as or more detrimental than physical abuse. In one study 72% of the battered women reported that emotional abuse had a more severe impact than physical abuse[31]. In another study psychological abuse was more strongly associated with psychosocial problems than threats or physical abuse[35]. In a similar vein, also among battered women, psychological abuse was a stronger predictor of the women fear than was physical abuse[36]. This finding is particularly salient because fear during a traumatic event has been identified as a strong predictor of the development of PTSD a frequent consequence of battering[37].

Along with the increased attention currently given to psychological abuse, attempts have

come to classify various forms that it takes. Direct practice work with battered women and men who batters helped to create a list of a broad range of abusive behaviors[38] some practitioners drew parallels between battered women and prisoners of war, and thus the list included techniques that are commonly used in brain washing, degradation, threats with occasional indulgences, isolation, and invalidation of perception[39]. A survey research that built on these observation and classifications has pointed to a number of different types[34] factor analyzed 58 forms of psychological maltreatment and found 2 major dimensions: dominance-isolation and emotional verbal. Using semi structured interviews a list of 5 types was created: threats of abuse, ridicule, jealousy, threats to change marriage, restriction, and damage to property[32]. Aguilar et al. divided abuse into controlling emotional and sexual/emotional, based on their cluster analysis[40]. Marshall, uncovered 6 patterns of psychological abuse through a cluster analysis of a large sample: (1) severe violence but without denigration or control of finances; (2) moderate violence and sexual abuse; (3) low on abuse but enforced isolation; (4) low levels of violence with overt criticism and several types of control; (5) several types of overtly dominating and controlling abuse and lower levels of sexual aggression; and (6) similar to cluster 5 but without pattern of help seeking[41].

Few attempts have been made to discover the forms of psychological abuse that have the most severe impacts. Ridicule, a form of emotional/verbal abuse, was identified by battered women as being the most detrimental for their emotional well being[32]. Also dominate/isolation was more strongly related to trauma and low self esteem than emotional-verbal abuse 6 months after the abuse occurred[42]. Women who experienced controlling/emotional abuse had lower self esteem scores[40]. Studies also indicated that the existence of psychological abuse is reported by women as having a worse effect than physical abuse, and is strong enough to predict PTSD, depression and low self esteem[36, 43-44]. The impact of psychological abuse alone has been relatively understudied. In general it has been found that it can be as devastating on health, if not more so, as physical abuse[13, 32, 45].

In short we can say that psychological abuse included verbal attacks (insults, humiliations); control and power (isolation from family and friends, impending decision making, economic abandonment) ; verbal threats (women and family's life threatened, threats regarding the custody of children, intimidating phone calls); and black mail (economize or emotional).

b) *Physical* abuse:

In many studies physical abuse definition included kicks, pushes, bites, slaps, chock, threaten with a knife or gun, strangling, burning[13-14, 46].

Physical health consequences of battering: Battering is a significant risk factor for a variety of physical health problems. Data from a national random survey reveal that severely battered women had almost twice of days in bed due to illness and were significantly more likely to describe their health as fair or poor[47]. Since battered women were frequently report untreated loss of consciousness because of abuse, the chronic headache often described by battered women may be inadequately diagnosed consequence of neurological damage from battering (Ibid) undiagnosed hearing, vision and concentration problems reported by battered women also suggest

possible neurological traumas resulting from battering[48-49].

Symptoms and conditions associated with the stress and fear of living with an abusive partner result in health complaints that bring battered women into contact with their providers for such conditions as chronic irritable bowel syndrome, sleep disorders and hypertension[46, 50].

Mental health consequences of battering: Depression is the primary mental health response of women who are or have been battered. Low self esteem often occurred in battered women because they blame themselves for the abuse[51]. Suicide attempts are correlated with IPV. Higher rates of PTSD have also been documented in battered women using shelters than in other women[52-53]. Substance abuse is correlated with IPV. Among battered women, 51% reported heavy alcohol use and 25% admitted alcohol dependence. These women also used sedatives and hypnotics[50]. One study seeking to describe the history of violence among drug abusing women found that the prevalence of abuse was higher than in the general population[54]. These finding may reflect a tendency for battered women who use emergency rooms to have greater problems with substance abuse.

C) Sexual abuse:

In many studies sexual abuse definitions included force or threat of harm[48, 55] or unwanted sexual experiences, even when they don't include threats or physical force[56]. Sexual abuse of women by intimate partners affects a large number of women in the US[57]. Sexual abuse among married women in physically abusive relationship was 5 to 7 times higher than the rates for women who had never been married but had no experienced of physical abuse[58]. In a national sample, regarding the national violence against women survey, 7.7% of women in the US have been raped by an intimate partner in their life time[57].

Research also suggests that intimate sexual violence (ISV) and IPV often co-occur, estimates range from 27% to 45% for the percentage of women who have experienced IPV and sexual violence by the same partner[17, 44, 55].

Physical health consequences of sexual abuse: The research on sexual victimization in general has found that sexual victimization is associated with serious negative physical health effects as gynecological symptoms[27], sexually transmitted disease (STD)[17], chronic pelvic pain[59], obesity[60], somatic complaints[59], and perception of poorer health[60-61].

Some research that has specifically examined women who have experienced ISV has also found evidence of similar physical problems. One study of women who were sexually abused by their spouses found that women ascribed a number of physical health problem, such as bladder infection, vaginal and anal bleeding, miscarriages, unwanted pregnancies and STD to their sexual abuse experiences[46].

A study on a sample of women from a domestic violence shelter revealed positive correlation between ISV and gynecologic problems[48]. In a community sample of IPV victims, women who had been sexually abused by a partner had more negative physical health problems and gynecologic problems than women who were physically abused but not sexually abused[62].

Mental health consequences of sexual abuse: Studies have also found association between ISV and mental health problems. In a survey of 3.132 household's adults, sexual abuse predicted subsequent onset of anxiety disorders, depressive episodes and substance use order among women[63]. Using a sample of IPV female victims seeking help for abuse, IPV was significant predictor of PTSD[64].

Previous studies:

Investigating psychiatric disorders of abused women revealed a high prevalence of major depression disorders (37%) and PTSD (47%) among abused women and these disorders were positively associated with abuse[65].

Binder evaluated the prevalence of fear and depression in women who were either rape or incest survivors, or both. Result revealed: A- Women who were rape survivors were more fearful and depressed than women who had never been sexually assaulted. B- Women who were incest survivors were more fearful and depressed also. C- Incest survivors were more fearful and depressed than the rape survivors. D- Women who were both incest survivors and rape survivors were more depressed and fearful than those women who had experienced either type of assault but not both[66].

Comparing abused women seeking treatment for problems of physical aggression in marriage and martially satisfied on current and past anxiety and affective disorders, family of origin experiences, and relationship characteristics results in comparison with non abused women revealed: A- Abused women reported significantly higher rates of PTSD, depression B- Abused women reported significantly more coercive control and psychological aggression by their partners as well as significantly more spouse-specific fear. C- Abused women didn't report significantly fewer perceived relationship alternatives. D- Abused women also didn't report witnessing significantly more parental violence or experiencing more child abuse[67].

In a study investigating the relationship between perceived lack of success in stopping the violence and depression revealed: A-75% of women were suffering from PTSD at the time of the interview; another 10% met the criteria for the disorder in the past. B- Greater severity of battering during the most violent year of the relationship was strongly associated with greater number of PTSD symptoms. C- Almost 60% of women were raped by their partners in addition to being battered. D- Greater frequency of rape was strongly associated with greater number of PTSD symptoms. E- 95% of the women had been clinically depressed at some time during their abusive relationship and 51% were depressed at the time of the interview. F- Women who were experiencing themselves as less successful in stopping the violence tended to be currently depressed[68].

The relationship between several psychological variables and a history of physical victimization against women by their male partners was examined reveling abused women had lower self esteem, lower self efficiency, and higher depression than the non abused women[69].

The characteristics of women physically abused by their spouses were also studied revealing that abused women reported significantly more fear of their spouses and reported that their spouses were

significantly more coercive and psychologically aggressive than women in the non-abused women. Abused women didn't report higher rates of abuse as a child nor did they report higher rates of past psychopathology than the non abused group. However abused women reported higher rates of emotional abuse in childhood and higher rate of PTSD than women in the non abused group[70].

In a cross-sectional study assessing the nature and consequences of violence against women, abused women compared with non-abused women were more severely depressed and suffered adjustment disorder and somatoform disorders[71].

Among Vietnamese refugee women, the prevalence of domestic violence and the psychiatric symptoms associated with abuse were studied in comparison with non abused women revealing: A- The life time prevalence of abuse was 53.3%. The current abuse was 36.7%. B- Abused women had significantly higher mean depression and PTSD scores and held more traditional attitudes towards sex roles and domestic violence. C- Abused women also reported significantly less partner occupational satisfaction and higher mean frequencies of partner's drinking behavior. D- Significant positive correlation between abuse and anxiety, depression and PTSD symptoms among abused women[72].

Investigating the extent to which domestic violence was part of the history of women diagnosed with depression revealed that there is 61% life time prevalence of domestic violence Abused women were found to be less healthy. Prevalence of headaches, chronic pain, rape or marital rape and sleep disorder or nightmares were significantly higher among abused women than non- abused women[18].

Wingood et al. examined the adverse consequences of intimate partner abuse among women showing that women with a history of both sexual and physical abuse were more likely to have a history of multiple sexually transmitted diseases, worry about acquiring HIV, feel depressed; use alcohol or marijuana to cope, attempt suicide, feel powerless in their relationship, experience more episodes of physical abuse, perceive their abuse as severe, and be threatened with abuse when asking that condoms be used than women experiencing physical but not sexual abuse[73]. Also history of abuse impacts women's general well being[19].

In Northern New England, women who reported either child or domestic abuse were significantly more likely to report pain symptoms than women in the control group[74].

Investigating the correlates and psychological outcomes of domestic abuse among women in a semi-industrial country using structural equation modeling to test the hypothesis that poverty and other structural inequalities would be related to incident of domestic violence in Chile, as they are in the United States, revealed: A- Lower socioeconomic status, even within poor communities and stressful life events has a direct relationship to domestic conflict. B- Domestic abuse was associated with women's mental health such that greater domestic conflict was related to higher reports of depressive affect and symptoms of PTSD[75].

In addition, women with IPV exposure reported fair/poor health, severe depressive symptoms, lower social functioning than women who have never experienced IPV[76]. Also, psychological abuse was associated with somatization. Sexual abuse with

penetration was associated with somatization but sexual abuse without penetration was not. Physical abuse was not associated with somatization when adjustments for other kind of abuse were made. Being abused in both adulthood and childhood was associated with somatization whereas being abused in childhood only was not[77].

In Brazil, a populated-abused household survey was carried out among women aged 15-49 years revealed: A- Large proportion of women reported violence (50.7%). B- Prevalence of mental disorders was 49% among women who reported any type of violence and 19.6% among those who didn't report violence. C- All physical or psychological abuse was associated with mental disorders[78].

Hypothesis of the research

There is a statistically significant differences between abused women and non abused women;

1. On the following scales: somatization, obsessive compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism in favor of abused women.

2. On emotional adjustment, family adjustment, and health adjustment in favor of non abused women.

3. On social competence in favor of non abused women.

Physical abuse sexual abuse and psychological abuse correlate positively with somatization, obsessive compulsive, interpersonal sensitivity, depression, anxiety, hostility, paranoid ideation, psychoticism, and negatively with emotional adjustment, health adjustment, social adjustment, and social competence.

SUBJECTS AND METHOD

Subjects: 196 Saudi women (98 abused women, 98 non abused women) and a control group (non abused women) were recruited from King Fahd hospital, social counseling centers and units in Jeddah. All abused women reported experiencing physical and psychological abuse from their husbands during the past year. All non abused women reported not exposing to any kind of abuse from their husbands. The age range of abused women and non abused women ranged from 35-45 years.

Instruments:

1. *Women Abuse Scale*[79]: It is 43 statements assessing a wife's experience of psychologically, physically, sexually, abusive behavior from her husband. The scale measures 3 dimensions of abuse: psychological abuse, physical abuse, sexual abuse.

2. *Symptom Check List* (SCL-90R) The (SCL -90R) was translated to Arabic[80]. It is a 90 items check list assessing psychological symptomatology. The SCL-90 is a widely used instrument consisting of 9 symptom dimensions: somatization, obsessive compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. Participants were instructed to indicate how much distress each item on the SCL–90 R had caused on a 5 point scale ranging from 0 (not at all) to 4 (extremely).

3. *Psychological Adjustment Scale* (81): It consisted of 80 items which measure 4 dimensions of adjustment emotional adjustment, health adjustment, family

adjustment and social adjustment. Participants were asked to answer all the statements by giving frank and accurate estimation on a 3 point scale ranging from 2 (extremely) to 0 (not at all).

4. *Social Competence Test*: It consisted of 10 statements which measure the social competence of the individuals. Participants were asked to describe their feeling while talking or being with others on a 4 point scale ranging from 4 (extremely) to 1 (not at all).

Standardization for the previous scales: Reliability: the internal consistency alphas for SCL full scales. Psychological adjustment subscales and social competence scale in both abused and non abused women (N=196).

Procedures: Study took place within the period of November 2007 to April 2008.
Scales were presented by the researchers individually to 98 (abused women) and 98 (non abused women) from Jeddah (the second capital of The Kingdom of Saudi Arabia). The subjects were asked to answer each item. Responses fro 196 women were statistically analyzed by use of SPSS and the values were consistently high (table 1).

Table (1)

Scales	Total Sample N=196
Somatization	.76
Obsessive Compulsive	.67
Interpersonal Sensitivity	.61
Depression	.81
Anxiety	.94
Hostility	.72
Phobic Anxiety	.81
Paranoid Ideation	.62
Psychoticism	.67
Emotional Adjustment	.87
Health Adjustment	.85
Family Adjustment	.91
Social Adjustment	.87
Social Competence	.85
Psychological Abuse	.86
Physical Abuse	.81
Sexual Abuse	.85

RESULTS

The data was analyzed to obtain mean, standard deviation, values as well as correlation coefficient.

Table (2) presents mean, standard deviation for SCL full scales, psychological adjustment sub scales, social competence in abused women and non abused women as follows:

1. For psychological abuse, physical abuse, and sexual abuse the abused women group had the highest mean.
2. For somatization, obsession, interpersonal, sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism. The abused women group had the highest mean.
3. For emotional adjustment, health adjustment, family adjustment, social adjustment, social competence, the non abused women group had the highest mean

Table (3) presents results of the t test comparing the mean scores of the two groups (abused women & non abused women on the scales) revealing that there were statistically significant differences between abused women and non abused women on:

1. Psychological abuse, physical abuse, and sexual abuse in favor of abused women.
2. Somatization, obsession, interpersonal sensitivity, depression, anxiety, hostility,

phobic anxiety, paranoid ideation and psychoticism in favor of abused women.

3. Emotional adjustment, health adjustment, family adjustment, social adjustment, and social competence in favor of non-abused women.

Table (2): Mean scores and SD on psychometric scales in abused and non abused groups

Scale	Abused women (N=98)		Non abused women (N=98)	
	M	SD	M	SD
Psychological abuse	80.01	28.09	33.95	17.44
Physical abuse	22.72	12.80	10.15	6.96
Sexual abuse	25.20	13.56	11.08	4.06
Somatization	18.10	12.95	9.37	6.05
Obsessive compulsive	16.96	13.49	13.46	4.87
Interpersonal sensitivity	13.66	11.77	7.26	5.81
Depression	15.95	12.87	8.96	5.87
Anxiety	15.98	15.17	6.89	5.04
Hostility	10.08	8.09	5.61	3.27
Phobic anxiety	15.27	13.91	5.06	2.54
Paranoid ideation	14.31	11.61	6.05	2.16
Psychoticism	12.58	13.18	6.39	2.56
Emotional adjustment	16.13	8.51	39.28	1.14
Health adjustment	13.85	5.80	37.63	2.43
Family adjustment	12.77	5.49	38.41	1.05
Social adjustment	11.37	5.75	38.64	1.92
Social competence	15.05	5.22	34.56	4.63

Table (3): t test comparing the mean of abused and non abused groups on the psychometric scale

Scale	Abused women (N=98)		Non abused women (N=98)		
	M	SD	M	SD	T
Psychological abuse	80.01	28.09	33.95	17.44	13.78**
Physical abuse	22.72	12.80	10.15	6.96	8.53**
Sexual abuse	25.20	13.56	11.08	4.06	9.87**
Somatization	18.10	12.95	9.37	6.05	6.03**
Obsessive compulsive	16.96	13.49	13.46	4.87	2.41**
Interpersonal sensitivity	13.66	11.77	7.26	5.81	4.82**
Depression	15.95	12.87	8.96	5.87	4.89**
Anxiety	15.98	15.17	6.89	5.04	5.62**
Hostility	10.08	8.09	5.61	3.27	5.57**
Phobic anxiety	15.27	13.91	5.06	2.54	7.14**
Paranoid ideation	14.31	11.61	6.05	2.16	6.92**
Psychoticism	12.58	13.18	6.39	2.56	4.55**
Emotional adjustment	16.13	8.51	39.28	1.14	26.67**
Health adjustment	13.85	5.80	37.63	2.43	37.36**
Family adjustment	12.77	5.49	38.41	1.05	45.35**
Social adjustment	11.37	5.75	38.64	1.92	44.48**
Social competence	15.05	5.22	34.56	4.63	27.66**

* Above 0.01 ** Above 0.00

Table (4) presents results of the coefficient correlation between psychological, abuse and the other variables showing that Ppsychological abuse correlated:

1. Positively with sexual abuse, somatization, obsession, interpersonal

sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism in the abused sample.
2. Negatively with emotional adjustment, health adjustment, family adjustment, social adjustment, and social competence in the abused women.
3. Positively with somatization, obsession, interpersonal sensitivity, depression, anxiety, phobic anxiety, and paranoid ideation in non abused sample.
4. Negatively with social competence in the non abused sample.

Table (4): Correlation coefficient between psychological abuse and other variables

Variables sample	Abused women (N=98)	Non abused women (N=98)
Physical abuse	.06	.08
Sexual abuse	.45*	.09
Somatization	.61*	.57*
Obsession	.32*	.29*
Interpersonal sensitivity	.48*	.57*
Depression	.34*	.48*
Anxiety	.41*	.35*
Hostility	.45*	.10
Phobic anxiety	.43*	.26*
Paranoid ideation	.50*	.35*
Psychoticism	.38*	.18
Emotional adjustment	-.26*	.05
Health adjustment	-.24*	.02
Family adjustment	-.26*	.06
Social adjustment	-.24*	.03
Social competence	-.89*	.45

Above 0.05

Table (5) presents results of the coefficient correlation between physical abuse and the other variables showing that physical abuse correlated:
1. Positively with sexual abuse, depression, anxiety, hostility, phobic anxiety and psychoticism in the abused sample.
2. Negatively with social competence in abused sample.
3. Negatively with social competence in the non abused sample.

Table (5): Correlation coefficient between physical abuse and other variable

Variables sample	Abused women (N=98)	Non abused women (N=98)
psychological abuse	.06	.08
Sexual abuse	.33*	.14
Somatization	.16	.18
Obsession	.01	.19
Interpersonal sensitivity	.01	.15
Depression	.25*	.17
Anxiety	.35*	.09
Hostility	.34*	.10
Phobic anxiety	.35*	.01
Paranoid ideation	.15	.18
Psychoticism	.22*	.01
Emotional adjustment	.09	.16
Health adjustment	.10	.09
Family adjustment	.10	.06
Social adjustment	.13	.06
Social competence	-.36*	-.32*

* Above 0.05

Table (6) presents results of the coefficient correlation between physical abuse and the other variables showing that Sexual abuse correlated:
1. Positively with psychological abuse, physical abuse, somatization, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism in the abused sample.
2. Negatively with social competence in the abused sample.
3. Positively with somatization, obsession, depression, anxiety, and hostility in the non abused sample.
Sexual abuse correlated negatively with social competence, social adjustment in the non-abused sample

Table (6): Correlation coefficient between sexual abuse and the other variables

Variables sample	Abused women (N=98)	Non abused women (N=98)
psychological abuse	.45*	.09
physical abuse	.33*	.14
Somatization	.45*	.27*
Obsession	.16	.20*
Interpersonal sensitivity	.24*	.14
Depression	.45*	.21*
Anxiety	.54*	.27*
Hostility	.53*	.22*
Phobic anxiety	.47*	.11
Paranoid ideation	.50*	.11
Psychoticism	.20*	.08
Emotional adjustment	.09	.18
Health adjustment	.14	.06
Family adjustment	.13	.01
Social adjustment	.11	-.23*
Social competence	-.66	-.45*

* Above 0.05

DISCUSSION

Results revealed that there were statistically significant differences between abused women and non-abused women on somatization in favor of abused women.

American Psychiatric Association[82] reported that the impact of abuse is sometimes manifested in the somatic symptoms that occur in the absence of organic finding.

This has been characterized as a dislocation in the body of unpleasant sensations in order to keep disruptive thoughts and feeling at bay. Symptoms such as nausea, sleep deprivation, skin problems, vomiting and physical pain can be triggered by the profound physiological and neurochemical changes in the brain caused by prolonged anxiety and stress[83]. This result is consistent with that abused women compared to non-abused women were more severely depressed and suffered somatoform disorder[71], and that women who reported either child or domestic violence were significantly more likely to report pain symptoms than women in the control group[74].

Results revealed that there were statistically significant differences between abused women and non-abused women on depression, anxiety, obsession, Interpersonal sensitivity, hostility, phobic anxiety, paranoid ideation and psychoticism in favor of abused women.

These results are in agreement with the studies that showed that victims of marital abuse had reported 4 times the rate of depression compared to their non victim's counterparts[22] and that there is high prevalence of major depression disorders among abused women[65] and also that abused women reported significantly higher rate of depression than non-abused women and reported also significantly more coercive control and psychological aggression by their partners as well as significantly more spouse-specific fear[63]. In addition many studies had similar conclusion[4, 26, 68, 71, 76]. Lam also found that abused women had lower level of self efficiency than the non-abused group women[84]. These results are also in agreement with those who reported that women who have experienced domestic violence have negative mental issues as depression, anxiety and negative mental health outcomes include phobia dysthymia, somatization[15, 17-18, 20-21].

Results revealed positive correlation between psychological abuse on one hand and sexual abuse, somatization, obsession, interpersonal sensitivity, depression, anxiety hostility, phobic anxiety paranoid ideation, and psychoticism on the other hand as previously reported[72].

Our results are also going along with some other researchers who found that domestic violence was related to higher reports of depressive affect and symptoms of PTSD[23, 75, 77-78].

Results revealed positive correlation between physical abuse on one hand sexual abuse, depression anxiety, hostility, phobic anxiety, and psychoticism on the other hand as in previous reports[24, 78].

Results revealed positive correlation between sexual abuse and psychological abuse, physical abuse, somatization depression, anxiety, hostility, phobic anxiety also as previous studies reported[63-64, 77].

REFERENCES

1. Fishbach RL, and Herbert B. Domestic violence and mental health: Correlates and conundrums within and across cultures. Soc Sci Med 1997;45(8):1161-76.
2. Home Office Domestic Violence Findings from a new British Crime Survey self-completion questionnaire. London 1999, Home Office Research Studies.
3. British Medical Association Domestic violence: a health care issue? London 1998, British Medical Association.
4. Gleason WJ. Mental disorders in battered women: An empirical study. Violence & Vict 2003;8:53-68.
5. Roberts AR, and Kim JH. Exploring the effects of head injuries among battered women: A qualitative study of chronic and severe woman battering. J Socl Serv Res 2005;32(1):33-47.
6. Tjaden P, and Thoennes N. Extent, nature, and consequences of intimate partner violence: Findings from the National Violence Against Women Survey. Report No. NCJ 18186. Washington, DC: U.S.2000 Department of justice.
7. Schafer J, Caetano R, Clark CL. Rates of intimate partner violence in the United States. Am J Public Health 1998;88(11):1702-04.
8. Straus MA, and Gelles RJ. How violent are American families? Estimates from National Family Violence Resurvey and other studies. M. A. Straus & R. J. Gelles (Eds.), Physical violence in American families: Risk factors and adaptations to violence in 8, 125 families 1990;92-112. New Brunswick, NJ: Transaction.
9. National Center for Injury Prevention and Control (NCIPC). Cost of intimate partner violence against women in the United States. 2003; Atlanta: Centers for disease control and prevention.
10. Parker G, and Lee C. Predictor of physical and emotional health in a sample of abused Australian women, J Interpers Violence 2002a;17(9):987-1001.
11. Campbell J, Jones A, Dienemann J et al. Intimate partener violence and physical health consequences. Arch Intern Med. 2002;162(10):1157.
12. Campbell JC, and Socker KL. Forced sex and intimate partner violence: Effects on women's risk and women's health. Violence Against women 1999;5:1017-35.
13. Coke A, Smith P, Bethea L et al. Physical health consequences of physical and psychological intimate partner violence. Arch Fam Med. 2000;9:451-57.
14. Mazz D, Dennerstein L, Ryan V. Physical, sexual and emotional violence against women: a general practice-based prevalence study. Med J Aust 1996;164:14-17.
15. Plichta S, and Falik M. Prevalence of violence and its implications for women's health. WHI 2001;11(3):244-58.
16. Porcerelli J, Cogan R, West P et al. Violent victimization of women and men: physical and psychiatric symptoms J Am Board Fam Pract 2003;16(1):32-9.
17. Campbell JC. Health consequences of intimate partner violence. Lancet 2002;359:1331-36.
18. Dienemann J, Boyle E, Baker D et al. Intimate partner abuse among women diagnosed with

depression. Issues Ment Health Nurs 2000;23:499-513.

19. Parker G, and Lee C. Violence and abuse: an assessment of mid-aged Australian women's experiences. Australian Psychologist 2002b;37(2):142-48.
20. Petersen R, Gazmarariam J, Andersen K. Partner violence: implications for health and community settings. WHI 2001;11(2):116-25.
21. Hegarty K, Hindmarsh E, Gilles M. Domestic Violence in Australia: Definition, prevalence and nature of presentation in clinical practice. Med J Aust 2001;173:363-67.
22. Gelles, R. J., & Straus, M. A. Intimate violence. 1988; New York: Simon & Schuster.
23. Arias, I, Street AE, Brody GH. Depression and alcohol abuse: Women's responses to psychological victimization. American Psychological Association's National Conference on Psychosocial & Behavioral Factors in Women's Health: Research, Prevention, Treatment & Service Delivery in Clinical & Community Settings. 1996; Washington, DC.
24. Maiuro RD, Cahn TS, Vitaliano PP et al. Anger, Hostility, and depression in domestically violent versus generally assaultive men and nonviolent control subjects. Consult Clin Psychol 1988;56(1):1723.
25. Danielson KK, Moffitt TE, Caspi A et al. Comorbidity between abuse pf an adult and DSM-III-R Mental Disorder: Evidence from an epiderniological study. Am J Psychiatry 1998;155(1):131-33.
26. Roberts GL, Williams GM, Lawrence JM et al. How does domestic violence affect women's mental health? Women and health 1998;28(1):117-29.
27. Golding JM, Wilsnack SC, Learman LA. Prevalence of sexual assault history among women with common gynecologic symptoms. Am J Obstet Gynecol 1998;179(4):1013-19.
28. HajYahia M.M. The incidence of wife abuse & battering & some sociodemographic correlates as revealed by two national surveys in Palestinian society. J Family Violence 2000;15(4):347374.
29. Stein MB, and Kennedy C. Major depressive and post-traumatic stress disorder co morbidity in female victims of intimate partner violence. J Affect. Disord 2001;66:133-38.
30. New Jersey Domestic Violence Fatality Review Board. New Jersey domestic violence fatality review board report. 2001;Trenton, NJ: Office on the Prevention of violence against women.
31. Nixon RD, Resick PA, Nishith P. An exploration of co-morbid depression among female victims of intimate partner violence with posttraumatic stress disorder. J Affect Disord 2004;82:315-20.
32. Follingstad DR, Rultedge LL, Berg BJ et al. The role of emotional abuse in physically abusive relationships. J family Violence 1990;5:107-20.
33. Loring MT. Emotional abuse. 1994;New York: Lexington Books.
34. Tolman RM. The development of a measure of psychological maltreatment of women by their male partners. Violence and Vict 1989;4:159-78.
35. Tolman RM, and Bhosley G. The outcome of participation in a sheltersponsored program form men who batter. In D. Knudsen & J. Miller (Eds.), Abused and Battered: Social and legal Responses. 1991;New York: Aldine de Gruyter.
36. Sackett LA, and Saunders DG. The impact of different forms of psychological abuse on battered women. Violence Vict 1999;14(1):105-17.
37. Arias I, and Pape KT. Contribution of psychological abuse to psychological adjustment and relationship stability among battered women. Violence Vict 1999;14:55-67.
38. Pence E, and Paymar M. Education groups for men who batter. 1993; New York: Springer Publishing.
39. Walker LE. The battered woman syndrome. 1984;New York: Harper & Row.
40. Aguilar RJ, and Nightingale NN. The impact of specific battering experiences on the self-esteem of abused women. J Family Violence 1994;9:3546.

41. Marshall L. Psychological abuse of women: Six distinct clusters. J Family Violence 1996;11:379-410.

42. Dutton DG & Painter S. Emotional attachment in abusive relationships. Violence Vict 1993;8:105-20.

43. Street AE & Arias I. Psychological abuse and posttraumatic stress disorder in battered women: Examining the roles of shame and guilt. Violence Vict 2001;16(1):65-78.

44. Vitanza S, Vogel LCM, Marshall LL. Distress & symptoms of posttraumatic stress disorder in abused omen. Violence Vict 1995;10:23-34.

45. O'leary KD. Psychological abuse: A variable deerving critical attention in domestic violence. Violence Vict 1999;14(1):3-23.

46. Campbell JC, and Alford P. The dark consequences of marital rape. Am J Nurs 1989;89(1):946-49.

47. Gelles RJ & Straus MA. The medical & psychological costs of family violence. In Physical Violence in American Families: Risk Factors & Adaptations to violence. 1990; 145. New Brunswick: Transaction Publishers.

48. Eby KK, Campbell JC, Sullivan CM et al. Health effects of experiences of sexual violence for women with abusive partners. Health Care Women Int 1995;16:563-76

49. Campbell JC, Pliska MJ, Taylor W et al. Battered women's experiences in emergency department need for appropriate policy & procedures, J Emerg Nurs 1994;20:280-88.

50. Bergman B, Larsson G, Brismar B et al. Battered wives & female alcoholics: a comparative social & psychiatric study. J Adv Nursing 1989;14:727-34.

51. Cantos AL, Neiig PH, O'leary KD. Men and women's attributions of blame for domestic violence. J Fam violence 1993;8(4):289-302.

52. Campbell R, Sullivan CM, Davidson WS. Depression in women who use domestic violence shelters: a longitudinal analysis. Wom Studies Q 1995;19:237-55.

53. Ratner PA. The incidence of wife abuse and mental health status in abused wives in Edmonton, Alberta. Canad J Pub Health 1993;84(4):246-49.

54. Hotlaing GT, and Sugarman DB. A risk marker analysis of assaulted ives. J Fam Violence 1990;5:1-3.

55. Shields NM, and Hanneke CR. Battered wives' reactions to material rape. In D. Finkel, R. Celles, G. Hotaling, & M. Straus (Eds.), the dark side of families: Current family violence research 1983;131-48. Thousand Oaks, CA: Sage Publications.

56. Zweig JM, Crockett LJ, Sayer T, et al. A longitudinal examination of the consequences of sexual victimization for rural young adult women. J Sex Res 1999;36(4):396-4094.

57. Tijaden P, and Thoennes N. Prevalence, incidence and consequences of violence against women: Findings from the National Violence against Women Survey (NCJ Publication No. 172837). 1998;Washington, DC: U.S. Department of justice. National institute of justice.

58. Mahoney P, and Williams L. Sexual assault in marriage: Prevalence, consequences, and treatment of wife rape. In J. L. Jasinkski & L. M. Williams (Eds.), Fanner violence: A comprehensive review of 20 years of research 1998;113-57). Thousand Oaks, CA: Sage publications.

59. Drossman DA, Leserman J, Nachman, G et al. Sexual and physical abuse in women with functional or organic gastrointestinal disorder. Annals of Internal Medicine 1990;113:828-33.

60. Cloutier S, Martin SL & Poole C. Sexual assault among North Carolina women: Prevalence & health risk factors. J Epidemiol Community Health 2002;56:265-71.

61. Golding JM, Cooper ML & George LK. Sexual assault history and health perception: Seven general population Studies. Health psychology 1997;16(5):417-25.

62. Campbell JC & Socker KL. Women's responses to battering: a test of the model. Research Nursing & Health 1999;22:49-58.

63. Burnam MA, Stein JA, Golding JM, et al. Sexual assault and mental disorders in a community population. J Consult Clin Psychol 1988;56(6):843-50.

64. Bennice J, Resick P, Mechanic M et al. The relative effects of intimate partner physical and

sexual violence on post-traumatic stress disorder symptomatology. Violence Vict 2003;18(1):87-93.

65. West, C Psychiatric disorder of abused women at shelter, psychiatric Quarterly 1990;61(4):295-301.
66. Binder B. The prevalence of fear & depression in sexually abused women: an analysis of archival data. DAI 1991;52(12b):6652.
67. Casardi M. and Murphy C.M. Psychological Agression and Abuse in Marriage», R. L. Hampton et T.P. Gullota, Family Violence : Prevention & Treatment. 1993; Newbury Park (CA), Sage Publications : 86-112.
68. Stitt M. Post traumatic stress disorder and battered women. DAI 1993;54(43):2225.
69. Orava T. Perception of control, depressive symptomatology, and self-esteem in abused women, DAI 1994;33(4):1345.
70. Cascardi M., O'Leary K.D., La Wrence E. et al. Characteristic of women physically abused by their spouses and who seek treatment regarding marital conflict. J Consult. Clin. Psychol 1995;63:616-23.
71. Romanathan S. Violence against women. Inter Med J 1996;3(2):145-48.
72. Tranc C. Domestic violence among Vietnamese refugee women: prevalence, abuse characteristics, psychiatric symptoms, and psychosocial factors, DAI 1997;57(11b):7239.
73. Wingood GM., DiClemente RJ., Raj A. Adverse consequences of intimate partner abuse among women in non-urban domestic violence shelters. Am J Prev Med 2000;19(4):270-75.
74. Kendall T, and Kathleen R. chronic pain syndromes and violence against women, women and therapy, 2003;26(1-2):45-56.
75. Ceballo R, Ramirez C, Castillo M. Domestic violence and women's mental health in chili, Psychol Women Q 2004;28(4):298-308.
76. Bonomi A, Robert S, Melissa R. Intimate partner violence and women's physical, mental and social functioning, Am J Prev Med 2006;30(6):458-66.
77. Samelius L, Wijma B, Wingren G et al. Somatization in abused women, J Women's Health 2007;16(6):909-18.
78. Ludermir A, Bernada S, Lilia B. Violence against women by their intimate partners and common mental disorders, Soc Sci Med 2008;66(4):1008-18.
79. هبة محمد على (٢٠٠٣) إستبيان الإساءة إلى المرأة القاهرة: مكتبة الأنجلو المصرية
80. عبد الرقيب البحيرى (١٩٨٤) : قائمة مراجعة الأغراض (SCL -90)
81. سلسلة الإختيارات السيكولوجية المصرية المقننة ' مكتبة النهضة المصرية;القاهرة
82. زينب شقير (٢٠٠٣) مقياس التوافق النفسى' القاهرة : مكتبة النهضة المصرية.
83. American Psychiatric Association Diagnostic and statistical manual of mental disorder. 2000; Washington, DC, American psychiatric association.
84. Van der Kolk, BA. The Psychological Consequences of Overwhelming Life Experiences. In B. A. van der Kolk (Ed.), Psychological Trauma, 1987; Washington DC: American Psychiatric Press.
85. Lam J. self efficiency and coping responses in lower socio economic status African American women involved in abusive relationships, DAI 1997;59(8b):4471.

Author of correspondence:

Heba Abuhegazy, Department of Clinical Psychology, Faculty of Arts, El Menia, Egypt.