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# RESEARCH ARTICLE

# PREVALENCE OF POST TRAUMATIC STRESS DISORDER IN PRIMARY SCHOOL CHILDREN IN BAGHDAD 2006

\*Dr. Ali Abbas Zbala F.I.C.S. and Dr. Besher M. Amen

Psych., Head of Psychiatry Department of AL-Yarmouk Teaching Hospetal, Baghdad, Iraq

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### **ABSTRACT**

Background: The presents situation in Iraq is dominated by violence, looting, kidnapping, torture, or murder. This had created an extremely threatening and traumatizing atmosphere for the whole population and especially children. Objectives: To determine the PTSD among primary school children in Baghdad. Method and Sampling: Across sectional multi stages sample survey of 600 respondent aged 6-15 years had been contacted in Baghdad during Jan and Feb.2006, sixteen schools were involved with 37-38 children represent each school. Tool: Arabic version of MINI (international neuro psychiatric interview PTSD module 1 was applied. Results: During the last 2 years 47% of the respondents had experienced major traumatic event. The prevalence of PTSD among school children was 14%. The male\female ratio was 1\3 which was statistically significant. Conclusion: The traumatizing events were very common and had precipitated PTSD in 14% of children the prevalence was less tan expected which may suggest that Iraqis had adapted some sort of psychological immunization through the last 3 successive stressful and traumatizing decades. The study warrants exceptional efforts to re-stabilize the situation in order to avoid wide spread of morbidity and disability among children.

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# INTRODUCTION

The present situation in Iraq is dominated by violence including Looting, kidnapping, torture, and murder. This has a severe impact on people especially school children who were exposed to many kinds of traumatizing events that may precipitate post traumatic stress disorder (PTSD) in some of them. PTSD is often associated with high morbidity and may be disability. Children represent the future of this troubled country and studying the extent of PTSD particularly in school children is the first step to provide early treatment and to plan for preventive measures.

## Rationale:

Arshad (2001) in his book about the war in Bosnia remarked "as I watched the report coming out of Bosnia, I knew that adult and children living under conditions such as these would be

\*Corresponding author: Dr. Ali Abbas Zbala F.I.C.S.

Psych., Head of Psychiatry Department of AL-Yarmouk Teaching Hospetal, Baghdad, Iraq

vulnerable to developing a range of debilitating and possibly long-lasting psychological symptoms Known as PTSD which is an abnormal emotional reaction to traumatic event characterized by symptoms of rexperience, hyper vigilance and avoidance. Another study (www.Prevalence and incidence of post-traumatic stress disorder-wrong diagnosis.com) found that PTSD may affect anyone and is common; around 5% of men and 10% of women will suffer from PTSD at some time in their life. Up to 30% of people exposed to a stressful event or situation of an exceptionally threatening or catastrophic nature such as a natural disaster, war, torture, rape or sexual abuse may develop PTSD. In Eastern Afghanistan Scholt et al. (2004) found that the prevalence rate was 20.4% (7.5% men and 31.9% women) while Gardoza et al., (2004) found prevalence rate to be 42.1% in Afghanstan, and it was 18.8% after earthquake in north China according to xiangdong et al. The prevalence in Newyork city after September 11 attack was 19.3% Galea et al. (2002). Hameed (2003) found the prevalence in Iraq to be higher than 30%. The study of the Center of Educational and Psychological Research of Baghdad university (Abdel-Wahab, 2007) done at 2005 found the prevalence to be 18%.

*Objectives:* To determine prevalence of PTSD in primary school children in Baghdad.

## MATERIALS AND METHODS

**Design:** Cross sectional study (Prevalence survey).

**Setting:** 16 schools in Baghdad.

# Sampling:

- Multistages sampling method had been used involving the 4 educational Sectors of Baghdad (Karkh 1,2 Risafa 1,2) as the base for stratification as the sample size was 600
- In every stratum we had chosen randomly 4 schools forming a sum of 16 schools as listed in the appendix 1. In each school using systematic random sampling we took 37-38 children, 6-7 students from each grade.

### **Tool**

Arabic version of M.I.N.I (International Neuro-psychiatric Interview PTSD module 'I') was applied (David Sheehan, University of South Florida, (9) dsheehan@hsc.usf.edu,

**Data collection techniques:** Direct interview with the children had been conducted by two well-trained psychologists.

*Statistical analysis:* We had used descriptive statistics for the prevalence and demographic features, and correlation statistics for associated features using EPI and SPSS11 soft ware.

**Ethical considerations:** A written informed consent was obtained from the parents of every child in order to apply the study on their children (appendix 3)

# **RESULTS**

- A total of 600 primary school children were interviewed, 375 (72%) females and 225 (38%) males from 16 different schools in Baghdad taking 37-38 children from each school and 6-7 from each grade.
- 100 children from each grade were involved in the study as shown in Table 1.

GRADE	MALE	FEMALE	TOTAL
1	43	57	100
2	43	57	100
3	29	71	100
4	30	70	100
5	20	80	100
6	60	40	100

AGE	MALE	FEMALE	TOTAL
6	41	36	77 (13%)
7	28	19	47(8%)
8	23	50	73(12%)
9	16	29	45(8%)
10	36	63	99(16%)
11	23	66	89(15%)
12	27	81	108(17%)
13	21	25	46(8%)
14	6	6	12(2%)
15	4	0	4(1%)
	225	375	

- The age of the children was from 6-15 years (with the average 10.3 years). Frequency distribution of children by age
- The no. of children who had been exposed to a major traumatic event during the last 2 years was 283 (47%).
- The children who were affected by PTSD were 84 (21 males 25% and 63 females 75%) giving us prevalence rate of 14%.

PTSD prevalence	Male	female
84	21	63
14%	25%	75%

- Male to female ratio was 1\3 using test of proportion
- Z=-2.564 which is more than 0.96.
- P value is less than 0.05 so this ratio is statistically significant.
- The age distribution of the affected children was from 6-15 years with the average of 10.3 years as shown in table IV

6	10	12%
7	1	1%
8	5	6%
9	7	8%
10	17	20%
11	16	19%
12	18	22%
13	7	8%
14	2	2%
15	1	1%

- Chi squire was 19.95 with 8 degrees of freedom P value was 0.01.
- Avoidance symptoms were as such: 83% avoided thinking about the event, 71%had trouble in recalling some important part of what happened, 44%become less interested in hobbies and social activities, 63% felt detached and estranged from others, 63% noticed their feelings are numbed, and 69% felt their life will be shortened.
- Hyper arousal symptoms were as such: 63% had difficulty sleeping, 63% were irritable, 54% had difficulty in concentrating, 53% were nervous, 81% were easily startled.
- The symptoms significantly interfered with the school work, social activities, or caused significant distress in 77% of the sample.

# **DISCUSSION**

- 47% of the sample of children had been exposed to a
  major traumatic event during the last 2 years, which
  points out to the volatile and violent environment we
  are living in and especially our children. This warrants
  exceptional efforts to re-stabilize the situation in order
  to avoid wide-spread morbidity and disability amongst
  those children.
- 14% of the children met the diagnostic criteria of PTSD, which may suggest that Iraqis and especially children had adapted in one way or another to stressful and traumatic events probably because these events became chronic and acted as a psychological immunization.
- The prevalence rate of PTSD was lower than expected compared with similar studies elsewhere 22.2% African

- schools Seedat *et al.* (2004), while it was 35% after US embassy bombing in Nairoby Njenga *et al.* (2004). It was in Afghanistan 20.1% Scholte *et al.* (2004) and 41% Gardoza *et al.* (2004), and it was 31% in bombing victims in France Verger *et al.* (1996).
- However, the prevalence rate of 14% is high enough to cause concern to take preventive and therapeutic measures to deal with it.
- The male \female ratio of 1\3 had been proved to bee statistically significant although the no. of females in the sample (375) was higher than male (225).
- The age distribution of the affected children indicate significant high percentage of the disorder among children aged 10 (20%), 11(19%), 12(22%). This may indicate the critical stage for the children on the threshold of adolescence who try to conceptualize the illogical traumatizing event
- These results open the door for further researches about this subject

#### Conclusion

- This study shows the impact of the current extremely violent. Environment in Baghdad and other parts of Iraq on children.
- The need is essential for an effective plan and program to deal with the psychological trauma and it's devastating effect.
- Further researches in this field are essential.
- he initiation of psychosocial support center in Baghdad and other sites had become an urgent need. = 5-To design the future mental health program with better cooperation and coordination with ministries of education, higher education and work affairs.

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## REFERENCES

- Abdel-Wahab K. and Razoki A. PTSD among primary school Baghdad children at 2005 the new Iraqi journal of medecine2007 -3[v2]14-16.
- Cardozo, Brbara Lopes, Bilukha, O.O., Crawford, Carol A.G., Shaikh, Irshad, Wolfe, Mitchell I., Gerber, Michael I. 2004. Anderson, Mark Mental health, social functioning, and disability in postwar Afghanistan, JAMA Aug vol 292 no 5 (a reprinted).
- Galea S., Bascarino J., Resnick H., David Vlahov Mental
   Health in New York City After the September 11 Terrorist
   Attacks: Results From Two Population Surveys. Mental
   Health, United States, 2002, National Mental Health
   Information Center.htm
- Hameed Ali PTSD in Iraqi children 2003.(not puplished)
- Husain Syed Arshad. 2001. Hope for the children lessons from Bosnia. Harfo-graf Tuzla Bosnia.
- Njenja F.G., Nicholls P.J., Nyamai C., Kijamwa P. and Davidson J.R. 2004. Post traumatic stress after terrorist attack: psychological reaction following the US embassy bombing in Nairooby, *British J.Psych.*, 185,328-333.
- Scholte, W.F., Olff, M., Ventevogl, P., Vries, G.J., Jansveld, E.Cardozo B.L., Crawford C.A.G. 2004. Mental health symptoms following war and repression in eastern Afghanistan. 2004 American medical association. Rep. JAMA Aug. vol 292 no 5.
- Seedat S., Nymal C., Njenga F., Vythilingum B. and Stein D.J. 2004. Trauma exposure and PTSD symptoms in urban African schools. *British journal of psychiatry*, 184, 169-175.
- Verger P., Dab W., Lamping D.L., Loze J.Y., Voinet C.D., Abenhaim L., Rouillon F. 2004. The Psychological Impact of Terrorism: An Epidemiologic Study of Posttraumatic Stress Disorder and Associated Factors in Victims of the 1995–1996 Bombings in France. American j.Psych., Aug 1384-1389.
- www.Prevalence and incidence of post-traumatic stress disorder-wrong diagnosis.com.
- www.Prevalence and Predictors of Post-Earthquake PTSD Findings from a Randomly Selected Community Sample in North China.htm.
- Xiangdong, Wang *et al.* Prevalence of post earthquake PTSD finding from a randomly selected community sample in north China Beijing

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