

First Phase Report of the Child Well-Being Psychosocial Support (PSS) of Traumatized Children in the Gaza Strip Project

Al Ahli Arab Hospital, Gaza City

Part of the Episcopal Diocese of Jerusalem

A diocese of the worldwide Anglican Communion



June 2019 - November 2019

Background

The children of Gaza are confronted with considerable amounts of violence in their daily lives. Since the outbreak of the Second Intifada in 2000, intensified violence coupled with an extreme decline in freedom and severe economic depression has affected the majority of people, especially women, children and adolescents. Children born into this environment are exhibiting psychosocial and behavioral problems. The steady exposure to violence coupled with poverty has led to various kinds of psychosocial and behavioral problems that develop into mental health diseases such as depression, anxiety, and PTSD. The exhibited behavioral symptoms include poor arousal, poor concentration, and poor attention, outbursts of anger and/or irritability, poor academic achievement, and withdrawal. These symptoms are the precursors to mental health disease. If not addressed, the mental health of the children of Gaza will greatly affect the society's future. This program is developed and implemented by the Al-Ahli Hospital (AAH) in Gaza, part of the Episcopal Diocese of Jerusalem, as it pertains to the organization's vision to provide the finest medical care possible under the most adverse circumstances to the marginalized and vulnerable. The psychosocial intervention program aims to help children cope positively with stressor events and promote the well-being of traumatized children and their mothers.

Methodology

Project design

The project is divided into two phases. The first phase, predicted stage, consists of four psychological assessment working days with children and another open day to close up peacefully.

The second stage of the project will select the children exhibiting difficulties coping positively with stressor events or showing symptoms of mental health issues such as PTSD.

Participants

The project sample consists of 650 children aged 6-15 with a mean age of 10.34 years (Standard Deviation= 2.06). There were 298 boys (46.13%) and 352 girls (54.87%).

Statistical Measures

The following scales were used to assess children in the first stage.

Socio-demographic questionnaire:

The Socio-demographic Questionnaire consisted of demographic variables that contained: age, sex/gender, place of residence, number of siblings, family income and other variables that may affect the psychological conditions of the children.

Gaza Traumatic Events checklist due to Great March of Return

This scale contains 15 items, checked by " yes" or " no", which measure the traumatic events that Gaza children experienced during conflict to identify the types of traumatic events that Palestinian children encounter in the Gaza strip. The scoring of the scale ranged between 0 for those who chose " No" and 28 for those who chose " Yes". In this study, the Cronbach's Alpha was 0.81

PTSD Scale for Diagnostic and Statistical Manual of Mental Disorders IV (Arabic version, Thabet, 2008)

The items of the PTSD scale indices are keyed to the Diagnostic and Statistical Manual of Mental Disorders, volume IV (DSM-IV) criteria and can provide preliminary PTSD diagnostic information. Moreover, it has a self-report for children and adolescents as well as a parent's report of PTSD symptoms. The adolescent version (for adolescents aged 13 years and older) contains a total of 22 questions and has also been administered in school classroom settings. A 5-point Likert scale from 0 (none of the time) to 4 (most all the time) is used to rate PTSD symptoms. Only 17 items were included in the total score because two items were not DSM-IV criteria and three items were repeated symptoms.

Although there is limited information about the specific cut-off score for a particular trauma type or population, a cut-off score of 38 has been proposed in the literature (Steinberg, 2004). In this study, the Cronbach's Alpha was 0.83.

Strengths and Difficulties Questionnaire (parents & self-report forms for children 11 & up)

The Strengths and Difficulties Questionnaire (SDQ) is a brief behavioral screening questionnaire for children aged 3-16. It exists in several versions to meet the needs of researchers, clinicians and educationalists. SDQ consists of 25 items; 14 describe perceived difficulties, 10 describe perceived strengths and one is neutral ('gets on better with adults than with other children'). Each 'perceived difficulties' item is scored on a 0-2 scale; 0: not true, 1: somewhat true, 2:

certainly true. Each 'perceived strengths' item is scored in the reverse manner; 2: not true, 1: somewhat true, 0: certainly true.

The 25 SDQ items are divided into scales of Hyperactivity, Emotional Problems, Conduct Problems, Peer Problems and Prosocial Scale (five items per scale). A score is calculated for each scale (range 0-10) and a total difficulties score for the four scales (excluding Prosocial behavior, which was considered different from psychological difficulties), i.e. a range of 0-40. The SDQ has been previously used for 322 Arab children living in the Gaza Strip and was very promising as a screening measure or rating scale in different cultural populations. For this study, internal consistency for this scale using Cronbach's alpha was 0.71.

Project activities procedures

Training the team

The project supervisor conducted two training days for the team on using the Problem, Action Result (PAR) technique (a technique used to build strong answers on behavioral interviewing questions), intervention and assessment tools. The facilitators practiced the activities on themselves to discover strengths and weaknesses in the methods, then reflected on them with the supervisor to start the assessment phase.

Targeting children

The project target was 650 children. The total number of participants was 646. They were recruited from the five areas of the Gaza Strip (North, Gaza, Middle, Khan Younis, and Rafah). The traumatized children were selected in cooperation with local Community Based Organizations (CBOs) in each area after an initial visit from the project supervisor and list of the number of children needed from each area. The participating CBOs were selected over a six month process that began in January 2018. AAH considers CBOs involved in the six month selection process as community project windows of AAH.

Conducting group work in the first phase

The activities include:

- Interviewing children and mothers for the baseline using the Gaza traumatic events checklist, PTSD scale and SDQ for parents of children who are less than 11 years old. Children self-interviewed through SDQ if they were 11 years and or older.

- One training day, four intervention days, and one open day as follows:
The team with the PSS supervisor conducted 27 intervention sessions for children aged (7-15) divided into two categories (7-10) and (11-15) years, in the five areas of the Gaza Strip in cooperation with eleven CBOs. The sessions were conducted inside the CBOs as each group consisted of 25 children. There were four days of intervention. Before starting the intervention, facilitators welcomed the children and their mothers, then they informed them about the project. They also explained the implementation of activities. After that, their mothers signed an informed consent to participate in the project activities.
- **First day activities:** On the first day of intervention, facilitators welcomed children and started the session with entertainment activities like drawing. After that they started implementing the main exercise a, “Risk and Resource Map”, in which they expressed their fears and safe places where risk areas were identified. The facilitators encouraged children to talk about their fears and worries and where they feel safe and relaxed.
- To close the day peacefully, a relaxation exercise was conducted.



Second day activities

The second day began with different entertainment activities. The main exercise was the use of a “body map” to talk about the physical symptoms of fears and worries. Children talked about the symptoms of fears and worries and used an outline of a body to indicate how those

symptoms affected their body and drew their symptoms onto the map. After finishing the work they discussed the drawing inside the group. This helped children to talk about hard times that they faced. Expressing their fears and bad memories is helpful in two ways: first, sharing memories of fear and trauma aids healing and second it is a useful assessment tool.

The third day activities

The third day's exercise was a "Problem Tree", in which the children worked in small groups. Every group defined the most common problems they faced, then wrote them down on A4 paper. Each group had to identify the causes of these problems, and finally suggest strategies to solve these problems.

The fourth day activities

The fourth day began by asking the children to talk about social relationships in hard times. The children were asked to identify people who provided help when they needed it. This gave the children an opportunity to tell their stories and share their experiences with other children. Through sharing their experiences they can see that they are not alone and that many children have the same feelings that they do. This discovery helps them develop empathy for others, show support and find strength in each other.



The fifth day activities

On the fifth day, children were taken on a tour to the AAH hospital to spend a free day playing in the garden and having a healthy meal. At the end of the day the children's post tests were conducted using the same methodology.

The Result

Socio-demographic characteristics of the study sample

As shown in table 1, the project sample consists of 646 children aged (7-15) with mean age 10.34 years (SD= 2.06). They were 298 boys (46.13%) and 348 girls (54.87%). According to place of residence, 27.72% were from North Gaza, 26.9% from Gaza city, 13.8% from the middle area, 15.5% from Khan Younis, and 16 % from the Rafah area. Regarding number of siblings, 75.7% had four and less siblings, 22.6% had 5-7 siblings and 4% had eight and more siblings.

Regarding Income, 85.9% of the families subsisted on monthly income of less than \$300, 10.8% of families subsisted in monthly income from \$301-\$500 monthly and 3.2 % of families subsisted in monthly income from \$501-\$750.

Regarding their father's education; 10.5% were not educated, 21.7% had Preparatory school, 33% had secondary, and 14.9% had attended university. Regarding their mother's education; 6% were not educated, 22.2% had Preparatory school, 39.8% had secondary, and and 15.9% had attended university.

Regarding their father's employment; 57% were unemployed, 11.3% worked as a day laborer, 15% were civil employees and employed, 6% were civil employees and unemployed, while 96% of mothers were house wives and only 2.3% were civil employees. This poor socio-economic situation and high unemployment rate has affected the psychosocial and mental health status of children.

Table 1

Socio-demographic characteristics of the study sample (N= 646)

	No	%
Sex		
Male	298	46.13
Female	348	53.87
Age		
Age from 7-15 years Mean=10.34 (SD=2.06)		
Age groups of children		
7-10-years	357	55.3
11 and more years old	289	44.7
Place of residence		
North Gaza	180	27.7
Gaza city	175	26.9
Middle area	90	13.8
Khan Younis	101	15.5
Rafah	104	16.0
Number of siblings		
4 and less	467	72.52
5-7 siblings	146	22.67
8 and above siblings	31	4.81
Type of residence		
City	303	46.98
Camp	195	30.23
Village	147	22.79
Family monthly income		
Less than \$300	555	85.91
\$301-500	70	10.84
\$501-750	21	3.25
Type of residence		
Rented flat	533	82.5
Own house	40	6.2
With extended family	67	10.4
Father's Education		
Not educated	68	10.5
Elementary	63	9.8
Preparatory	140	21.7
Secondary	213	33.0
Diploma	45	7.0
University	96	14.9
Post graduate	21	3.3
Father's Employment		
Unemployed	368	57.0

Simple worker	73	11.3
Skilled worker	20	3.1
Civil employee and employed	102	15.8
Civil employee and unemployed	44	6.8
Merchant	3	.5
Sailor	6	.9
Farmer	4	.6
Other	26	4.0
Mother's Education		
Not educated	39	6.0
Elementary	40	6.2
Preparatory	143	22.1
Secondary	257	39.8
Diploma	56	8.7
University	103	15.9
Post graduate	8	1.2
Mother's Employment		
House wife	622	96.3
unskilled worker	4	.6
Civil employee	15	2.3
merchant	2	.3
Other	3	.5

Exposure to Traumatic Events

As shown in table two, the most commonly reported traumatic events experienced by children during the Great March of Return (GMR): ***watching mutilated bodies and injured Palestinians on television (72.6%). Table 2).***

Overall, children reported a range of 0 to 11 traumatic events, with a mean number of 1.50 (SD=1.66). There were no significant differences between males and females in reporting traumatic events ($t=1.29$, $p=0.19$). When children were grouped in the 7-9, 10-12 and 13-15 years age groups, there were no differences in reporting traumatic events ($F=1.27$, $p<0.27$). The majority of children did not go to the GMR, nor were they exposed to any traumatic events physically, which indicates that parents have realized the danger and tried to protect them. However, families yet don't recognize the impact of trauma related to watching TV news and injured bodies. Those who live in the border area have different experiences, They not only watched the GMR activities; they experienced it. As a result, some of the children themselves were injured.

Table 2: Type of traumatic experiences

Item	No		Yes	
	No.	%	No.	%
1. Hearing killing of a non-relative	588	91.2	57	8.8
2. Hearing killing of a relative	584	90.5	61	9.5
3. witnessing arrests during the GMR	611	94.6	35	5.4
4. Witnessing killing of a friend	627	97.2	18	2.8
5. Witnessing killing of a close relative	615	95.3	30	4.7
6. Witnessing shooting of a friend	610	94.6	35	5.4
7. Witnessing shooting of a close relative	532	82.5	113	17.5
8. Watching mutilated bodies on TV	177	27.4	468	72.6
9. Shooting by bullets, rocket, or bombs	632	98.0	13	2.0
10. Threaten by shooting	623	96.6	22	3.4
11. tear gas inhalation	565	87.6	80	12.4
12. being shot by rubber bullets	633	98.1	12	1.9
13. amputation of part of your body due to shooting	639	99.1	6	.9
14. being arrested near the border	635	98.4	10	1.6
15. direct injury by gas bomb	631	97.8	14	2.2

Children's Post-traumatic Stress Reactions

Mean of PTSD in Palestinian children

Mean of post-traumatic stress symptoms was 32.94 (SD= 14.73). Mean of intrusion symptoms was 11.18 (SD= 5.47). Mean of avoidance symptoms was 12.44 (SD= 6.44). Mean of arousal symptoms for boys was 9.33 (SD= 5.20). These results demonstrate that children in the Gaza Strip are exposed to traumatic events and they are at risk of developing mental health disorders if there are no proper interventions.

Table 3

Mean of PTSD in Palestinian children -first stage

	N	Min.	Max.	Mean	SD
Total PTSD symptoms	646	0	66	32.94	14.73
Intrusion symptoms	646	0	20	11.18	5.47
Avoidance symptoms	646	0	28	12.44	6.44
Arousal symptoms	646	0	20	9.33	5.20

Sex differences in PTSD in Palestinian children

Mean of post-traumatic stress symptoms for boys was 33.44 (SD= 14.57) and mean for girls was 31.66 (SD=14.76). There were statistically significant differences in total PTSD toward girls ($t= 2.39$, $p =0.02$).

Mean intrusion symptoms for boys was 11.91 (SD= 5.41) and mean for girls was 10.55 (SD=5.46). There were statistically significant differences in intrusion symptoms toward boys ($t= 3.16$, $p =0.001$)

Mean of avoidance symptoms for boys was 12.60 (SD= 6.51) and mean for girls was 12.29 (SD=6.38). There were no statistically significant differences in avoidance symptoms.

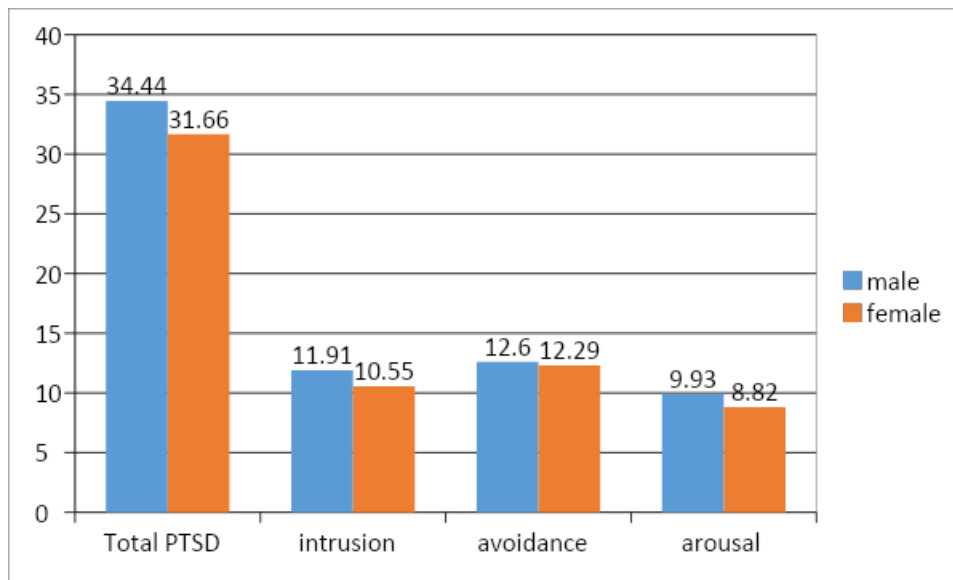
Mean of arousal symptoms for boys was 9.93 (SD= 5.13), mean of arousal symptoms for girls was 8.82 (SD= 5.21) and mean for girls was 12.29 (SD=6.38). There were statistically significant differences in arousal symptoms toward boys ($t= 2.71$, $p =0.01$)

Table 4

Mean of PTSD in Palestinian children first stage

		N	Mean	SD	T	p
Total PTSD symptoms	Male	298	34.44	14.57	2.39	0.02
	Female	348	31.66	14.76		
Intrusion symptoms	Male	298	11.91	5.41	3.16	0.001
	Female	348	10.55	5.46		
Avoidance symptoms	Male	298	12.60	6.51	0.61	0.54
	Female	348	12.29	6.38		
Arousal symptoms	Male	298	9.93	5.13	2.71	0.01
	Female	348	8.82	5.21		

Figure 1: Mean of PTSD in Palestinian children



Prevalence of PTSD symptoms

As shown in table 5 (below), 84 children reported PTSD (13%) and 562 reported no PTSD (87%).

Table 5

Prevalence of PTSD in children

Cases of PTSD	N	%
No PTSD	562	87.0
PTSD	84	13.0

Socio-Demographic differences and severity of post-traumatic stress reactions

Sex differences in severity of post-traumatic stress reactions

There were statically significant sex differences in developing post-traumatic stress reactions in which girls developed more PTSD symptoms than boys (Mean =31.1 vs. 29.93) ($t(739) = -3.32$, $p = .001$). The results showed that girls significantly developed more intrusion symptoms than boys ($t(610) = -1.94$ $p = .05$) (Mean =12.64 vs.11.89), and avoidance symptoms ($t(733) = -2.58$, $p = .01$).

Table 6

Independent t test for differences in sex and PTSD in children

Sex		N	Mean	Std. Deviation	Std. Error Mean	t	p
Total PTSD	Male	773	28.93	12.99	0.47		
	Female	739	31.1	12.46	0.46	-3.32	0.001
Intrusion symptoms	Male	634	11.89	6.9	0.27		
	Female	610	12.64	6.73	0.27	-1.94	0.05
Avoidance symptoms	Male	765	10.28	6.03	0.22		
	Female	733	11.06	5.69	0.21	-2.58	0.01
Arousal symptoms	Male	611	6.96	6.45	0.26		
	Female	603	7.16	6.47	0.26	-0.54	0.59

Prevalence of general mental health problems using SDQ by parents and children less than 11 years old

Using SDQ for parents, 34.7% of children were rated as having caseness* (cut-off point = 16-40), 18.3% (14-16) were borderline, and 46.9 (0-13) were normal by parents. Of children themselves, 34% of children were rated as having caseness (cut-off point = 20-40), 20.7% (16-19) were borderline, and 43.3 (0-15) were normal.

Table 7

Prevalence of general mental health problems using SDQ by parents

	Normal	Borderline	Abnormal
SDQ caseness parents	46.9 (0-13)	18.3 (14-16)	34.7 (17-40)
SDQ caseness self	45.3 (0-15)	20.7 (16-19)	34 (20-40)

* 'caseness' is the degree to which something is a diagnosable case

Children's Post-traumatic Stress Reactions-stage 2

Mean of PTSD in Palestinian children

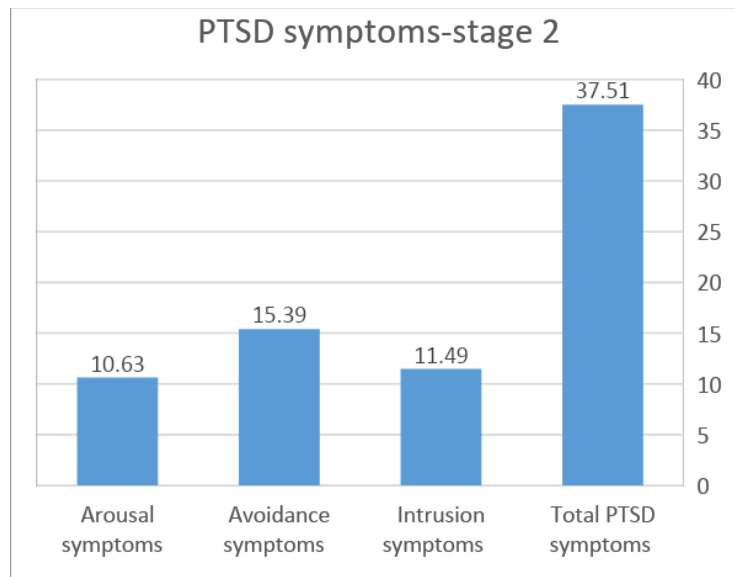
Mean of post-traumatic stress symptoms was 37.51 (SD= 15.65). Mean of intrusion symptoms was 11.49 (SD= 5.49). Mean of avoidance symptoms was 15.39 (SD= 6.41) and mean of arousal symptoms for boys was 10.63 (SD= 4.98).

Table 8

Mean of PTSD in Palestinian children - stage 2

	N	Min.	Max.	Mean	SD
Total PTSD symptoms	597	17.00	78.00	37.51	15.65
Intrusion symptoms	597	5.00	25.00	11.49	5.49
Avoidance symptoms	597	7.00	33.00	15.39	6.41
Arousal symptoms	597	5.00	25.00	10.63	4.98

Figure 2: Mean of PTSD in Palestinian children



Prevalence of PTSD symptoms

As shown in table 9 (below), 141 children reported PTSD (23.6%) and 456 reported no PTSD (76.4%).

Table 9

Prevalence of PTSD in children

Cases of PTSD	N	%
No PTSD	456	76.4
PTSD	141	23.6

Prevalence of general mental health problems using SDQ by parents and children 11 years age

Using SDQ for parents, 24.5% of children were rated as having caseness (cut-off point = 16-40), 12.2% (14-16) were borderline, and 63.3% (0-13) were normal by parents.

Table 10

Prevalence of general mental health problems using SDQ by parents

	Normal	Borderline	Abnormal
SDQ caseness parents	63.3 (0-13)	12.2 (14-16)	24.5 (17-40)

Impact of intervention in children PTSD and subscales

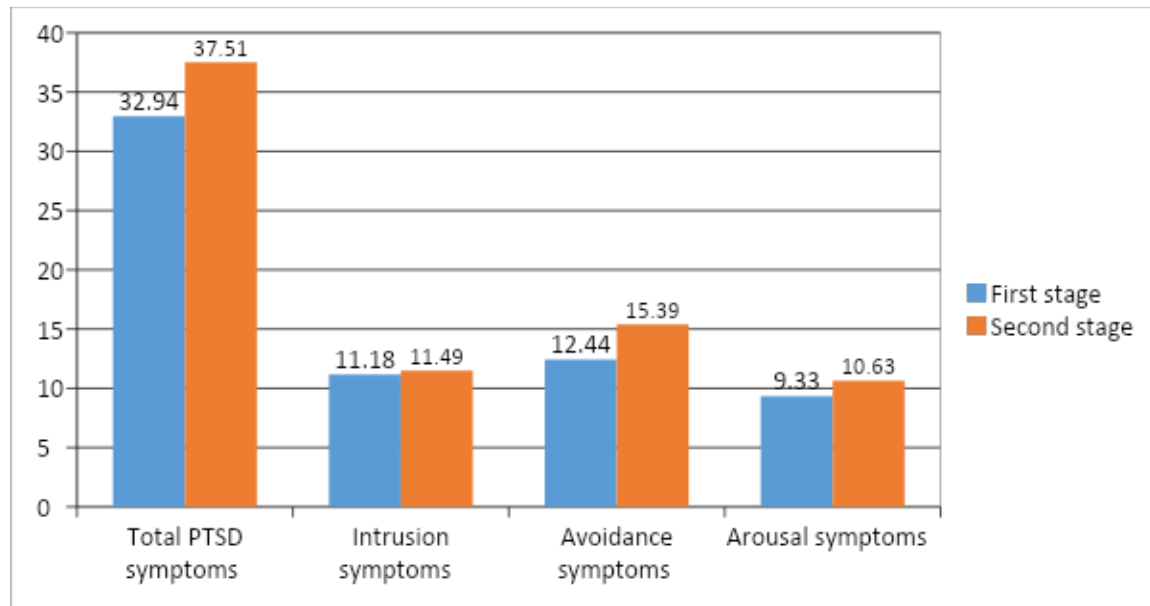
The **PTSD tests were** repeated after one month and it was obvious that the total **PTSD** mean increased including all subscales. This indicates that the short intervention program is not sufficient to recover from stressors. The children expressed their feelings during the sessions and remembered the traumatic events they were exposed to during the wars. However, they did not have the sufficient time to recover. Therefore, they need advanced intervention to help them cope with their stressors. There was no significant difference according to age. It is therefore, alarming to implement the second phase of the program.

Table 11

Paired T test comparing effectiveness of Impact of intervention in children PTSD and subscales

	N	Mean	Std. Deviation	Std. Error	t	p
Total PTSD symptoms -first stage	646	32.94	14.73	0.58	56.85	.001
Total PTSD symptoms stage 2	597	37.51	15.65	0.64	58.56	.001
Intrusion symptoms -first stage	646	11.18	5.47	0.22	51.89	.001
Intrusion symptoms stage 2	597	11.49	5.49	0.22	51.09	.001
Avoidance symptoms -first stage	646	12.44	6.44	0.25	49.08	.001
Avoidance symptoms stage 2	597	15.39	6.41	0.26	58.68	.001
Arousal symptoms -first stage	646	9.33	5.2	0.2	45.62	.001
Arousal symptoms stage 2	597	10.63	4.98	0.2	52.23	.001

Figure 3: Effectiveness of Impact of intervention in children PTSD and subscales



Impact of intervention on children's mental health according to SDQ for parents form

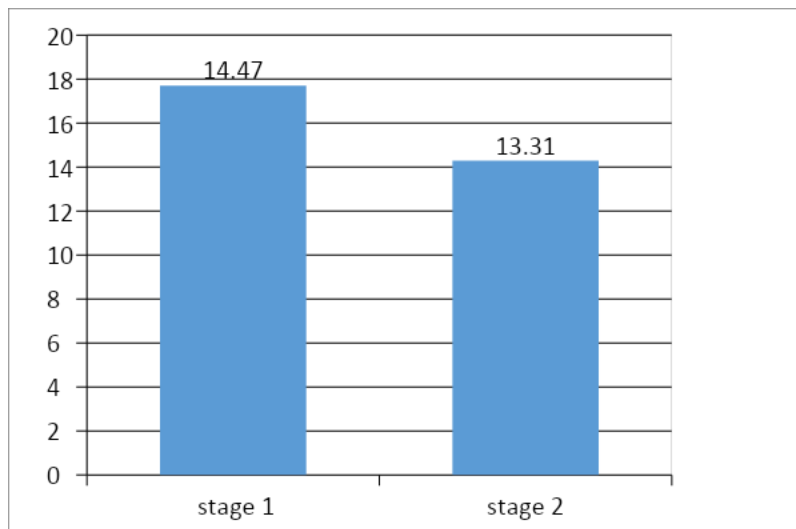
The SDQ for parents form was repeated after one month and it was obvious that the total SDQ mean decreased from 14.47 to 13.34 ($t = 46.8, p = 0.01$). The results affirmed the need for intervention programs to help children promote their resilience .

Table 12

Paired T test comparing effectiveness of intervention using SDQ-parents

		N	Mean	Std. Deviation	Std. Error Mean	t	p
	total parent SDQ stage 1	356	14.47	5.83	0.31	46.88	0.01
	total parents SDQ stage 2	597	13.31	6.28	0.26		

Figure 4: Effectiveness of Impact of intervention in children using SDQ-parents



Impact of intervention on children’s mental health according to children themselves

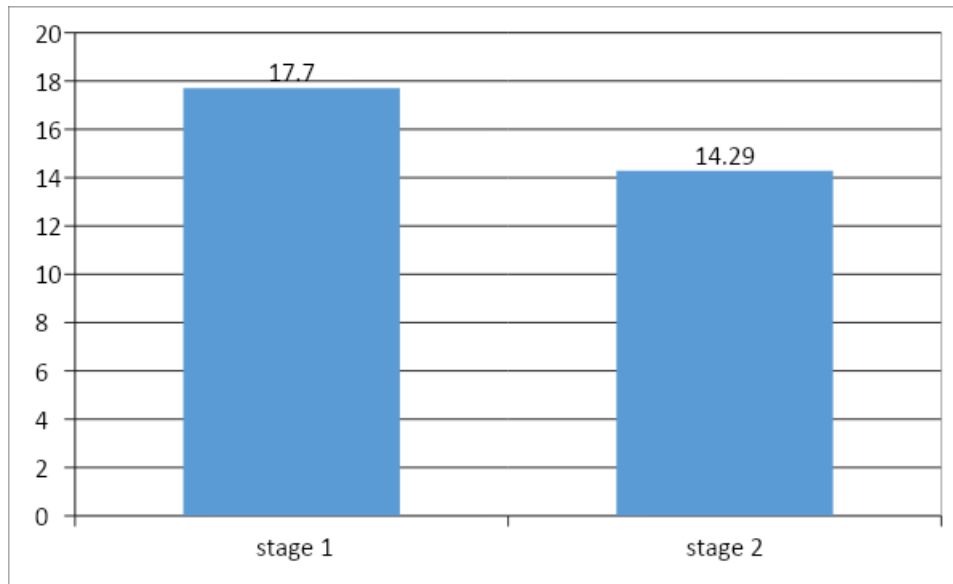
The SDQ for children themselves was repeated after one month. It was obvious that the total SDQ mean decreased from 17.70 to 14.29 ($t = 48.03$, $p = 0.001$). The results showed that the intervention activities had a positive impact for children according to the children themselves and their parents.

Table 12

Paired T test comparing effectiveness of intervention according to children themselves

		N	Mean	Std. Deviation	Std. Error Mean	t	p
	total self SDQ stage 1	281	17.70	6.18	.37	48.03	.0001
	total self SDQ stage 2	262	14.29	6.39	.39		

To children themselves



Conclusion

The most commonly reported traumatic events due to the bad political situation and siege on Gaza was watching mutilated bodies and wounded people **on TV (72%)**. The results showed that the intervention activities had a positive impact for children, according to the children themselves and their parents, it was obvious that total SDQ mean decreased from 17.70 to 14.29 ($t = 48.03$, $p = 0.001$). This result indicates that such intervention programs help children in coping with stressors, and promoting resilience.

The first phase findings report a high response rate to the intervention program; 46% among boys and 53% among girls. The results showed children affected negatively by poverty. The majority of their families monthly incomes are below \$300 (85.9%). Of unemployed parents, 57% were fathers and 96% were mothers.

This poor status of income and education reflected on the children's mental health and it had a negative impact on children's psychosocial status. According to their mother's feedback, mothers said that their children have insufficient healthy food. One mother said, "I cannot meet the needs of my children." This increased the psychosocial problems on both children and parents.

Recommendations:

- ❖ Children in the Gaza Strip have many types of psychosocial and behavior problems, especially in marginalized areas. They need long term intervention programs to help them cope with their stressors, events and response.
- ❖ Awareness and psychosocial programs for women & parents.
- ❖ Entertainment programs for children and mothers.
- ❖ Encouragement for children by distributing toys and presents.
- ❖ Entertainment for team between phases of the project
- ❖ Continue capacity development program for team.
- ❖ More staffing for the psychosocial program.
- ❖ Training for the current staff for the second phase.

Monitoring & Evaluating

The Supervisor conducted daily meetings with the team to discuss work implementation, challenges, and success stories. Field visits to the team at the implementation place. Daily and weekly reports provided by facilitators while monthly, quarterly and final reports provided by supervisor.

Challenges:

- *Delayed start of the program for two main reasons: 1) It was difficult to start the program because many children attend school. The actual screening had to start after school and Ramadan. 2) CBO's selection. AAH had been through a long process to re-evaluate its outreach using CBO's due to governance and legislations issues. 20 CBO's were qualified among the total, which was more than 20.*
- *Many conflict escalations occurred during the implementation period and all activities were paused for security reasons.*
- *Children to staff ratio. Each session had up to 25 children and a limited number of staff. This poor ratio reduces the chance of full participation from the children and opportunities to talk about their feelings and their experiences.*
- *More children want to join the program, but the capacity of the project is limited.*
- *Lack of time to perform the reports and data entry versus activities time.*