

Impact of Psychoeducational Program on Foster Care Children's Aggressive Behavior at Minia Governorate, Egypt

SherifaRabea Mohamed ¹, Nefissa Mohammed Abd El-Kader², Hanan Ibrahim Abd EL Aziz ³, Fatma Nagy Kotb⁴

¹Assistant lecturer of psychiatric Mental Health Nursing, Faculty of Nursing, Minia University

² Professor of Psychiatric Mental Health Nursing, Faculty of Nursing, Cairo University

³ Professor of Psychiatric Mental Health Nursing, Faculty of Nursing, Cairo University

⁴ Assistant Professor of psychiatric Mental Health Nursing, Faculty of Nursing, Minia University

Abstract:

Background: Child maltreatment is a foremost public concern, affecting hundreds of thousands of children annually and yielding vast short and long-term behavioral consequences. Emotional, social and physical deprivation during early life has been linked to a wide array of short and long-term mental health consequence. Traumatic experiences in childhood are a prominent risk factor for aggressive behavior. Psychoeducational intervention is generally considered first line when addressing trauma- and stressor-related emotional and behavioral conditions in children. **This study aimed** to evaluate the impact of psychoeducational program on aggressive behavior among foster care children. **Subjects and Method:** The study sample included 51 foster care (males & females) children in age group 6-12yrs. Personal characteristics and aggressive behaviors scale were used. **Results:** Majority of participants were males. Foster boys had high mean scores of physical aggression than girls. **Conclusion:** there was a highly statistically significant difference in all types of aggressive behavior between pretest, post and after three months from implementation of the program at ($P=0.000$). **Recommendation of the study:** regular assessment of aggressive behavior and applying psychoeducational intervention for foster children at school.

Key Word: Foster Care Children, Aggression, Psychoeducation.

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I. Introduction

In Egypt, foster care harbors either true orphans or foundlings abandoned by mothers after illegal pregnancies, runaway children, family breakup, poverty, or child abuse¹. Compared with the general population, foster care children are at greater risk of having higher rates of mental health problems, low self-esteem, developmental health problems and behavior problems². In addition to maltreatment in the home, placement in foster care while providing relief from adverse conditions also disrupts children's lives as foster care can sometimes be unstable. These disruptions in foster care at young ages prevent children from forming attachments at a time in their lives when forming and maintaining attachment is a critical developmental stage³.

The loss of a parent represents the loss of an attachment figure to the child⁴. Removal from the home and placement in foster care are major life events for children, this can lead to 'dyadic adjustment disorder', in which the child ultimately rejects its parents. Researchers have repeatedly demonstrated that children who have been abused or neglected exhibit higher levels of aggressive behavior, disruptive and noncompliant behavior, conduct disorder, and delinquency⁵.

Aggression in children is the first step on the slippery slope to the misbehavior. High level of aggressive behavior in childhood is a strong predictor of delinquency and antisocial behavior later in life⁶. Foster care environment cannot be same as that of home environment. It has a major influence to mould the innate tendency of aggressive behavior in the children. Characteristics of the foster placement itself might also influence the likelihood that a foster child will develop problematic aggressive behaviors⁷. Aggression in childhood has been linked to adverse outcomes in later life, for both victims and perpetrators⁸. Aggressive behavior in children is considered a complex phenomenon that involves multiple factors and manifests in a variety of forms. Children with different age groups have different ways of expressing aggression. Aggressive symptoms may change with developmental competence in motor and cognitive domains⁹.

Psychoeducational intervention is a humanistic approach to changing the behavior patterns, values, interpretation of events, and life outlook of individuals who are not adjusting well to their environment¹⁰. Psychoeducational program can be used to teach the ways to control the aggressive behavior and its discipline

strategies teach children new methods to handle their negative feelings and behaviors and also, positive discipline such as reward system and praising can motivate children to withdraw the aggressive behavior¹¹.

Aim of the study:

- The study aimed to assess the impact of psychoeducational program on aggressive behavior among foster care children at Minia governorate.

Research Question:

- Does the implementation of psychoeducational program could reduce aggressive behavior among foster care children?

II. Subjects and Method

Study Design: Quasi-experimental research design has been utilized in this study.

Study Location: This study was conducted at foster care centers at Minia governorate, Egypt which includes two foster cares (Minia institution for boys and Minia institution for girls). Minia institution for boys in Minia city, it receives children from one day of age to 18 years of old (about 123 children). Minia institution for girls localizes in Minia city. It receives female children from 6 years old up to marriage age (about 39 children). They provide food, shelter, health care, clothes and education.

Study Duration: March 2019 to August 2019.

Sample size: A purposive sample from the foster care children (51 children) aged from 6-12 years old; 23 females and 29 males.

Inclusion criteria:

- Both genders aged from 6-12 years old.
- The length of stay in foster care was more than one year.

Tools and Data Collection:

Personal characteristics data

A well-designed questionnaire was used to collect the data of the foster care children. Data were obtained from the foster care children's file included; demographic information: age, gender, educational level, reason of entry foster care and duration of stay.

Tool (II) Aggressive behavior scale

Aggressive behavior scale (Adel, 1993): Arabic structured questionnaire designed by Adel Ahmed Hussein (1993) for measuring aggressive behavior among foster care children. This scale consists of 36 items including forms of aggression. Verbal aggression toward others is 12 items, 16 items related to physical aggression, 4 items related to aggression toward things and 4 items related to aggression toward self. Responses of scale ranged from 0 for No, 1 for Sometimes to 2 for Yes. The total scoring system was ranged from 0-72, high score indicating severe aggressive behavior while low score indicating mild aggressive behavior

The aggressive behavior levels:

- From 0-24: Mild aggressive behavior
- From 25-48: Moderate aggressive behavior.
- More than 48: Severe aggressive behavior

Validity and reliability of tools

The questionnaires were reviewed and validated by the Jury committee that was composed of a panel of 5 experts of in psychiatric mental health nursing to test tools validity (Minia, Assiut and Cairo Universities faculty of nursing). They reviewed the tools for clarity, relevance, comprehensiveness, understanding, applicability and considered the aim of this study. The reliability of the tools were done by the statistician and revised by the supervisors. The internal consistencies of the questionnaires were calculated using Cronbach's alpha coefficients. Test-retest used. The Cronbach's alpha of the questionnaires was 0.73, which indicated good reliability.

Procedure:

An official letter was obtained from the dean of the Faculty of Nursing, Minia University, Egypt as well as the director of Social Solidarity & directors of males and females institution were asked for permission to collect data and carry out the program. Oral consent was obtained from the children after explaining the nature and purpose of the study through direct personal communication to gain their acceptance and cooperation.

Development of the educational program:

The proposed program was conducted through the following phases:

1. Assessment phase (early phase)

This phase was aimed to assess aggressive behavior among the studied sample, each child was interviewed to collect the necessary data .Based on the assessment phase, the program and media were prepared by the researcher in the form of pictures and videos.

2. Planning (preparatory phase)

A review of the related literature which covering various aspects of the problem was done, using available books and journals, to get acquainted with the research problem and to implement the study. The planning phase included the program strategy time, number of sessions, teaching methods and media used. In addition, the teaching place and the program facilities were checked for appropriateness. Numbers of sessions were 6 sessions, two sessions every week; the duration of each session ranged from 90-120 minutes. Sessions were introduced about (anger, aggression, aggressive behavior forms, causes, management strategies etc....).A variety of teaching methods were included in this program lectures, group discussion, and role play of the studied sample were utilized in this program.

3. Implementation of the program (Implementation phase)

Oral agreement for participation was obtained from children. The program implemented for four subgroups, 1st group consisted of foster boys in age group 6-9 yrs. about 13 children, 2nd group consisted of foster boys in age group 10-12 yrs. about 15 children, 3rd group consisted of foster girls in age group 6-9 yrs. about 8 children and 4th group consisted of foster boys in age group 10-12 yrs. about 15 children.

The program was conducted by researcher; the purpose of the study was explained through direct personal communication with the studied sample for getting their approval, cooperation as well as voluntary participation, privacy and confidentiality were assured. Program conducted through the following stages:

- Child interview; includes introduction about the program and information about aggression.
- Child education about causes and effects of aggression on self, others and society.
- Effective coping with anger, aggressive behavior and improving communication skills.

4. Evaluation of the program

The post test was done twice:

1. Immediately, after one week of the program implementation to assess aggressive behavior.
2. Second posttest was done three months after program implementation in order to test the continuation of the effectiveness of the implemented program.

Pilot study

Pilot study was done to evaluate the tools clarity and applicability as well as the time needed to fulfill sheet. It was carried out on 6 children; this number was excluded from the total sample. All subjects recruited in the pilot study met the inclusion criteria.

Administrative Design:

An official letter was obtained from the dean of the Faculty of Nursing, Minia University, as well as the director of Social Solidarity & directors of males and females institution asking for permission to collect data and carry out the program. Oral consent was obtained from the children after explaining the nature and purpose of the study through direct personal communication to gain their acceptance and cooperation.

Ethical Consideration

A written initial approval was obtained from the Research Ethical Committee of the Faculty of Nursing, Minia University, there is no risk for study sample during application of this research, the study followed common ethical issues for participation in the clinical research, privacy was provided during data collection. Anonymity and confidentiality were assured through coding the data; and child has the right to refuse to participate in the study without any rationale. Informed oral consent to participate in the study was obtained from studied sample.

Statistical analysis

The collected data were coded, categorized, tabulated, and analyzed using the Statistical Package for the Social Science (SPSS 26) .Numerical data were expressed as mean and SD. Quantitative data were expressed as frequency and percentage. For quantitative data, comparison between two variables was done using t-test and comparison between more than two variables used ANOVA test .Relation between different numerical variables was tested using Pearson correlation. Probability (p-value) less than 0.05 was considered significant and less than 0.001 was considered highly significant.

III. Results

Table (1) shows the descriptive statistics of the 51 foster care children included in the study. More than half of the participants were males (54.9%), and (58.8%) of them were in age ranged between 9:12 years old, and all children were in primary school (100%). In addition to, nearly more than half of the studied sample was foundling (50.9%), while (31.4) of them entered foster care due to parent separation (divorce), and orphans were (17.6).

Table (1): Descriptive statistic of demographic characteristics of the studied sample (N= 51).

Variables	N	%
Gender		
▪ Male	28	54.9
▪ Female	23	45.1
Age group		
▪ 6-9 years	21	41.2
▪ > 9-12 years	30	58.8
Level of Education		
▪ Illiterate	0	0
▪ Primary Education	100	100
Reasons for entry foster care		
▪ Orphan	9	17.6
▪ Foundling or abandonment	26	51.0
▪ Divorce or parent separation	16	31.4

Table (2) reveals that; mean score for physical aggression was higher among males than females (43.46 ± 7.46 & 36.30 ± 6.73 respectively); while mean score for verbal aggression was higher among females than males (28.91 ± 2.48 & 28.11 ± 1.23 respectively). The total mean scores for aggressive behaviors were higher among males than females (92.07 ± 7.78 & 83.04 ± 7.38 respectively). There were highly statistically significant differences between gender and nearly all types of aggressive behavior at baseline assessment ($P=0.001, 0.001, 0.000$ & 0.000) respectively.

Table (2): Relation between gender and types of aggressive behavior at baseline assessment (N=51).

Types of aggressive behavior	Male (28) Mean \pm SD	Female (23) Mean \pm SD	T	P
Verbal aggression	28.11 \pm 1.23	28.91 \pm 2.48	1.509	0.1
Physical aggression	43.46 \pm 7.4	36.30 \pm 6.73	3.559	0.001*
Aggression toward things	10.64 \pm 0.48	9.60 \pm 1.40	3.641	0.001**
Aggression toward self	9.85 \pm 0.35	8.22 \pm 1.85	4.579	0.000**
Total aggressive behavior	92.07 \pm 7.78	83.04 \pm 7.38	4.216	0.000**

*p-value <0.05 S;

**p-value <0.001 HS

Table (3) clarifies that; the mean scores for physical aggression and aggressive behavior toward things were higher among children in age group (6-9 yrs.) than children in age group (10-12 yrs.) (40.85 ± 8.46 & 10.52 ± 1.12 respectively), while mean score for aggressive behavior toward self was higher among children in age group 10-12 yrs. than children in age group 6-9 yrs. (9.73 ± 0.58). Children in age group 6-9 yrs. were highly aggressive than other age group children (88.28 ± 10.44 & 87.80 ± 7.62) respectively. There was highly statistical significant difference between age group and aggressive behavior toward self at baseline assessment ($P = 0.000$).

Table (3): Relation between age group and types of aggressive behavior at baseline assessment (N=51).

Types of aggressive behavior	Children at age group 6-9 years (21) Mean \pm SD.	Children at age group 10-12 yrs. (30) Mean \pm SD	T	P
Verbal aggression	28.66 \pm 2.43	28.33 \pm 1.49	0.60	0.5
Physical aggression	40.85 \pm 8.46	39.80 \pm 7.66	0.46	0.64
Aggression toward things	10.52 \pm 1.12	9.93 \pm 1.08	1.89	0.06
Aggression toward self	8.23 \pm 1.94	9.73 \pm 0.58	3.97	0.000
Total aggressive behavior	88.28 \pm 10.44	87.80 \pm 7.62	0.19	0.8

Table (4) demonstrates that; the mean scores for verbal and physical aggression were higher among children which entry foster care for reason of parent separation (divorce) than orphan and foundling children (29.12 ± 0.80 & 41.50 ± 9.69 respectively); while the mean score for aggressive behavior toward self was higher among foundling children (10.00 ± 0.00). There was significant difference between reason of entry foster care and aggressive behavior toward self at baseline assessment ($P=0.000$).

Table (4): Relation between reasons of entry for foster care and types of aggressive behavior at baseline assessment (N=51)

Types of aggressive behavior	Foundlings or abandonment. (N=26)	Orphan (N=9)	Divorce or parent separation (N=16)	F	P
Verbal aggression	28.07 ± 2.39	28.44 ± 1.58	29.12 ± 0.80	1.50	0.23
Physical aggression	39.80 ± 6.60	39.22 ± 8.72	41.50 ± 9.69	0.30	0.73
Aggression toward things	10.11 ± 1.07	10.00 ± 1.50	10.37 ± 1.02	0.38	0.68
Aggression toward self	8.34 ± 1.76	10.00 ± 0.00	9.87 ± 0.50	9.30	0.000
Total aggressive behavior	86.34 ± 7.59	87.66 ± 8.63	90.87 ± 10.39	1.34	0.27

Table (5) illustrates that there was a highly statistically significant difference in all types of aggressive behavior between baseline assessment, post and after three months from implementation of the program at ($P=0.000$).

Table (5): Impact of the program on aggressive behavior (relation baseline assessment, posttest & follow up) N= (51)

Aggressive behavior											
Baseline assessment				Post- test				Follow up			
Mean±SD		T	P	Mean±SD		T	P	Mean±SD			
Pre	88.0 ± 8.79	32.8	0.0001*	Post	44.09 ± 5.04	9.91	0.000	Pre	88.0 ± 8.79	29.4	0.000**
Post	44.09 ± 5.04		*	Follow	51.1 ± 5.87		1	Follow	51.1 ± 5.87		

*p-value <0.05 S

**p-value <0.001 HS

Figure (1) enumerates foster children had severe level of aggressive behavior at baseline assessment. (60.7%) of them had mild aggressive behavior immediately posttest while (45.2%) had moderate level of aggressive behavior at follow up.

Figure (1): Relation between aggressive behavior levels (relation between baseline assessment, posttest & follow up) N= (51)

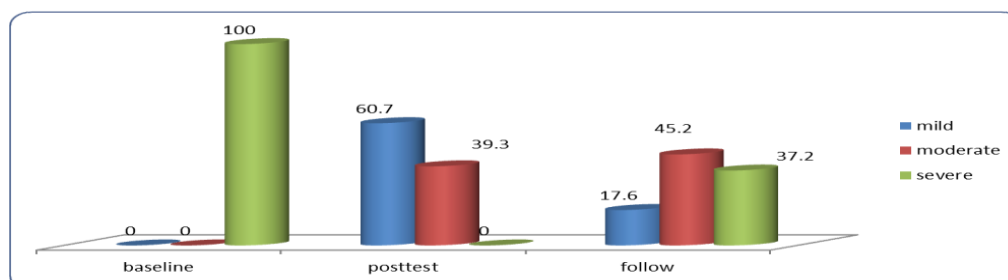


Table (6) shows that, statistically significant difference was found between baseline assessment and follow up regarding gender ($t=4.23$ & 4.96) respectively at $p=0.000$.

Table (6): Impact of the program on aggressive behavior in relation to personal characteristics (N=51):

Personal data	Baseline test N= (51)	Post test N=(51)	Follow Up N=(51)
Gender			
* Male	92.07±7.78	44.92±6.01	54.07±5.66
* Female	83.04±7.38	43.08±3.36	47.47±3.76
T	4.23	1.37	4.96
P	0.000	0.17	0.000
Age group			
*6-9 yrs.	88.28±10.44	45.61±3.94	51.33±7.14
*10-12 yrs.	87.80±7.61	43.03±5.49	50.93±4.93
T	0.192	1.84	0.23
P	0.84	0.07	0.82
Reasons of entry			
*Foundling or abandonment	86.34±7.59	43.80±6.24	49.65±6.03
*Orphan	87.66±8.63	43.33±2.12	52.11±1.83
*Divorce or parent separation	90.87±10.39	45.0±3.98	52.87±6.72
F	1.34	0.393	1.694
P-value	0.27	0.67	0.19

IV. Discussion

Concerning the demographic characteristics of the foster care children, the current study results revealed that boys constituted slightly more than half of the studied subjects. This reflected the general population distribution; the gender ratio was 106.2 males per 100 females, (51.5% males to 48.5% females) (Central Agency for Public Mobilization and Statistics, Oct., 2020). This finding was broadly compatible with the result conducted in Egypt by ¹² who found that the males represented about 63.1 % of the total foster care children. This finding was inconsistent with those¹³ who found that the females represented about 68 % while males 32% of the total foster care children.

As regards the reasons for entering foster care at Minia governorate, foundlings (abandoned children) represented about half of all foster children followed by orphans represented one third. This could be related to absence of the caregiver and it may be related to low socio-economic status of others relatives. Which in congruent with ¹⁴ who mentioned that family disintegration, which is characteristic of modern societies and statistics which indicate increasing the rates of divorce in recent years, causing a negative impact on family care for their children, coupled with weak family ties between members of the extended family, which made the search for child care in the foster care the alternative choice in many cases.

These results were partially consistent with those ¹⁵ who found that, the main causes for presence in institution were, parent's divorce represented 45.6% followed by 42.1% were foundlings. Additionally, similar studies from various countries as in California, most of children (42%) were placed in foster care because of neglect (failure to provide adequate food, clothing, shelter, supervision, or medical care for a child or exposure of a child to dangerous situations) and caregiver absence (as a result of illness, incarceration, or death) and incapacity (as a result of disability or illness), about 20% of children were removed for physical or sexual abuse¹⁶.

As regarding, types of aggressive behavior and gender at baseline assessment. The difference between girls and boys was statistically significant. This result illuminated that foster boys displayed more frequency on the severity of physical aggression. This could be interpreted for several gene variants were postulated to increase the susceptibility for aggressive behavior, the culture influences gender-role expectations as well as other social norms (the community inspires male children the idea that boys are stronger, harsher, they do not cry like girls do) where boys were seen more aggressive than girls, other influences are added like the media, group of friends, older children examples, the aggressive behavior emerges, showed mostly by the boys, considering that by such aggressive reactions they prove their masculinity.

On the other hand, females in our society usually repress aggression and not express it, because their environment and socializing were subjected her makes it incapable to express her feelings and her emotions clearly making it less aggressive. Numerous studies have documented sex differences, ¹⁷ stated that physical was more in males (25.7%) than among females also, ¹⁸ reported that boys in foster care display more frequency on the severity of aggressive behaviors according to foster parents. In contrast with the results of ¹⁹ which stated that the male and female are not different on aggressive behavior.

Regarding the age group and aggressive behavior, small group (children in age group 6-9yrs. had more physical, verbal aggression and aggressive behavior toward things than other old group (children in age group 9-12yrs) (table, 3), this could be explained by some reasons such as limited verbal abilities, increased motor skills

and feelings of autonomy which they express themselves using physical aggression. On the other hand, old group was highly aggressive toward self than small group, because of their fears from punishment of their caregivers, they may not have someone who gives love and comfort or talk and listen to their needs and concerns and also, they spend most of day's hours on TV films which may be partially learned by watching and imitating people's behavior.

Furthermore, the present study revealed that, aggressive behavior was highly among children of separated parents (children enter foster care because of divorce) especially physical aggression. This could be explained by the fact that parental separation has been noted as one of the factors that influence aggressive behavior in children and it is often seen as a cause or contributing factor to depression and aggressive behavior in children. Separation is a common relationship phenomenon in the community today. Despite the changes in community attitudes and family patterns, separation still represents a major life stressor for the individuals involved.

This outcome could be explained in several reasons; the foster children know their parent names only, their parent didn't visit them. The deprivation of family environment, parent's love and feeling of rejection from their family can become manifest in hostile-aggressive. This outcome was in disagreement with ¹² who reported that mean scores of verbal aggression among institutionalized children were higher than mean scores of physical aggression.

Children of divorced or separated parent's exhibit increased behavioral problems and the marital conflict that accompanies parents' divorce places the child's social competence at risk. Even in intact families that have low to medium levels of conflict, children still have "fewer behavior problems than those in the high-conflict, disrupted families". During a divorce, conflict between parents is often accompanied by less affection, less responsiveness, and more inclination to punish their children, which leaves their children feeling emotion

The outcome the present study revealed that, aggressive behavior mean scores were significantly decreased after the implementation of the psycho-educational program. On the same line, the results of the present study showed that the level of aggressive behavior was changed after the application of the program, where the level of aggressive behavior was decreased at the second assessment (from severe to mild level) and third assessment time with slightly increase in the third assessment (moderate level) after application of the program.

This could be attributed to exposure of the foster children to the program with its various techniques which contributed in one way or another to the success of the program in reducing the level of aggressive behavior. The positive impact of the program emphasized that human behaviors are learned and can be modified with warmth, empathy, and social support among group participants.

Another plausible explanation for this finding may be attributed to the fact that children were exposed to important concepts about aggression and what behaviors constitute aggressive. Psycho-educational intervention designed to learn social skills which increase self-control and provide skills training to influence perceived social norms. Each session introduces a new skill and activities that facilitate child's application of the skill. Problem solving, self-management and self-control skills, communication, peer resistance, and conflict resolution were emphasized.

These findings are consistent with other studies conducted to determine the effectiveness of the aggression prevention program for example but not limited to **Adam, (2017)**²⁰ who mentioned that there was a significant difference in favor of the intervention group based on their trait score in their pre and posttests. Also, ²¹ who reported that there was a significant effect of the social skills training program in decreasing aggression. ²² & ²³ who mentioned that, post-test total mean aggression scores were significantly lower than pre-test scores. Also, these results are supported by ²⁴ who reported that, institutional children have decreased their aggressive behavior level after applying the program compared to the level of aggressive behavior they have before applying the program, which confirms the effectiveness of the counseling program in reducing the level of aggressive behavior among institutional children.

V. Conclusion

Foster boys had high mean scores of physical aggression than girls and there was a highly statistically significant difference in all types of aggressive behavior between pretest, post and after three months from implementation of the program at (P=0.000).

Recommendation:

In the light of the results of the current study, the following recommendations are suggested:

- Frequent assessment of aggression among foster care children.
- Effective comprehensive programs designed to prevent and reduce the occurrence of aggression among foster care children.

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