Effect of Health Teaching for Mothers on Quality of Life for Their Children with Rheumatic Arthritis

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Abstract

Background: Rheumatic arthritis (RA) is an autoimmune progressive disease affecting one percentage of the general population Aim: This study aimed to evaluate the effect of health teaching for mothers' on quality of life for children with rheumatic arthritis. Design: A quasiexperimental design was used to conduct this study (pre &post- test). Setting: the study was conducted at Pediatric Rheumatic Fever Clinic of Tanta University Hospital. Subject and **method:** A quasi-experimental research design was used with a convenience sample of 60 mothers and their children with rheumatic arthritis. Data were collected using three tools: tool (I) Structured Interview Schedule sheet: it was be divided into two part: part (A) Socio demographic characteristics of studied mothers and their children, part (B) Mothers' knowledge and practice about rheumatic arthritis (Pre/Post): Tool (II) Quality of life domains for children with rheumatic arthritis (Pre/Post). Tool (III) FLACC behavioral pain assessment scale (Pre/Post). Results: The results revealed that more than a third of the total score of knowledge about rheumatic arthritis at pre- education compared to less than three quarters of them at post education, and one third of them had good total quality of life at preeducation compared to more than half of them at post education. Also, one third of them had mild pain at pre-education compared to that more than half of them at post education. Conclusion and Recommendations: it can be concluded that after health education was implemented, the quality of life for children with rheumatic arthritis improved. Establish continuous educational and training program for children and their mothers about rheumatic arthritis are recommended to increase their knowledge, quality of life, and management of RA and prevent its complication.

Keywords: Children, Effect, Quality of Life, Rheumatic Arthritis, Health Teaching, Mothers.

Introduction

Rheumatic arthritis (RA) is an inflammatory disorder disease affecting 1% of the general population, is mainly a disease of the joints resulting in destruction of the joints and disability,

and in severe cases, it may cause lifethreatening complications. Rheumatic arthritis of children is the most prevalent chronic rheumatologic disease in children and one of the most common chronic diseases during childhood. The prevalence of RA ranges from 0.3% to 1% globally. RA is the result of an immune response in which the body's immune system attacks its own healthy cells. The specific causes of RA are unknown, but some factors can increase the risk of developing the disease (Goma, Razek, & Abdelbary, 2019).

Rheumatoid arthritis is a chronic inflammatory disorder that can affect more than just joints. RA mainly attacks the joints, usually many joints at once. RA commonly affects joints in the hands, wrists, and knees. In a joint with RA, the lining of the joint becomes inflamed, causing damage to joint tissue. Tissue damage can cause long-lasting or chronic pain, unsteadiness (lack of balance), and deformity (misshapenness).In some people, the condition can damage a wide variety of body systems, including the skin, eyes, lungs, heart and blood vessels (Shan, Zhao, Zheng, Guo, Schrodi, 2023) .Nursing education can be provided about good eating habits that help control bone loss caused by inactivity and drug side effects. Health teaching Provides information revealing coping methods that work and the need to develop new coping skills and behaviors, family attitudes; child with special long-term needs may strengthen or strain family relationships and an undue degree of overprotection may be detrimental to child's growth and development (disallow school attendance and peer activities, avoiding discipline of child, and allowing child to assume responsibilities for ADL) (Mostafa, Elzven, Zaved & Salama, 2022)

The nurse encourages family members to express problem areas and explore solutions responsibly. Reduces anxiety and enhances understanding; provides the family with an opportunity to identify problems and develop problem-solving strategies. Assist family members to express feelings, how deal with the chronic needs of the child and coping patterns that help or hinder adjustment to the problems (**Mostafa et al., 2022**).

Significance of the study:

Rheumatoid arthritis is the most prevalent chronic rheumatic disease in children and a significant reason of both short-term and long-term disability that impair the normal child life. Studies in developed countries have stated a prevalence that differ between 16 and 150 per 100 000. Globally, about 3 million children and young adults are estimated to suffer from rheumatic arthritis. Girls were constantly found to be at a higher risk than boys (Dave, Rankin, Pearce, & Foster, 2020). According to the most current WHO data published in 2018, that Egypt has a 0.5% prevalence of rheumatoid arthritis, with 78% of those affected being female (Mostafa et al., 2022). Nonetheless, few studies have been conducted on this topic and the prevalence of chronic disease is high in children. Goma et al. (2019) confirmed that rheumatoid arthritis causes impairment of all aspects of QOL

The aim of the study:

This study was aimed to evaluate the effect of health teaching for mothers' on quality of life for children with rheumatic arthritis.

Research hypothesis:

After health education was implemented, the quality of life for children with rheumatic arthritis improved.

Subjects and Method Research design:

A quasi-experimental research design was used (pre &post- test).

Setting:

The study was conducted at Pediatric Rheumatic Fever Clinic of Tanta University Hospital's which is affiliated to Ministry of Higher education and scientific research

Subject:

A Convenience sampling of 60 mothers and their children with rheumatic arthritis was assigned in the current from the previous mention of setting.

Inclusion criteria of children:

- Age (6–12years).
- Both sexes: male & female.
- Free from other medical disease.

Tools of data collection:

In this research, three instruments were used and categorized as follows:

Tool I: Structured Interview Schedule sheet: After looking over previous studies (Wallander, & Koot, 2016), the researchers created it (Muculley et al., 2018). It has three sections and was written in basic Arabic. Part 1: Socio demographic characteristics of studied mothers and their children. -A mother's age, degree of education, profession, marital status, and place of living are all demographic details.

-Characteristic of children as gender, age, the child's birth and educational level.

-Past and present medical history as which joints appeared arthritis, how often does arthritis affect your child, when does the severe pain occur, when does the arthritis occur more, was the child admitted to the hospital, how often is the child hospitalized because of arthritis, what is the reason for hospitalization, have any specific investigations or tests been done for the joint, does the child take the medication regularly, where does the child get good advice and does the child miss because of arthritis pain.

Part 2: Mothers' knowledge and practice about rheumatic arthritis (Muculley et al., 2018) (Pre/Post): It was developed by the researcher to asses mothers' knowledge about rheumatic arthritis, after reviewing related literature it was include meaning, predisposing factors. manifestation, complication, diagnoses, methods of treatment, giving your child medication, take the prescribed doses regularly, keen on the availability of medications for your child, what do you do when your child has pain, follow up regularly provide any instructions and methods of using treatment, source of health education you obtained and elements of health education (total question 16).

Scoring system: The 16 questions had a total score of 32 out of 100, representing the moms' knowledge. For each question, the right and incomplete answers received 2, 1 and 0 respectively, while the wrong answers received 0. Using a model key response, we were able to classify the moms' levels of knowledge as high, moderate, or low. A % score was generated by adding together all of these

scores. There were three groups into which it was placed:

-If your overall score is between 75% and 100%, you have a high degree of expertise.

-If your overall score is between 50% and 75%, you have a moderate degree of understanding.

-Scores below 50% indicate a lack of expertise.

Tool II: Quality of life domains for children with rheumatic arthritis (Pre/Post):

This comprehensive questionnaire evaluates the child's overall health, mental state, academic performance, and social environment. To measure the quality of life of children with rheumatoid arthritis, the researcher altered and applied it; it was originally created by **Shokir**, (2009). There are four parts to it:

First Physical domain: Consist of (17 items) as complain of pain, headache, body loss weight, constipation, nausea, exercise and hygiene...etc.

Second psychological domain: Consist of (15 items) reflect emotional status, feeling and sleeping...etc.

Third domain social functioning: Contains sixteen questions that address the child's social interactions, including things like feeling pleasure and happiness, social relations, participating in group activities, and want to visit relatives, among others.

Fourth educational domain: comprises of fifteen elements, including but not limited to: school functioning as attentive class attendance, difficulty thinking, difficulty concentrating, difficulty solving issues, difficulty making independent decisions, etc.

Scoring system (Xiang, &Huang, 2018)

Scored 189 out of a possible 63 items, all of which were self-reports. On a scale from 1 to 3, each item's answer was used to determine the moms' Put a three for always, a two for occasionally, and a one for seldom. Based on response of children, total score will be ranged from good to poor quality of life.

-Less than 50% was considering poor quality of life.

-From 50% and more was considering good quality of life.

Tool III: FLACC behavioural pain assessment scale (Pre/Post): It was developed by Kyle, Carman (2013). It was used to assess behavioral responses of children with rheumatic arthritis toward pain. The FLACC behavioral pain assessment scale is a tool used to assess pain in non-verbal patients, including infants and young children. The acronym FLACC stands for Face, Legs, Activity, Cry, and Consolability. An increased score indicates a more intense level of discomfort. The following is a synopsis of all the sections: Face: The child's facial expression is observed for signs of pain, such as grimacing or furrowing of the brow.

Legs: The child's leg movement is observed for signs of pain, such as restlessness or tenseness.

Activity: The child's activity level is observed for signs of pain, such as decreased movement or inability to engage in play. **Cry:** The child's crying is observed for signs of pain, such as intensity or duration.

Consolability: The child's ability to be comforted is observed for signs of pain, such as ease of being comforted or inability to be comforted.

Scoring system A total score of 10 was achieved by assigning a score of 0 to each category on a scale. -Relaxation and comfortable zero.

-Mild pain from 1-3.

-Moderate pain from 4-6.

-Severe pain from 7-10.

Method: - 1-A formal letter of approval was sent to the directors of the aforementioned establishment from Tanta University's Dean of the Faculty of Nursing. Afterwards, the researcher met with Tanta University Hospital's director to go over the study's goals, procedures, and patient permission required for data collection

2-Ethical Considerations

Ethical clearance from Tanta University Hospital's general manager and the nursing school's ethics committee were required for this study. Mothers who agreed to participate in the study had their questions about its purpose and goals answered by the researcher before it began. Mothers gave their verbal assent after receiving an explanation that was both clear and concise, tailored to their individual comprehension levels. The data collected was only for study purposes, and they made sure of that.

.3-**Pilot Study:** The purpose of the pilot research was to evaluate the usefulness of the developed instruments and the precision of the questions by surveying

10%, or 6%, of mothers. Time required to complete the questionnaire by each participant was also estimated during the pilot.

4-Validity it was determined by a panel of five professors who are authorities in paediatric nursing. Analyzing the tool's reliability by analysing its internal consistency using Cronbach's Alpha.

Table (1):	Cron	bach'	s Al	lpha	test.
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Items	Cronbach alpha
Structured Interview Schedule	0.753
Quality of life	0.812
FLACC behavioral pain assessment scale	0.843

The researcher was visiting the study setting 3days / week (Saturday, Monday and Wednesday) at (9AM -2PM).

5-Three tools were used in the current study for data collection. Using tool I Mothers' knowledge about rheumatic arthritis (Pre/Post):

After investigating relevant literature, the researcher created it to test moms' understanding of rheumatic arthritis. The researcher checked their rheumatic arthritis knowledge twice, first before the program me started and again after it ended. No more than fifteen to twenty minutes was needed. With a perfect score of 2, a partial score of 1, and a score of 0 for wrong answers, each question was rated based on the moms' knowledge. Mothers' levels of knowledge were assessed using a model key response and then classified as high, moderate, or low. Rheumatic At the Fever Clinic, researchers evaluated the quality of life of each kid separately, taking 10-15 minutes

for each child before and after the program was implemented, using tool (II). Scored 189 out of a possible 63 items, all of which were self-reports. On a scale from 1 to 3, each item's answer was used to determine the moms' Put a three for always, a two for occasionally, and a one for seldom.

Each child was interviewed individually by the researcher assess the **behavioral pain assessment** pre and post implementation the program based on tool (III) the time required for each child was 5-10 minutes. It contained 5 items, and total score is 10. Each category on a scale scored from 0-2 resulting in a total score of 10.

6-Program construction: The researcher created it after reviewing the relevant literature and taking into account the study subject's real needs assessment. After then, there were four stages to the fieldwork:

The Assessment Phase:

The mothers' familiarity with rheumatic arthritis was gauged in a pre-test utilising the aforementioned instruments.

The Planning Phase

The requirements of mothers and children with rheumatic arthritis were identified by examination of the pre-test data. The researcher developed the curriculum, which was reviewed and edited by supervisors; it was implemented over the course of four sessions.

The Implementation Phase:

The studied mothers were divided into subgroup. Each group was consisted of 6,

each group was taken 4 sessions, each session ranged from 30-45 minutes. The researcher was used various instruments such as paper, color pens, markers, erasers, pencils, paints, inked brushes, crayons, ruler, drawing board and camera. **First session:** Focus on definition, predisposing factors, manifestation and complication of rheumatic arthritis.

Second session: Focus on pain assessment and management

Third session: Focus on healthy diet and suitable exercise

Fourth session: Focus on quality of life for their children.

7-The Evaluating Phase: Each mother was evaluated by the researcher before and after one month after implementation of the program by using (tool II, III).

Data collection period: Data were collected through six months, from the beginning of March 2022 to the end of August 2022.

8- Statistical Analysis Revisions, coding, and data entry were performed using Personal Computer on data gathered from the sample under study (PC). Statistical analysis and data input were carried out using SPSS version 24, a Computer Program for the Social Sciences. The data was shown using descriptive statistics, namely percentages and frequencies.

Significance of the results: -Significantly so with a p-value less than 0.01.

-At p-value < 0.05, statistical significance was deemed.

-The p-value is more than or equal to 0.05, which indicates that it is not significant.

Results:-Table (1): illustrates percentage distribution of studied mothers in relation

two socio demographic characteristics it shows that more than two thirds (70.0%)are 25 years old and more with mean age SD= 25.5 ± 1.09 . As well, more than half of them (53.3%) had a secondary education and about two thirds of them (66.7%) don't work. In addition, there is a kinship between the parents among about one tenth of them (11.7%) and more than two thirds (71.4%) was second degree. Besides, less than two thirds of them (61.7%) live in urban areas. As illustrates in Figure (1) represents that, more than one fifth of the studied mothers (53.3%) have secondary education, more than one quarter of them (28.3%) have university education, while minority of them (3.4%)can read and write. .

Table (2): Number and percentage distribution of the studied child's according to their personal information (n=150). It clarifies that more than half of them (55%) are females. In addition, less than one fifth of them (16.7%) their age were ranged between 10 to 12 years old with mean age SD= 8.15 ± 1.67 . Regarding ranking among their siblings, less than one third of them (31.7%) are the third child.

Table (3) Comparison between the studied mothers' at pre and post intervention regarding to their total knowledge about rheumatic arthritis, declares that there is a clear improvement in total knowledge about rheumatic arthritis among the studied mothers at education compared post to preeducation with a highly statistically significant difference (P< 0.01). As evidence, (41.7%) of the total score of knowledge at pre- education compared to less than three quarters of them (73.3%) at post education as illustrated in figure (2). Table (4) percentage distribution of the studied mothers' at pre and post education regarding to total quality of life domains for their children with rheumatic arthritis. highlights that there is a high significant difference in quality-of-life domains for children with rheumatic arthritis among the studied mothers at post education compared to pre-education with a highly statistically significant difference (P< 0.01). As evidence, more than one third of them (35%) have good physical domain at pre-education compared to more than half of them (58.3%) at post education. Besides, slightly more than one third of them (33.3%) have good total quality of life at pre-education compared to more than half of them (58.3%) at post education, illustrated as figure (3).

Table (5) Comparison between the studied children at pre and post intervention regarding to their total pain assessment, declares that there is a marked enhancement in total pain among the studied children at post education compared to pre-education with a highly statistically significant difference (P< 0.01). As evidence, one third of them (33.3%) have mild pain at pre-education compared to more than half of them (53.3%) at post education, Illustrated as Figure (4).

Table (6) clarifies that there is a highly significant statistical positive correlation between the studied mothers' Total knowledge and Total quality of life at preadd post-program with (p < 0.01)

Socio demographic characteristics of mothers	n=60 No	%
Age		
<20	0	0
20-<25	18	30.0
>25	42	70.0
Mean+ SD 25.5±1.09		
Education level		
Illiterate	0	0
Read and write	2	3.4
Primary education	9	15.0
Secondary education	32	53.3
University education	17	28.3
Occupation		
Work	20	33.3
Not work	40	66.7
Is there a kinship between the parents		
Yes	7	11.7
No	53	88.3
If the answer is yes n=7		
First degree	1	14.3
Second degree	5	71.4
Third degree	1	14.3
Residence		
Rural	23	38.3
Urban	37	61.7

Table (1): Percentage Distribution of studied mothers according to socio demographic characteristics.



Figure (1): Studied mothers' according to their educational level

Table (2): Percentage distribution of studied children according to their socio demographic characteristics (n=150).

Socio demographic characteristics	No	%
Gender		
Male	27	45.0
Female	33	55.0
Age		
6-<8	23	38.3
8-<10	27	45.0
10-12	10	16.7
Mean + SD 8.15±1.67		
The child's ranking among his siblings		
First	21	35.0
Second	15	25.0
Third	19	31.7
Forth	5	8.3
Educational level		
Illiterate	0	0
Primary education	60	100.0

Total knowledge	P (n=	re :60)	Po (n=	ost :60)	2	(p-value)
	No	%	No	%	χ ²	`
High	25	41.7	44	73.3		
Moderate	11	18.3	7	11.7	25.69	000**
Low	24	40.0	9	15.0	55.08	.000**

Table (3): Relation between studied mothers' regarding to their total knowledge about rheumatic arthritis.

**: Highly statistically significant



Figure (2): Studied mothers' regarding to their total knowledge about rheumatic arthritis of their children (n=60).

Ouality of life domains	Pre (n=60)		Post (n=60)		t-test	(p-val ue)
2	No	%	No	%		(r · ·····)
Physical domain Good Poor	21 39	35.0 65.0	35 25	58.3 41.7	18.33	.000**
psychological domain Good Poor	19 41	31.7 68.3	34 26	56.7	16.94	.000**
Social domain Good Poor	17 43	28.3 71.7	36 24	60.0 40.0	19.64	.000**
Educational domain Good Poor	24 36	40.0 60.0	33 27	55.0 45.0	17.79	.000**
Total Good Poor	20 40	33.3 66.7	35 25	58.3 41.7	21.38	.000**

 Table (4): Percentage distribution of studied mothers' regarding to total quality of life domains for their children with rheumatic arthritis

*: Significant

**: Highly statistically significant



Figure (3): Quality of life domains for children with rheumatic arthriti

Total	P1 (n=	re :60)	Pc (n=	ost :60)	γ^2	(p-value)	
	No	%	No	%	K	(p · muc)	
Relaxation	0	0	0	0			
Mild	20	33.3	32	53.3	02.15	000**	
Moderate	26	43.3	21	35.0	23.13	.000**	
sever	14	23.4	7	11.7			

Table (5): Relation between the studied children at pre and post intervention regarding to their total pain assessment.

**: Highly statistically significant



Figure (4): Correlation between the studied children at pre and post intervention regarding to their total pain assessment.

Table (6): Correlation between study variables pre- and post-program (n= 60).

		Total quality of life pre-	Total quality of life post-		
		program	program		
Total knowledge		0.607	0.599		
Total knowledge	Р	.000**	.000**		

Statistically significant at p<0.01.

Discussion

Psoriatic arthritis is among the most frequent chronic illnesses in children and the

most common rheumatologic condition in children. Having a kid or family member suffer from a chronic and limiting illness is terrible for everyone's mental health and QOL. Attention, self-restraint, and independence are crucial for youngsters. Children with rheumatic arthritis may also feel inadequate and embarrassed since they aren't active enough to participate in school and extracurricular activities related to their condition. (The 2019 study by Fair and colleagues). Considering the sociodemographic characteristics of the women who were part in the research, the findings showed that almost two thirds of the moms were 25 years old or older. According to Windiani et al. (2020), the mothers whose ages were measured were on average 26.6±3.25 years old, which is consistent with these findings. Alternatively, research by Abdel-Salam, and Mahmoud, (2018) found that mothers' ages vary from 26 to 35 for more than 75% of the moms.

Along those lines, the current research found that over half of the moms surveyed had completed secondary school, and that over two-thirds of those women were unemployed. It is worth noting that EL-Gendy et al. (2020) who mentioned hat housewives and moms with technical diplomas made up the largest proportion of the mothers surveyed. On the other hand, Elsayed, Salah, and Elsayed Hassan, (2020) who found that the majority of the moms in their study were in pre-K.. Furthermore, over two-thirds of the moms were second-degree relatives, and the present research found that around 10% of the mothers had some kind of parental affinity. Further, city dwellers made up less than two-thirds of their total population. Based on the findings of **Rodrigues et al. (2022),** who indicated that the majority of the mothers surveyed lived in rural areas and did not have any kind of familial relationship with their partners, this finding cannot be reconciled. Moreover, almost two-thirds of the moms surveyed did not have any blood relatives in the study, according to **Battran et al. (2022).**

More over half of the children surveyed were girls, according to the study's break-down of socio-demographic variables. The mean age was 8.15±1.67 years, and fewer than 20% fell into the 10 to 12 year old age bracket. This result is somewhat in line with another research that was used by Mulligan and Kathleen, (2022) who found that the majority of the children who were evaluated were girls and that their average age was 6.3 (3.2) years. One third or less was the third child, according to the current research. On top of that, they were all elementary school graduates. According to Rapley, May, Smith, and Foster, (2021), the majority of the children surveyed were in elementary school, which is consistent with our findings. One research that found the opposite was done by Khawaja, Zletni, Abushhawia, Elmagrabi, and Sabei, (2018) who mentioned that most of the youngsters that were surveyed were rated first.

This result was consistent with as study performed by **Tovar (2021) who** stated found the number of right answers increased after the caregiver health education intervention when participants participated. The majority of participants got the post-intervention survey questions right after receiving the health education intervention for caregivers. Even though over two-thirds of parents had no prior knowledge of juvenile idiopathic arthritis before beginning follow-up in the rheumatology clinic, **Khawaja, et al. (2018)** who mentioned that most parents correctly answered the question regarding their children's diagnosis following educational intervention.

Atshan and Aziz (2022) who mentioned that the educational program was effective in enhancing parents' knowledge, as there was a high significant difference in overall principal domains related parents' knowledge between the pre- and post-tests in the research group. Similarly, Shojaei, Tavakoly, Ghavamim and Tehrani, (2022) who found that knowledge changed considerably from baseline to follow-up in the intervention group compared to the control group. Similarly, Bozzini, Neder, Silva, and Porta, (2019) investigated the quality of life of children and found that, compared to controls, the children in the research had much poorer physical, social, and overall marks. Patients also showed poorer scores on the overall, emotional, psychosocial, and academic areas when compared to healthy youngsters, according to research by Carvalho, Pinedo, Teles, Seixas, and Carvalho, (2018), also, according to Hordijk et al. (2020), the children who were part in the research had lower scores on the majority of QOL parameters.

However, three quarters of the youngsters surveyed by **Abd El-Mohsen**, **Shaafik**, **Fouda**, (2018) who reported a modest physical level of quality of life. In terms of their mental health, the majority of them had very fulfilling lives, although over fifty had somewhat diminished academic performance. Perhaps the discordance is due to the fact that the two samples under investigation were different in important ways. Furthermore, there was a highly statistically significant difference between the two groups, with little more than a third of the children surveyed reporting a good overall quality of life before the intervention and over half reporting the Statistical analysis revealed same after it. a statistically significant improvement in overall pain scores between the pre- and posteducation periods for the children in this research. This is supported by the fact that the percentage of individuals reporting moderate discomfort increased from one-third before schooling to over 50% after education. After controlling for baseline levels, Stinson et al. (2020), Fellas et al. (2022), and Martins et al. (2022) all arrived to the same conclusion: after intervention, participants an reported significantly less pain and less interference with daily activities as compared to those in the education control group.

This result was contrasted with a study conducted by **Ahmed & Mahmoud (2018)** who reported that most of children with juvenile rheumatoid arthritis had severe pain The current research demonstrated a statistically significant positive link between the mothers' overall knowledge and their quality of life, as far as the variables under investigation were concerned, prior to the programme. You might say that this is because moms who are well-informed about their children's illnesses are better equipped to assist their children in adjusting to their condition. The quality of life of the children investigated was positively correlated with the mothers' level of education, according to studies conducted by Abdel-Salam et al. (2018) and EL-Gendy et al. (2020). After the programme ended, the moms in this research showed a strong positive association between their overall knowledge and their quality of life, according to the results of the correlation analysis. This may be seen as an opportunity for the educational programme to help moms whose children suffer from rheumatoid arthritis have a better understanding of the disease, which in turn would enhance their capacity to make informed health decisions and, ultimately, alter their behaviour. In a similar vein, research by Battran et al. (2022) and Sadik & Mahmoud (2019) who found that children whose moms had more education had better quality of life after participating in a programme.

Conclusion: After health education was implemented, the quality of life for children with rheumatic arthritis improved. This was supported by the following: a higher percentage of mothers with good total quality of life after education. **Recommendations:-** It is crucial to educate healthcare providers, moms, and educators about the potential impact on children with rheumatic arthritis on their health-related quality of life .

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