Effectiveness of psychoeducation intervention on Symptoms of depression among Syrian Refugees Children in Kurdistan region - Iraq

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ETHICAL APPROVAL

All procedures involving human participants in this study were performed by the ethical standards of the official permission was sought from the University of Sulaimani/ college of nursing. The Directorate of Sulaimani governorate was informed about the research and written permission had been obtained to carry it out (JCC, on 1-11-2020), and the Arbat comp (UNHCR) manager was informed to ensure their agreement. An agreement was made by the researcher with the camp manager about the procedures for data collection. Informed consent by children and relatives was obtained.

DATA SHARING

The data that support the findings of this study are available on request from the author. The data are not publicly available due to privacy or ethical restrictions.

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare. The co-author has seen and agrees with the contents of the manuscript and there is no financial interest to report. We certify that the submission is original work and is not under review at any other publication. NOTE: this paper is part of my theses and the co-author (who is my supervisor).

PATIENT CONSENT STATEMENT

Participants were informed that their participation was voluntary and that they are free to withdraw at any time, without giving a reason and without cost. They voluntarily agreed to take part in this study.

Abstract:

Background: Effective psychotherapy for children always includes parent involvement, teaching skills that are practiced at home or school, and measures of progress that are tracked over time.

Methods: The study quasi-experimental research design, and has been conducted in Arbat Camp Refugees, Sulaimani City-Kurdistan region – Iraq,

Objective: This study aimed to assess the effectiveness of the psycho educational program for reducing symptoms of depression in Syrian children.

Results: A non-probability, purposive sample size of (272) children was chosen to be included in this study. The sample was divided into two groups; the experimental, and control, (136) children for each group, using the simple random sampling approach for division. The target population of interest in this study will be children living in this area and include the age group between 6-12 years.

The study assessed the effectiveness of psycho education Therapy on Symptoms of depression among Children in Arbat Camp Refugees Sulaimani City-Kurdistan region – Iraq.

Conclusion: Findings that the psycho-education intervention is effective in reducing symptoms of depression in children.

Keywords: Effectiveness, psychoeducation intervention, depression, Children

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Introduction

People with depression have depressingly negative thoughts, feelings, and behaviors. Depression is a severe disorder. Clinical depression, as opposed to normal sorrow, is characterized by its persistence, frequent interference with the experience or anticipation of pleasure, and severe interference with day-to-day functioning [1]. A complicated clinical judgment is required in practice to classify the degree of depression based on the number of symptoms present. There could be a corresponding functional impairment in relationships, at home, or at school. Unlike in adults, low mood may not be as common and irritation instead of melancholy may be the major mood alteration. Major depressive disorder (MDD) in youngsters (5–12 years old) can be difficult to diagnose [2].

Increased awareness of mental health research in science has been brought about by rising incidence rates of psychiatric diseases.1-3 According to World Health Organization (WHO) predictions, depression will rank as the second most common ailment worldwide until 2021.1. However, the frequency of depressive disorders has grown in both adults and children [3], with a range of 0.3% to 7.8% among those under the age

of 13. Depending on the method of measurement, children under 14 years old in Brazil have a prevalence of childhood depression ranging from 0.2% to 7.5%. Because childhood depression affects children and can have significant and long-lasting effects, it is a psychological issue that requires specific attention [4].

Children of school age (ages six or seven to twelve) might exhibit depressive symptoms, with melancholy, impatience, or boredom being the most common emotions to be communicated. They seem depressed, weep easily, and exhibit feelings of weariness, loneliness, and low academic achievement, which may lead to school rejection, phobias, separation anxiety, and death desires. In addition, they could experience mood-congruent psychotic symptoms (depreciative aural hallucinations and less commonly delusions of blame or guilt), poor focus, somatic problems, weight loss, sleeplessness, and weight loss. [4, 5]

The decline in performance could be due to weak concentration or interest, both characteristic of the state of depression. It is common for the child not to have friends say that classmates do not like him, /her or have an exclusive and excessive attachment to animals.[6] Inability to enjoy oneself (anhedonia), poor relationship with peers, and low self-esteem, telling oneself as stupid, silly, or unpopular can also be present. It is important to emphasize that teachers are often the first to notice the progressing modifications of depression in these children [7].

Clinicians often divide treatment into three phases: In the acute phase, which usually lasts six to 12 weeks, the goal is to relieve symptoms. In the maintenance phase, which can last for several more months, the goal is to make the most of improvements. At this stage, clinicians may make adjustments to the dose of a medication. In the maintenance phase, the aim is to prevent relapse. Sometimes the dose of a drug is lowered at this stage, or psychotherapy carries more of the weight. Unique differences in life experience, temperament, and biology make treatment a complex matter; no single treatment is right for everyone.[8] Psychotherapy and medications are commonly used treatment options. In some research, adolescents showed a preference for psychotherapy rather than antidepressant medication for treatment. Cognitive-behavioral therapy and interpersonal therapy have been empirically supported as effective treatment options for adolescents.[9] Studies have shown that a combination of psychotherapy and medication is the most effective treatment [10]. Pediatric massage therapy may immediately affect a child's emotional state at the time of the massage, but sustained effects on depression have not been identified [11].

Treatment programs have been developed that help reduce the symptoms of depression. These treatments focus on immediate symptom reduction by concentrating on teaching children skills about primary and secondary control. While this treatment program's efficacy in children with mild or moderate depressive symptoms[12].

Psycho-education is a common behavioral treatment approach that involves explaining to patients the nature of their complaint from multiple perspectives, such as social, biological, familial, and pharmacological, in an organized group or individual program. It also gives caregivers and service providers knowledge, upkeep, and management techniques [13].

There are several formats: family with patient engagement versus family without patient participation, peer-led versus professionally led, patients versus relatives, group intervention against individual intervention, and, more recently, in-person versus web-based or online [14]. In actuality, parent participation, skill-building exercises that may be done at home or at school, and progress measurements that are monitored over time are all integral components of psychotherapy for kids [15]. In many kinds, women are urged to be forceful in their about-turn, while males are encouraged to verbalize their sorrow and open up more emotionally. Frequent psychotherapy helps children and teenagers learn coping mechanisms while providing a secure space for them to examine their emotions and experiences [16].

The world's refugee population has grown dramatically since the start of the Syrian civil conflict in 2011 [17]. Economic and party-political crises, conflict, war, persecution, and human rights violations were the primary causes of this worldwide refugee crisis and mass movement [18]. Children outnumber local populations in terms of prevalence, and this difference persists regardless of whether they are internally or externally displaced into high- or low-income countries. The majority of children who are shocked by the negative events related to war also have a higher prevalence of persistent symptoms of anxiety and depression than the general population [19].

Thousands of Syrian citizens have been hurt, killed, and abducted since the turmoil in that country flared out in March 2011. The multi state war in Syria has resulted in widespread forced displacement [20]. 5.4 million Syrian refugees were officially registered in Turkey, Jordan, Egypt, and Iraq by the end of 2017 [20, 21]. About 25,000 Syrian refugees were living in Iraq as of March 2018, according to a report by the UNHCR. The majority of these refugees were living in camps or urban areas in the Kurdistan Region of Iraq (KRI).

The study's objective: the main object was aimed to assess the effectiveness of the psycho-educational program for reducing symptoms of depression in Syrian children.

The specific object was aimed to

1- Identify and equivalence demographics data of children in the experimental and control group.
2- Determine the effect of the psycho-educational program on depression symptoms.
3- Find out the correlation between experimental and control groups.
4- Find out the association between children's characteristics and the effectiveness of programs.

Material and Methods:

The study quasi-experimental research design, and was conducted at Arbat Camp Refugees, Sulaimani City-Kurdistan region – Iraq. This study was carried out to assess the effectiveness of psychoeducational programs for reducing symptoms of depression among Syrian children.

A non-probability, purposive sample size of (272) children was chosen to be included in this study. The sample was divided into two groups; the experimental, and control, (136) children for each group, using the simple random sampling approach for division.

The target population of interest in this study will be children living in this area according to the following inclusion and exclusion criteria:

Inclusion criteria:

1- Children aged between 6-12 years,
2- Agreement between family and children.
3- Both sexes.
4- Children with depression symptoms.

Exclusion criteria: Children have previous psychiatric problems according to medical diagnosis. For assessing the case-control design, the cases were selected according to the inclusion and exclusion criteria, while the control group consisted of participants with all of the inclusion and exclusion criteria except having a psychiatric disorder.

Tools and methods of data collection:

The instrument of data collection includes a Questionnaire. The instrument has three parts. The data will be collected through a direct interview (face to face with children and their parents) method using this scale (DASS), and the DASS Scoring

Each of the 42 questions is scored on a 4-point scale ranging from 0 (“Did not apply to me at all”) to 3 (“Applied to me very much, or most of the time”). Scores for Depression, Anxiety and Stress are calculated by summing the scores for the relevant items: “ Depression: 3, 5, 10, 13, 16, 17, 21, 24, 26, 31, 34, 37, 38, 42 Anxiety: 2, 4, 7, 9, 15, 19, 20, 23, 25, 28, 30, 36, 40, 41 Stress: 1, 6, 8, 11, 12, 14, 18, 22, 27, 29, 32, 33, 35, 39”.

Part one: Sociodemographic characteristics of children

this part consisted of sociodemographic characteristics of the participants which include: age, sex, level of education, and for parent’s level of education, occupational status, and parents’ presence of psychiatric disorder.

Part two: Assessment of psychological symptoms of child depression.

Part three: Evaluate effects of psychoeducation Therapy. This part includes the assessment and evaluation of the effect of Psychoeducation Therapy on alleviating the symptoms of depression.

Methods of data collection:

The samples were collected by interviewing all children of school age and with parents in Arbat refugee Camp, looks that 272 children have symptoms of depression.

Those children with symptoms of depression are divided into two groups (control and experimental).

All participants gave informed consent and confidentiality was maintained throughout the study. All respondents in both groups were advised that they were free to make self-referrals if they recognized the symptoms/conditions being investigated. All respondents were given information on resources available for help.

Also took interviews with parents for symptoms of psychological distress, and used the same scales (DASS).

Psychoeducation Therapy was applied to the experimental group

1. In the experimental group, baseline characteristics were obtained. This was followed by 4 psycho-education sessions. All session.

All Sessions: include

Session 1- contact with group1. Include collaborative agenda-setting: Discuss children with parents presenting problems.

Session 2-health education and identification of depression symptoms: Educate children with parents about the cognitive model of depression. , identify main problems, educate children with parents about depression, and take homework

Session 3- advice children with parents on how to take care of advice: diet, sleeping, physical exercise, pleasant activity, and social skill.

Session 4- Provide a final summary, and get feedback: reassessment for symptoms of depression.

2. In the control group, interviewing the children and their parents for the assessment of depression symptoms by questionnaire (pre-test), no interventions were provided. Reassessment was done at 3 and 6 weeks (posttest) and appeared mostly the same symptoms of depression.

After 3 months, the assessment was followed immediately by a repeat of the same process of psycho-education, in addition to lecturing on the challenges that the respondents had experienced after the first round.

Each psycho-education program in all the departments in the experimental group lasted between 1.5 months and 2 months.

Implementation of the interventions should follow a specific plan written and distributed to all involved with the child, including parents, teachers, aides, specialists, and others. The plan should include the methods, timelines, tools, needed resources, and other components necessary to increase the likelihood of success. For depressed children, the program must be followed closely so that consistency and predictability are evident, which will help to reduce perceived stress. If the program itself causes depression or negative responses, its potential effects may be undermined.

Data Analysis:

Data from the present study were analyzed through the use of the statistical package for social science (SPSS) Version 25. The statistical procedures which were applied for the data analysis and assessment of the results include the following statistical methods:

The statistical procedures were applied to determine the results of the recent study include:

The following formula was used:

1. Descriptive statistics

   This approach includes the following statistics:

a. Percentage (%) to calculate the description n of the sample.

b. Mean and standard deviation to estimate the value of some data.

   ♦ The Mean of the score (M.S)

   ♦ Standard deviation:

2. Inferential statistics

   a. Chi-square: this test was used to determine if there were significant differences between the observed and expected frequency distribution (Johnson, 2007). This test was used to determine a significant statistical relationship between a patient's socio-demographic and clinical variables and the level of frequencies of behavioral characteristics items.

There was a certain set of probability levels to determine the significance of the test:

1. non-significant (P> 0nonsignificantt (p< 0.05)
2. Highly significant (P< 0.01).

Results:

Table (1): Distribution of the sample's responses relating to demographical data of the control group and experimental group

	Control group		Experimental group	
	No.	**%**	**No.**	**%**
Child age				
5-7	18	13.2	22	16.2
8-10	51	37.5	49	36
11-13	67	49.3	65	47.8
Total	136	100.0	136	100.0
Child sex				
male	65	47.8	63	46.3
female	71	52.2	73	53.7
Total	136	100.0	136	100.0
The presence of psychological distress among parent				
yes	122	89.7	125	91.9
no	14	10.3	11	8.1
Total	136	100.0	136	100.0
How many children in the family				
1-3	22	16.2	9	6.6
4-6	63	46.3	66	48.5
≥7	51	37.5	61	44.9
Total	136	100.0	136	100.0
Education level of parent				
illiterate	19	14	25	18.4
basic	66	48.5	99	72.8
preparatory	51	37.5	12	8.8
Total	136	100.0	136	100.0

*%= percentage, N=number,

The result of the study reveals that most of the children were 49.3 their ages ranged from 11-13 years old. It appears from the control group that the most frequent age group is 11-13 years 49.3%, and the last one is the group of 5-7 years 13.2%, most of the children are females 52.2%, most of them have parent psychiatric distress among them 89.7%, also appear that most of the family have 4-6 children 46.3%.

Also shows that most of the children 47.8 their ages ranged between 11-13 years old. It appears from the control group that the most frequent age group is 11-13 years 49.3%, and the last one is the group of 5-7 years 16.2%, most of the children are females 53.7%, most of them have parent psychiatric distress among them 91.9%, also appear that most of the family have 4-6 children 48.5% and most of the parent have a basic level of education 72.8%.

Table (2) Distribution of the sample's responses relating to depression symptoms in children.

No	Responses / Items	Frequency 0	1	%	2	%	3	%	Total
1	I couldn't seem to experience any positive feeling at all	0	62	22.8	107	39.3	103	37.9	272
2	I just couldn't seem to get going	0	94	34.6	174	64	4	1.5	272
3	I felt that I had nothing to look forward to	1	47	17.3	185	68	39	14.3	272
4	I felt sad and depressed	0	19	7	208	76.5	45	16.5	272
5	I felt that I had lost interest in just about everything	0	13	4.8	240	88.2	19	7	272
6	I felt I wasn't worth much as a person	0	11	4	141	51.8	120	44.1	272
7	I felt that life wasn't worthwhile	0	58	21.3	211	77.6	3	1.1	272
8	I couldn't seem to get any enjoyment out of the things I did	0	28	10.3	198	72.8	46	16.9	272
9	I felt down-hearted and blue	0	18	6.6	169	62.1	85	31.3	272
10	I was unable to become enthusiastic about anything	0	80	29.4	151	55.5	41	15.1	272
11	I felt I was pretty worthless	0	57	21	195	71.7	20	7.4	272
12	I could see nothing in the future to be hopeful about	0	2	0.7	169	62.1	101	37.1	272
13	I felt that life was meaningless	0	36	13.2	200	73.5	36	13.2	272
14	I found it difficult to work up the initiative to do things	0	82	30.1	168	61.8	22	8.1	272

*0= did not apply to me at all, 1= Applied to me to some degree, 2= Applied to me to a considerable degree, 3=Applied to me very much.

Table (2) also indicated that most of the children have depression symptoms. It appears that the higher frequent behavioral characteristics are I just couldn't seem to get going (34.6%) some of the time; also the higher frequent behavioral characteristics are I felt that I had lost interest in just about everything (88.2) considerable applied to me. And the higher frequent behavioral characteristics response most of the time was (44.1) I felt I wasn't worth much as a person.

Table (3): the pretest sample's responses relating to depression symptoms in children and post-test sample responses relating to depression symptoms in children of the control group.

	Group	N.	Mean	Std. Deviation	t	p. value
depression	pre	136	2.7687	0.19188	0.446	0.195 NS
	post	136	2.7682	0.19115		

NS=non-significant, N=number, M=Mean, SD=standard deviation.

In table (3) shows that the mean scores in pretest ($\bar{x}$= 2.7687) , (SD= 0.19188) and posttest ($\bar{x}$= 2.7682) , (SD= 0.19115), and the t-test is (0.446) shows that no significant in-control group between pre and posttest.

Table (4): the pretest sample's responses relating to depression symptoms in children and post-test sample responses relating to depression symptoms in children of the experimental group.

	Group	N.	Mean	Std. Deviation	t	p. value
depression	pre	136	3.0706	0.15494	32.214	0.0001 Sig.
	post	136	2.3608	0.22723		

*Sig. = Significant, N= number, M=Mean, SD=standard deviation.

The table shows that the mean scores of depression in pretest ($\bar{x}$= 3.0706, SD ± 0.15494) and post-test ($\bar{x}$= 2.3608, SD ± 0.22723), and t-test (32.214) appear highly significantly in the pretest and post-test of the experimental group.

Table (5): comparison between the control group and experimental group samples.

	Group	N.	Mean	Std. Deviation	t	p. value
depression	Control	136	2.7687	0.19188	19.151	0.0001 Sig.
	Experimental	136	2.3608	0.22723		

*Sig. = Significant, N= number, M=Mean, SD=standard deviation.

		N.	Mean	Std. Deviation	t	p. value
depression	control	136	2.7687	0.19188	−52.960	0.0001 **Sig.**
	Psychological distress in the parent	136	1.10	0.305		
	experimental	136	2.3608	0.22723	−37.554	0.0001 **Sig.**
	Psychological distress in the parent	136	1.10	0.305		

Table (5) reveals the differences between the scores of the control group and experimental group of depression have differences between control and experimental group, the mean score of the control group is ($\bar{x}$= 2.7687), (SD ± 0.19188), and in the experimental group ($\bar{x}$= 2.3608), (SD ± 0.22723) and t-test (19.151). It appears highly significantly in the comparison between the control group and experimental group.

Table (6): correlation between Psychological distresses in the parents, control group, and experimental group samples.

*Sig. = Significant, N= number, M=Mean, SD=standard deviation.

Table (6) reveals the differences between the scores of the control group and Psychological distress in the parent of the depression symptoms, the mean score of the control group is ($\bar{x}$= 2.7687), (SD ± 0.19188), and Psychological distress in the parent ($\bar{x}$= 1.01), (SD ± 0.305) and t-test (-52.960). the mean score is ($\bar{x}$ = 2.3608) , (SD ± 0.22723) in experimental group ($\bar{x}$= 1.01) , (SD ± 0.305) in Psychological distress in the

parent, and t-test (−37.554). It appears highly significantly in the comparison between the control group and Psychological distress in the parent.

Discussion:

The study assessed the Effectiveness of psychoeducation interventions on Symptoms of depression among Children in Arbat Camp Refugees in the Sulaimani City-Kurdistan region – of Iraq.

The study by "(Elena, et al., 2011) indicated that most children have depression symptoms higher between the age of 8-12 years, and also depression symptoms appear in girls more than in boys. The results showed the effectiveness of the psychological intervention on the children to alleviate the level of depression symptoms". These results supported by "Kristy, et al., 2020) have shown that psychoeducation therapy, is effective in treating childhood depression disorders". The result of we indicated that the psychological distress of the parents affects their children, also in the study by "Cressida M., (2006), supported that, early qualitative reviews provided evidence of an association between parental illness and elevated mental health difficulties in children of parents who are ill".

In the study, "Turki Alotaibi (2015) showed that student counseling in Saudi schools could potentially help indirectly combat and reduce levels of anxiety and depression among Saudi school children and adolescents".

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