

Psychiatric morbidity among internally displaced persons (IDPs) in Nazrawa camp, Kirkuk Governorate-Iraq

Radhwan Abdul Majeed Al-Tuhafy¹, Ghaydaa Ahmed AL-Kazzaz²,
Omar Ahmed Deab³, Dhilal Ahmed Deab⁴

¹M.B.Ch.B, Ibn-Sena Teaching Hospital

²F.I.M.S (Psych) - M.B.Ch.B, Ibn-Sena Teaching Hospital

³D.R.M.R - M.B.Ch.B, Al-Karama Teaching Hospital

⁴F.I.C.M.S (Cardiothoracic Surgen) CIBMS Family Medicine Al-Khansaa Teaching Hospital

ABSTRACT

Background: There was an extensive forced displacement of the Iraqi civilians to host areas after the attack and the invasion of the Islamic State in Iraq and Sham terrorists to their original areas which lead to a huge humanitarian catastrophe and exposure of the civilians to traumatic events. **Method:** A cross-sectional observational study was conducted among a randomly selected sample of internally displaced persons (IDPs) in Nazrawa camp, Kirkuk governorate-Iraq, consisted of 746 adult participants aged 18-60+ years old, assessing the psychiatric morbidity among them using the MINI international neuropsychiatric interview 5.0 (the Arabic version). **Results:** The psychiatric morbidity among the IDPs participants was 76.27%. Post-traumatic stress disorders formed 37.9% of the psychiatric morbidity, while the major depressive episodes formed 22.1%, and the comorbid psychiatric disorders were 17.9%. the following factors were significantly associated with psychiatric morbidity: those whose age were 60 years old and more; odd ratio 0.507, 95% CI (0.145-0.731), females; 0.342 (0.231-0.513), widowed; 0.413 (0.231-0.513), illiterates; 0.655 (0.312-0.761), unemployed; 1.0 (0.94-1.04), retired; 0.608 (0.536-0.711), very bad household economic status; 0.532 (0.214-0.708), participants who were exposed to two traumatic events; 4.7 (1.25-18.82). **Conclusion:** This study used a standardized tool for diagnosing the psychiatric morbidity among the IDPs participants and to give as much as possible an actual description of the problem and the impact of the man-made disasters on the mental health of the participants, highlighting the need to explore the broader mental health issues of the vulnerable populations affected by the forced displacement and with the extreme needs to build a more specific mental health services programs much needed by this population.

Key words: Psychiatric morbidity, Nazrawa camp, IDPs.

HOW TO CITE THIS ARTICLE

Radhwan Abdul Majeed Al-Tuhafy, Ghaydaa Ahmed AL-Kazzaz, Omar Ahmed Deab, Dhilal Ahmed Deab, "Psychiatric morbidity among internally displaced persons (IDPs) in Nazrawa camp, Kirkuk Governorate-Iraq", International Journal of Enhanced Research in Science, Technology & Engineering, ISSN: 2319-7463, Vol. 7 Issue 5, May -2018.

INTRODUCTION

Internal conflict in Iraq caused forced displacement of non-combat populations and this is a common global occurrence [1-2], which is usually associated with substantial health and social impact on the internally displaced persons (IDPs), including acute and long-term effects on mental health [3-5]. Forced displacement can last from short intervals (few months), to much longer period [6]. The nature of the conflict that caused displacement, the ongoing geo-political situation and the choice of the displaced population may define the outcome of the displacement process [6]. IDPs are often neglected when the displacement is prolonged with adverse social, cultural and health impacts [7-9]

Continuation of the conflict in the area of origin has been found to be associated with poorer mental health outcomes in those displaced [10-11]. Most of the forced and prolonged displacement take place against a backdrop of resource poor

settings with social vulnerability, lack of adequate infra-structures along with loss of hope for the future which can act as to compound the already raised risk of mental disorders among the IDPs^[11]. Mental disorders associated with forced internal displacement are varied^[3], and most studies have focused on a limited number of disorders such as post-traumatic stress disorder, anxiety, depression^[12].

In Iraq, the Islamic state in Iraq and Syria (ISIS) terrorists occupied huge areas and cities in the north and west of the country including big cities like Mosul, Tikrit, Ramadi, besides hundreds of small towns and villages in those territories, which led to a vast number of people to fled from the areas of origin to a safer host area. This crisis posed a serious humanitarian social, economic challenges besides the disruption of the host communities. While fleeing from the area of origin occupied by ISIS terrorists, the IDPs were sniped by ISIS members or subjected to explosive packages or mines which led to killing or serious injuries of the IDPs or witnessing of these traumatic events or evacuation under dangerous conditions. Most of the IDPs lost their properties by confiscation or destruction. The economic status of the IDPs is very bad and some of them were subjected to forced separation from their families. In the camps, many of the IDPs were bothered by the security procedures accomplishes by the security forces with restrictions on their movement or forced searching of their tents along with the bad living environments, bad weather and lack of food and water supply and the over crowdedness in the tents which had adverse impacts on the mental health.

Aim of the study: first: The aim of this study was to assess the presence of psychiatric disorders in a sample of IDPs settled in Nazrawa Camp-Kirkuk governorate. Second; To highlight the correlation between the psychiatric morbidity and many socio-demographic variants; and third; to view the impact of many traumatic events which encountered the IDPs, on their mental health.

METHOD

1. Design of the study: This is a cross-sectional observational study conducted in Nazrawa camp for the IDPs in Kirkuk governorate from the 15th of January 2017 till the 14th of July 2017.

2. Setting: Nazrawa camp was established by the UNHCR in 2015, located in the south east of Kirkuk city to receive the IDPs whose areas of origin were invaded by ISIS terrorist (mainly from Mosul, Tikrit, Ramadi and parts of Kirkuk governorates more than 10000 IDPs were settled in this camp from those areas (the majority of them were from Hawiga district). There was ongoing influx of more IDPs to this camp in the years 2016-2017 who were settled later on in this camp. The camp was divided into 16 sectors each sector contained 100-110 tents.

3. Participants: More than 800 randomly selected IDPs (from both sexes) in Nazrawa camp were invited to participate in this study. 746 personnel were reacted positively to this invitation. 3 clinicians (one of them was psychiatrist) conducted the interviews with the participants. The inclusion criteria were:

- The IDPs must be Iraqi nationality
- The participants must be IDPs who are settled in the camp
- They didn't complain of any cognitive or communication problems
- Their age range was 18-79 years old.
- The participants must give a consent for their participation in the research.

Interviewing the participants was done in 3 areas inside the camp:

The first area was in the sectors of the camp, the researcher conducted the interviews through a random walking method in between the tents inside the sector chosen. The household in each tent was randomly selected as the researcher choses a tent number and then select a tent from every 3 consecutive tents in the sector, then 2 adult family members were selected from each household and invited to participate in the interview. The interview was done with the participant alone inside the tent after evacuating it from the other members of the family.

The second area was the waiting area inside the primary health care center in the camp. The invitation to participate in the interview was done after the triage process was done and the participants were selected randomly without knowing whether they are patients or accompanied persons with the patients. The interview was done inside the room of the psychosocial support activities inside the PHCC.

The third area was the collection area of the newly IDPs attendees to the camp which was situated near the camp management office. The sample was selected randomly in this area and the participants were invited to the interview which was done in one of the camp management room.

The researchers met at the end of every week to discuss the result they gain and any obstacles they face during the data collection. At the end of the study, the data were subjected to statistical analysis.

Tools:

The researchers used the M.I.N.I the international neuropsychiatric interview modules (the Arabic version) in this study (13,14,15). The M.I.N.I. was designed as a brief structured interview for the major Axis I psychiatric disorders in DSM-IV and ICD-10. Validation and reliability studies have been done comparing the M.I.N.I. to the SCID-P and the CIDI. The results of these studies show that the M.I.N.I. has acceptably high validation and reliability scores but can be administered in a much shorter period of time (mean 18.7 ± 11.6 min., median 15 min.) than the above referenced instruments. It can be used by clinicians, after a brief training session. Lay interviewers require more extensive training. To use the modules in the interview we must take into account the followings:

The interview: In order to keep the interview as brief as possible, the researchers informed the patient that they will conduct a clinical interview that is more structured than usual, with very precise questions about psychological problems which requires a yes or no answer.

General format: The M.I.N.I. is divided into modules identified by letters, each corresponding to a diagnostic category. At the beginning of each module (except for psychotic disorders module), screening question(s) corresponding to the main criteria the disorder is presented in a gray box. At the end of each module, diagnostic box(es) permit(s) the clinician to indicate whether the diagnostic criteria are met.

Conventions: Rating instructions: All questions read must be rated. The rating is done at the right of each question by circling either YES or NO. The clinician should be sure that each dimension of *Sentences written in « normal font »* should be read exactly as written to the patient in order to standardize the assessment of diagnostic criteria. *Sentences written in « CAPITALS »* should not to be read to the patient. They are *instructions* for the interviewer to assist in the scoring of the diagnostic algorithms. *Sentences written in « bold »* indicate the time frame being investigated. The interviewer should read them as often as necessary. Only symptoms occurring during the time frame indicated should be considered in scoring the responses. *Sentences (in parentheses)* are clinical examples of the symptom. These may be read to the patient to clarify the question. *Answers with an arrow above them (→)* indicate that one of the criteria necessary for the diagnosis(es) is not met. In this case, the interviewer should go to the end of the module, to circle « NO » in all the diagnostic boxes and move to the next module.

When terms are separated by a *slash (/)*, the interviewer should read only those symptoms known to be present in the patient (for example, question A3). The question is taken into account by the patient (i.e.: time frame, frequency, severity, « and/or » alternatives). Symptoms better accounted for by an organic cause or by the use of alcohol or drugs should not be coded positive in the M.I.N.I.

The socio-demographic variables were taken into account in this study (age, gender, marital status, employment status inside the camp, economic status inside the camp)

Six Traumatic events the participants may be subjected to, were taken into consideration like (forced separation from their families, witnessing murders, confiscation or destruction of their properties, evacuation from their original area under dangerous conditions, physical injuries due to combat situations, tortured by ISIS terrorists. The reply to this questionnaire was (yes or no). the number of participants who were subjected to one or more than one traumatic events with its correlation to the psychiatric morbidity were considered in the study.

Ethical considerations:

Ethical approval of this research was taken from the ethics committee in Kirkuk general coordination of health. A permission to do the study was taken from the IRD camp management office. A written consent was taken from every participant after taking the signature or their finger prints (for the illiterate participants).

Statistical analysis:

Statistical analysis was performed using statistical package for social sciences, version 17.0 for windows (16). the categorical variables, differences were analyzed with X² (chi square) test and Fisher Exact test when appropriate. P value of < 0.05 was considered statistically significant.

RESULTS

Prevalence of psychiatric morbidity:

The prevalence of the psychiatric morbidity among the internally displaced persons (IDPs) in this study was five hundred sixty-nine (76.27%) participants out of seven hundred forty-six persons (Table 1). post-traumatic stress disorder formed the highest frequency of the psychiatric disorders among the affected sample of the IDPs (216, 37.9%), followed by the major depressive episodes (126, 22.1%). The comorbid psychiatric disorders formed the third rank in

frequency (102, 17.92%), they were mainly between major depressive episodes and suicidality (23.04%), post-traumatic stress disorder and major depressive episodes (13.8%). Severe mental disorders.

*Comorbid major depressive episodes and suicidality (23, 4.04%), Comorbid major depressive episodes and P.T.S.D (79,13.8%),

Table (1): participants out of seven hundred forty-six persons

*Diagnoses (569 psychiatric cases out of 746 participants)	frequency	Percentage
Major depressive episodes	126	22.14%
Major depressive episodes with melancholic features	41	7.2%
Dysthymia	7	1.23%
**suicidality (alone)	0	0
(Hypo) Manic episodes	1	0.17%
Panic attacks	8	1.4%
Agoraphobia	3	0.52%
Social phobia	8	1.4%
Obsessive compulsive disorder	14	2.46%
Post-traumatic stress disorder	216	37.9%
Alcohol dependence/abuse	4	0.7%
Drug dependence/abuse	9	1.58%
Psychotic disorders	7	1.23%
Anorexia nervosa	0	0
Bulimia nervosa	0	0
Generalized anxiety disorders	12	2.1%
Antisocial personality	9	1.58%
*Comorbid psychiatric disorders	102	17.92%

b. Socio demographic profile:

A total of seven hundred forty-six participants were interviewed with an overall 100% response rate obtained. The appropriately weighted distributions of covariates in the sample are displayed in (Table 2) (age groups, gender, marital status, educational status, household economic status.

Table (2): The appropriately weighted distributions of covariates.

	Total number (746)	Psychiatric disorders		OR CI (95%)	P value
		+ve	-ve		
Age (years)					
18-39 years old	217	149	68		
40-59 years old	408	312	96		
60 + years old	121	108	13	0.507 (0.145-0.731)	0.0005
Gender					
Females	427	361	66	0.342 (0.2416-0.4858)	0.0002
Males	319	208	111		
Marital status					
Single	297	168	129		
Married	382	324	58		
Widowed	67	67	0	0.413 (0.231-0.513)	0.0005
Education status					
Higher school	79	40	39		
Secondary school	102	65	37		
Primary school	209	148	61		
Illiterate	356	316	40	0.655 (0.312-0.761)	0.0007
Employment status in the camp					
Fixed employment	67	13	54		
Occasional employee	142	96	46		
Unemployed	489	438	51	1.0 (0.94-1.04)	0.024
Retired	48	22		0.608 (0.536-0.711)	0.0007

Household economic status					
Good	0	0	0		
Average	96	23	73		
Bad	515	411	104		
Very bad	135	135	0	0.532 (0.214-0.708)	0.0005

c. Unadjusted associations of the sociodemographic variables with mental disorders:

In (Table 2) mental disorders were significantly associated with old ages, female gender, widowed, unemployment, and retarded IDPs. It is associated too with the very bad household economic status ($p < 0.05$)

d. Associations between psychiatric morbidities and traumatic events (Table 3):

A high number of IDPs (431) were subjected to evacuation from their original areas under dangerous conditions, while (388) IDPs were exposed to confiscation or destruction of their properties by ISIS terrorists. Some of the participants witnessed murders in their original areas (117) and 68 internally displaced persons were tortured by ISIS members. Fifty-five IDPs were forcefully separating from their families while they fled from their original areas. A least number of the participants had physical injuries or disabilities due to combat situations. There is an overlap in the number of the participants who were exposed to the traumatic events (Table 4), so, 167 participants were exposed to one traumatic event and complained of the least psychiatric morbidity (52.61%), while those who were exposed to two traumatic events had significant psychiatric morbidity (80.16%). IDPs who were exposed to three or more traumatic events had a highly significant psychiatric morbidity (100%).

Table (3): Association between psychiatric morbidities and traumatic events

Traumatic events	Number if the IDPs subjected to the traumatic events
Forced separation from their families	55
Witnessing murder	117
Confiscation or destruction of their properties	388
Evacuation under dangerous conditions	431
Physical injuries due to combat situations	49
Tortured by ISIS terrorists	68

Table (4): The effect of traumatic events

Number of traumatic events	Number of IDPs subjected to the traumatic events	Number of IDPs who had psychiatric disorders	Number of IDPs who had no psychiatric disorders	Percent %	OR CI (95%)	P VALUE
Participants who were subjected to one traumatic event	167	88	79	52.6%		
Participants who were subjected to two traumatic events	494	396	98	80.16%	4.7 (1.25-18.28)	0.015
Participants who were subjected to three or more traumatic events	85	85	0	100%	7.9 (0.684-0.81)	0.00003

DISCUSSION

In this study, the psychiatric morbidity among the IDPs in Nazrawa camp was (76.27%). This result is comparable to a similar study performed on afghan refugee in Peshawar, Pakistan (80%) (17) and to another study conducted among the IDPs in South Darfur (62.2%) (18) and a similar rates of psychiatric morbidity were found in the study conducted by Musa and Hamid (2010) who found that 72% of participants had a psychiatric condition using the General Health Questionnaire (GHQ-28) ^[19], but it is higher than the psychiatric morbidity found among the internally displaced persons in Sindh (42%) ^[20].

The IDPs in Nazrawa camp fled under very difficult situations from their original areas and exposed to a catastrophic traumatic events during their presence in the original areas and when they were evacuated beside the difficulties inside the camp which include the strict restrictions on their movement outside the camp and the confiscation of their identity cards by the security forces inside the camp besides the shortage in food and water and the bad living environment in their tents.

In the current study, the psychiatric morbidity among the internally displaced females is significantly higher than that in males (84.54% vs 65.2%). This result is comparable to the finding in the study which was done in south Darfur in which the psychiatric morbidity in the females was 91.1% ^[18], and more than the findings in the internally displaced females in Sindh (65.6%) ^[20]. This reflected the high susceptibility of the females to the negative impact of the trauma of the displacement and usual they represented their psychological complaints in more somatic symptoms.

The lowest psychiatric morbidity was found in postgraduate participants while the highest morbidity was found in the illiterates and those who are unemployed who suffered of very bad economic status with the lack of the opportunities to get employment due their low qualifications and the low financial status due to the circumstances of the forced displacement and the impact of the bad living situations in the camp. Lack of proper employment in the host areas may be due to the geographical resources limitation besides the difficulties in engaging the host communities with the resultant negative attitudes against the internally displaced persons ^[21]. These finding are consistent with the same results in other similar studies ^[22-23].

This study found that as the age increased, there will be a higher psychiatric morbidity which is very significant in those whose ages were more than sixty years old (100% of them complained of psychiatric disorders). This result is consistent with a result obtained in a similar study on the IDPs of Darfur ^[18] and the study which was done in Nakuru county in Kenya ^[24]. This indicated that older IDPs were potentially equipped with the burden of the forced displacement as the found that those events were more difficult to them to regain their social status that they had enjoyed in their original areas and societies.

A significantly high psychiatric morbidity was found among widowed IDPs. Most of the lost their husbands in the combat operations or executed by ISIS terrorists besides the lack of the economic and the family supports with the added burden of rearing their children without any financial support, these results are in line with the finding of the Kenyan study conducted among the IDPs of Nakuru county ^[24]. There is a significant correlation between the psychiatric morbidity and retirement in this study. Most of the retired participants were within the old age group, most of them were living alone and separated away from their families who stayed in the original areas besides the exposure to the catastrophic traumatic events during their displacement.

All the participants in this study were subjected to traumatic events. A high number of them faced confiscation or destruction of their properties (n:431) (Table 4), while the remaining participants were exposed to forced separation from their families or had physical injuries or disabilities due to combat conditions, some of them were tortured by ISIS members. A direct correlation between the number of the traumatic events the participants subjected to and psychiatric morbidity was highlighted in this study. 53.6% of the participants who were exposed to one traumatic event complained of psychiatric disorders while 80.16% of those who faced two traumatic events had mental problems. A significant percent of the participants (100%) who were subjected to three or more traumatic events complained of different psychiatric disorders which reveal the heavy impact of those events on their mental health.

The highest frequency of the psychiatric disorders was the complaint of post-traumatic disorders (n: 216, 37.9%), followed by the complaint of major depressive episodes (n:126, 22.14%). These findings are consistent with the finding of other similar studies ^[18,19,20,24].

This study used a standardized tool for diagnosing the psychiatric morbidity among the IDPs in one of the IDPs camp in Kirkuk governorate-Iraq (Nazrawa camp) which was performed by three clinician who were IDPs as well to give as much as possible an actual description of the problems of internal and forced displacement and the psychiatric morbidity caused by human-made disasters, hoping that this study will help to lead to a more detailed and specific mental health service program much needed by this population.

Limitation of this study:

This study might be limited by the sample selection, as we might have missed many complaining of mental disorders due to the random selection criteria of the participants in each sector of the camp. The small sample size formed another limitation in the current study. The cross-sectional design mean that causations can't be attributed and the temporal relationship between risk factors and outcome can't be inferred, as a result, the reverse causality can't be excluded for the more subjective risk factors. The restrictions that was put on the movement of the researchers inside the camp for security reasons formed a dilemma facing the researchers there.

REFERENCES

- [1]. Chesmal S, Anshka A, Gayan P, Sisira S, Melanie A, Athula S, Robert S. Prolonged internal displacement and common mental disorders in Sirilanka: The COMRAID STUDY. PLOS ONE/www.plosone.org. (2013) May; 18 (5): e647442.
- [2]. IDMC. Internal Displacement Monitoring Center (2012) Global IDP statistics. www.internal-displacement.org. Accessed on 27 June2012.
- [3]. Neuner F, Elbert T (2007) The mental health disaster in conflict settings:scientific research help? BMC Public Health 7:275.
- [4]. Porter M, Haslam N (2005) Pre-displacement and Post-displacement Factors Associated with Mental Health of Refugees and Internally Displaced Persons: Meta-analysis. JAMA 294(5):602–612
- [5]. Kuwert P, Brahler E, Glaesmer H, Freyberger HJ, Decker O (2009) Impact of forced displacement during World War II on the present-day mental health of the elderly: a population-based study. Int Psychogeriatr 21(4):748–753.
- [6]. Thomas SL, Thomas SDM (2004) Displacement & health. Br Med Bull 69: 115–127
- [7]. World Health Organization (2003) Mental and social aspects of health of populations exposed to extreme stressors. Geneva WHO (<http://www.who.int/hac/techguidance/pht/8656.pdf>).
- [8]. Roberts B, Ocaña F, Browne J, Oyok T, Sondrop E (2009 a) Factors associate with the health status of internally displaced persons in northern Uganda J Epidemiol Community Health 63: 227–232.
- [9]. Gu'lsen C, Knipscheer J, Kleber R (2010) The impact of forced migration on mental health: a comparative study on posttraumatic stress among internally displaced people and externally migrated Kurdish women. Traumatology 16(4):109–16.
- [10]. Roberts B, Damundu EY, Lomoro O, Sondorp E (2009 b) Post-conflict mental health needs: a cross-sectional survey of trauma, depression and associate factors in Juba, Southern Sudan. BMC Psychiatry 9: 7.
- [11]. Bozzoli C, Bru'ck T, Muhumuza T (2012) Movers or stayers? Understanding the drivers of IDP camp decongestion during post-conflict recovery in Uganda. German Institute for Economic Research. Berlin.
- [12]. De Jong JT, Komproe IH, Van Ommeren M (2003) Common mental disorder in postconflict settings. Lancet 361(9375): 2128–2130.
- [13]. Sadek A, Ghanem M, Sheehan D, Asaad T, Sheehan K, Albehairy A (2002): Comparison of the MINI international neuropsychiatric interview (M.I.N.I) with the composite international diagnostic interview (CIDI): In an Egyptian sample presenting with addiction disorders. MD thesis. Ain Shams university. Psychiatric Institute.
- [14]. Ghanem M, Sheehan D, Omar A, Sheehan K, El-Rasheed A, Maghraby H.M (2002): Comparison of the MINI international neuropsychiatric interview (M.I.N.I) with the composite international diagnostic interview (CIDI): In an Egyptian sample presenting with psychotic disorders. MD thesis. Ain Shams university. Psychiatric Institute.
- [15]. Sheehan DV, Lecrubier Y, Hamett-Sheehan K, Janavs J, Weiller E, Evans T, et al. reliability and validity of MINI international neuropsychiatric interview according to SCID-P. European psychiatry (1998); 12: 232-241
- [16]. SSPS (Statistical package for social science version 17.0 for windows) (2001) SSPS for windows, Rel-11.0.1.2001. Chicago: SSPS Inc
- [17]. Naeem F, Mufti KA, Ayub M, Haroon A, Saifi F, Qurish SM. Psychiatric morbidity among Afghan refugees in Peshawar, Pakistan. J Ayub Med Coll. Abbottabad (2005); 17:23-5
- [18]. Mahmoud M Elhabiby, Doaa N Radwan, Tarek A Okasha and Eman D El-Desouky. Psychiatric disorders among a sample of internally displaced persons in South Darfur. International Journal of Social Psychiatry (2014);61 (4): 1-5
- [19]. Hamid, A. A., & Musa, S. A. (2010). Mental health problems among internally displaced persons in Darfur. International Journal of Psychology, 45, 278–285. doi:10.1080/0020-7591003692620.
- [20]. Solangi M, Zafer S, Moezudin M, ZaferI, Rehman RU. Psychiatric morbidity among internally displaced persons of Sindh. European Psychiatry (2012); 17(1):1-5
- [21]. Chesmal S, Anshka A, Gayani P, Sisira S, Melanie A, Athula S, Robert S. Prolonged internal displacement and common mental disorders in Sirilanka (The COMRAID study) (3013 May); 18(5); e 64742.
- [22]. Artazcoz L, Benach J, Borrell C, Corte's I Unemployment and Mental Health: Understanding the Interactions Among Gender, Family Roles, and Social Class. Am J Public Health (2004); 94(1): 82–88.
- [23]. Kett ME Internally Displaced Peoples in Bosnia-Herzegovina: Impacts of Long-term Displacement on Health and Well-being. Med, Confl Surviv (2005); 21(3): 199–215.
- [24]. Elijah MG, Chris P, Evans H. The mental health quality of life and life satisfaction of internally displaced persons living in Nakuru county, Kenya. Bio Med Central public health (2015); 15: 755-7.