Impact of Structured Educational Package on Newly Mothers' Knowledge and Practice regarding First Aid Management among their Children

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Abstract

Background: - First aid intervention can lower the disability and increase the chances of survival of the injured child. Mothers as caregivers are playing a vital role in the prevention of childhood injuries. They are the primary persons who can help the children and perform first aid on them so that, they can prevent complications and sometimes prevent death. Most of these accidents are preventable through increased mothers' awareness and improvements in the home environment. Aim: To evaluate the impact of a structured educational package on new mothers' knowledge and practice regarding first aid management among their children. Research design: A Quasi-Experimental design (one group pre/post design) was utilized in the current research. Settings: This study was conducted at Pediatric Outpatient Clinics at Sohag University Hospital. Subjects: A convenience sampling of a 11 new mothers (200) who were present at the time of data collection from the previously selected setting within six months. Tools: (I): Personal data of the mother, (II): Mothers' knowledge about first aid management, and (III): Mothers' reported practice about first aid management. Results: The current results revealed significant differences and improvements in knowledge and practice scores about first aid management post-structured educational package implementation than pre-structured educational package implementation. There was a positive statistically significant correlation between the total knowledge score and total practice score about first aid management. There was a highly significance relation between mothers' knowledge and practices regarding first aid management and their age and education. There was a highly significant relationship between mother's practices and education. Conclusion: the study concluded that structured educational package has a positive effect on improving newly mothers' knowledge and practice regarding first aid management among their children. Recommendations: Training courses about first aid must be provided to mothers in pediatric settings. Health members should continue their teaching about first aid periodically in pediatric settings. Media such as TV should also, introduce information about common children's injuries, and first aid management.

Keywords: Children, First aid management, Knowledge and practice, New mothers, Structured educational package.

Introduction:

In any community, mothers and children comprise a priority group, with children under 5 years comprising nearly 40% of the total population⁴. Injuries in childhoodare very common and comprise the base of the injury pyramid for all ages (Hoon, 2023).

Children are particularly prone to accidents because their bodies are still developing and they lack the mental capacity to understand their surroundings and potential dangers. The early years are crucial for a child's development. Because of their prematurity, early childhood motor development puts children at risk of injury due to their exploration and interaction with the world, incomplete muscle coordination, and immature depth perception of danger (Nour et al., 2018).

The environment a child grows up in has a significant impact on the likelihood of harm. The majority of accidents occur in or close to children's homes due to dangerous play spaces, windows, staircases, and other construction features that make it easy for children to enter the house and encounter hazards (Jassem et al., 2019). An accident is described as an unforeseen, unplanned incident that typically results in property damage, unintentional injury, or death (Üçüncü et al., 2019).

According to the (World Health Organization, 2021), the injury-specific death rate was 73 per 100,000 people. In the developed world, injuries are the main cause of death for children ages 1 to 5 years. Furthermore, there is a disparity in the mortality rate between the developed and developing worlds, with developing countries experiencing roughly twice as many deaths from unintentional injuries as developed countries (Engel, 2020). The Egypt Demographic and Health Survey (EDHS) found that 4% of children under the age of five were either wounded or involved in an accident every single time. Open wounds, fractures, and burns account for 46%, 36%, and 20% of all reported injuries, respectively, with 2% of children experiencing other types of injuries (El-Zanaty & Way, 2022).

One of the most frequent reasons for unintentional injuries in children is burns, which can occur from falling from a bed, a crib on stairs, slick floors, high windows, or toppling furniture. Injuries caused by sharp or pointed objects, choking, poisoning, and hazardous

chemicals can be discovered in places where pharmaceuticals are kept, such as the garden shed, garage, under the kitchen sink, or medicine cabinets. Some home accidents involve drowning as well as water-related injuries from swimming pools, kitchens, and bathrooms. Firearms are used in these incidents less frequently (Al-Bshri & Jahan, 2021).

Burns, abrasions, and crushes are common accidents that happen to children aged one to five. The most frequent burns experienced were scalds and burns (62.5%), according to a study conducted in Jaipur on an accidental injury prevention survey (Guidelines for First Aid, American Heart Association, and American National Red Cross Society, 2022). The bulk of the twenty women the investigator randomly spoke with described frequent mishaps involving their kids, such as burns, scalds, and cuts. A few parents were found to be ignorant of the risk of childhood burns, and it was noted that homes are unsafe for kids (World Report on Child Injury Prevention, 2022). There have also been reports of incorrect behaviors and misconceptions about diseases and injuries among community members (Hoon, 2023).

Children's accident prevention and control has been demonstrated to be especially successful in lowering injury mortality and long-term impairments (Abbassinia et al., 2019). Throughout their early years and throughout preschool, parents, especially women, have constant direct interaction with their offspring at home. Therefore, it is extremely incumbent upon them to be well-versed in accidents, first aid protocols, and protective measures for the safety of the home environment, all while providing sufficient supervision (Altundağ & Körükçü, 2022).

First aid is defined as the assessments and interventions that can be performed by a bystander (or by the victim) immediately with minimal or no medical equipment. The main objective of providing first aid is to reduce suffering, promote the healing process, and prevent damage. Most of the time the first aid given decides the future course of illness, its severity, and its outcome. Often the knowledge regarding first aid reported is poor and disintegrated (Engel, 2020).

First aid is not only just about helping crash victims atthe roadside. But also calming an injured person or as profound as saving a life certain self-limiting illnesses or minor injuries may not require further medical care immediately if first aid is given. It aims to preserve and protect life, prevent further injury or deterioration of illness, and help to promote recovery (El-Zanaty & Way, 2022).

First aid is the emergency care and treatment given to an ill or injured individual before the arrival of more experienced medical personnel. Reducing pain, fostering recovery, and averting injury are the three primary goals of first aid (Pellegrino et al., 2020). The quick and efficient maintenance of the body's primary functions, such as breathing, circulation, blood management, and airway clearance, is critical to life and recovery from disease and injury in the pre-hospital situation (Gopalan & Sakesena, 2020). The most important factor in ensuring a child's recovery from injury is the efficient support of these fundamental processes, according to medical study data. Thus, mothers' prompt and appropriate care can significantly impact the result by limiting handicaps and increasing the injured child's chances of survival (Auerbach, 2022).

Nurses are essential members of the professional healthcare team. They are well-educated about children's health and medical emergencies; they also have direct contact with the mothers and their children and can assess environmental hazards (World Health Organization, 2022).

Significance of the study:

According to the Global Burden of Disease report from the World Health Organization (WHO), unintentional injuries account for approximately 80% (3.9 million) of all deaths (Altundağ & Körükçü, 2022).

The WHO lists traffic accidents, falls, drowning, poisoning, and burns as the main causes of unintentional injuries. Children are thought to be under close supervision in the house, which is where the majority of accidental accidents occur. Younger children in preschool are particularly vulnerable to risk factors since they spend most of their time in the house and are part of a family setting (Gopalan & Sakesena, 2020). These danger variables include heat, sharp furniture, toxic detergent, windows and staircases without safety grills, open water reservoirs, and access to stoves that are placed on the floor, as well as objects like blades and medication or the environment itself, like passing cars. According to Engel (2020), of the top

15 causes of death for children and adolescents under the age of 20 years old, three are unintentional injuries.

Creating and executing an organized curriculum aids in bridging the knowledge and skill gap between mothers and their kids about first aid management and increases awareness of the vital role it plays in children' health. An assessment of how a structured instructional package affects new moms' understanding and application of managing their children's first aid needs is crucial.

Aim of the study:

To evaluate the impact of structured educational package on new mothers' knowledge and practice regarding first aid management among their children through:

- Assessing mothers' knowledge regarding first aid management.
- Assessing mothers' practices regarding first aid management.
- Designing and implementing the structured educational package according to the actual needs of the studied mothers
- Investigating the relationship between mothers' knowledge and practices regarding first aid management
- Determining the impact of structured educational package on new mothers' knowledge and practice regarding first aid management among their children.

Research hypothesis:

It is anticipated that structured educational package will improve mothers' first aid practices and knowledge.

Subjects and Methods:

Research design:

The current study used a quasi-experimental design with one group pre- and post-design.

Setting:

This study was conducted at Pediatric Outpatient Clinics at Sohag University Hospital.

Subjects:

A convenience sampling of a l l new mothers (200) who were present at the time of data collection from the previously selected setting within six months.

Data collection tools:-

Tools: (I): Personal data of the mother: It contained details about the mothers' age, educational level, place of residence, and line of work.

(II): Mothers' knowledge about first aid management: This tool was in an Arabic language designed by the researcher after reviewing of the related literature (Auerbach, 2020; Pellegrino et al., 2020). It contained data on mothers' first aid management knowledge. There were fifteen multiple-choice (MCQ) questions on the following topics:

Definition of first aid

- Importance of first aid
- Most common types of accidents.
- The most common place for accidents
- Prevention of accidents.
- First aid management of accidents such as burns, electrical shock, poisoning, chocking...etc.

Scoring system:

For every question, the right response was assigned a two-grade score, while the incorrect response received a zero.

The total knowledge scores:-

- A knowledge level of more than 70% was regarded as good knowledge.
- Knowledge between 50% and 70% was regarded as average
- Knowledge below 50% was seen as poor.

(III): Mothers' reported practice about first aid management: It contained the following details on moms' stated practices: The researcher created it after reading the literature to evaluate the first aid management methods that mothers with their children reported doing. Twenty multiple-choice questions

(MCQ) covering topics like burns, wounds, fractures, electrical shock, poisoning, and choking were included in the test.

Scoring system:

Answers to the "yes/no" practice questions were reported as follows: 2 was given for the right response and 0 for the wrong one.

The total reported practices scores system:-

- Mothers regarded their practices as satisfactory if they reported a percentage of > 60%.
- Mothers deemed their practices to be unsatisfactory if they reported them at less than 60%.

Procedures of the study:

The formal letter from the Dean of the Faculty of Nursing explaining the goal of the study and the methodology for data collection was presented to the director of the chosen clinic, who then granted permission for the study to be conducted. Permission to conduct research for demonstration purposes was obtained through a meeting with the director of the setting.

To the mothers who participated in the study, the researcher gave an introduction and went over the goals and procedures for gathering data between October 2023 and March 2023. Data were gathered three times a week. Three specifically created resources were used by the researcher: the mothers' first aid management methods, knowledge, and personal data.

Four distinct stages of the study's execution were assessment, planning, implementation, and evaluation. Pre- and post-structured educational packages were used for data collection.

I-Assessment phase:

Starting with a pilot test, the researchers went on to validate the tool by consulting with nursing specialists. Mothers participating in the study were then asked to provide information about their knowledge and experience with first aid management. Before gathering data, the moms were informed of the purpose and anticipated results of the study by the researchers, who then requested them to fill out the necessary forms.

It took about twenty to thirty minutes on average to finish each instrument. Pretest instruments were those that were utilized during data collection. The knowledge and practice of the mothers under study were evaluated using pre-testing instruments on their data.

Tools validity and reliability:

Five board members with more than 10 years of combined experience in pediatric and community health nursing evaluated the tool's face and content validity for clarity, comprehensiveness, and relevance. Tool two's α = 90% and tool three's.89% reliability scores were determined using Cronbach's alpha test.

Ethical considerations:

A formal letter was sent by the Ethical Committee of Research as well as the Faculty Dean. Before completing the actual study and the pilot study, the participants were asked to provide their oral consent on the study's objectives. The online questionnaire had an informed consent form on the first page, which mothers must sign to complete the questionnaire. Before beginning the first section of the online questionnaire, the mothers were all explained the research's purpose and made aware that participation in the study was voluntary. Additionally, completely participants received guarantees that the information they provided would be kept private and utilized exclusively for the study.

Pilot study:

To assess the clarity and viability of the research procedure as well as the amount of time required for data collection, a pilot study was conducted on 10% of the mothers (20 mothers). For the pilot trial, no changes were needed. Included in the overall sample was the pilot research sample.

II- Planning phase:

For the mothers in the study, the researchers developed structured educational package content (such as a booklet, posters, and images) based on the results of the evaluation phase.

III- Implementation Phase:

With two theoretical and two practical sessions, as well as a demonstration and re-demonstration for each program component, each group of ten moms had four sessions. To make sure everyone understood the study topics, sessions were conducted in Arabic with some visual assistance. After gathering data, the researchers administered a pretest before the structured educational package, administered the package, and evaluated the posttest.

For two days a week, the length of each theoretical and practical session varied from forty to fifty minutes. From 11:00 AM to 12:00 PM, the theoretical sessions began. First aid knowledge was the main topic of the theoretical sessions. From 12:00 PM to 1:00 PM, the practical sessions began. Performing first aid before transporting the child to the hospital was the main emphasis of the practical sessions.

The simplified booklet was utilized as a helpful tool and given to the moms in Arabic after analyzing the related research and determining the actual needs of the women under investigation. It included every aspect of first aid management comprehension and application. As teaching tools, posters, talks, pictures, and lectures were all used.

Each session began with summaries of feedback from the prior one, and the first included an introduction to the structured educational package about first aid management.

The structured educational package included knowledge regarding first aid management as follows:

- Definition of first aid
- Importance of first aid
- Most common types of accidents.
- The most common place for accidents
- Prevention of accidents.
- First aid management of accidents such as burns, electrical shock, poisoning, choking...etc.

Information about first aid management was included in the practical section. Each mother required about 25 to 35 minutes to complete the questionnaire and respond to the questions to evaluate the reported habits of the newborn mothers under study. Lectures, posters, and instructional movies were used to put it into practice.

The structured educational package included reported practices regarding first aid management for accidents among their children such as burns, wounds, fractures, electrical shock, poisoning, choking. Also, included stress management techniques such as progressive muscle relaxation technique and breathing exercises.

Evaluation phase:

Evaluation of the structured educational package's effect on newlywed mothers' first aid knowledge and practice concerning managing their children's first aid was conducted after two months. The same pre-test instruments were used to reevaluate the mothers.

Statistical analysis:

Data analysis was done using SPSS version 20. The mean values of the data were compared using an independent t-test. The descriptive statistics were shown as mean and SDs for quantitative variables and frequencies and percentages for qualitative variables. The significance of differences was assessed using P-values less than 0.05. The chi-square (x^2) test of significance was used to compare the proportions of the qualitative components.

Results:

Table 1 shows that, with a mean age of 25.4±5.6 years, 76% of the new mothers under study were between the ages of 18 and 29. About education, forty percent of the new moms under study had completed secondary school, 85% lived in cities, and 55% were unemployed.

The data presented in **Figure** (1) indicates that all (100%) of the new mothers under study had never taken a first aid management course before.

Table (2) shows that mothers' first aid management knowledge varied significantly before and after the adoption of structured educational packages. These variations were highly statistically significant. Furthermore, these variations showed that mothers' first aid management knowledge had improved before and after the deployment of the structured teaching package, demonstrating the beneficial effects of that program.

It was clarified from **Figure (2)** that, (90%) of new mothers had poor total knowledge level pre-structured educational package implementation regarding first aid management which decreased to (8%) post-structured educational package implementation.

Table (3) reveals that highly statistically significant differences were observed between mothers' reported practices regarding first aid management pre and post-structured educational package implementation with the improvement of mothers' knowledge post-structured educational package implementation.

It was clarified from **Figure (3)** that, (90%) of the studied new mothers had an unsatisfactory level of total reported practice pre-structured educational package implementation regarding first aid management, but post-implementation of the structured educational package, there was an improvement of their practice, (92%) of them had a satisfactory level of total reported practice.

Table (4): Shows a correlation between total scores of new mothers' knowledge and practices regarding first aid management among their children. It was found that there was a statistically significant difference with a positive correlation between total scores of new mothers' knowledge and practices regarding first aid management among their children pre- structured educational package, there were highly statistically significant differences between total scores of nurses' knowledge and practices regarding first aid management among their children post- structured educational package (P-0.01 &0.000).

Table (5): illustrated that there was a statistically significant relationship between the educational level of the new mothers and overall knowledge and practices throughout the phases of the structured educational package at p<0.01.

Table (1): Newly mothers distribution regarding their data (N=200)

Personal data	No	%
1- Age(years):		
- 18 - 29	152	76
- 29 ≥ 40	48	24
Mean and SD (25.4±5.6)		
Educational level:		
-Secondary school diploma	50	25
-Technical Institute	60	30
-Bachelor's degree	80	40
-Postgraduate	10	5
Residence		
- Urban	170	85
- Rural	30	15
- Occupation		
- Working	90	45
- Housewives	110	55

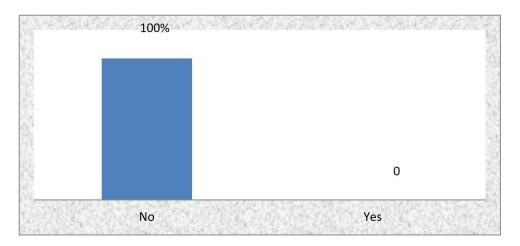


Figure (1): Newly mothers' distribution regarding attending previous courses concerning first aid (200)

Table (2): Mean differences regarding new mothers' knowledge regarding first aid pre and post-structured

educational package implementation (n=200).

Variable	Pre- structured educational package	post-structured educational package	t-test	P-value
Definition of first aid	0.47 ± 0.48	1.21±0.27	18.78	<0.001**
Importance of first aid	0.56±0.79	1.43±0.34	12.23	<0.001**
Most common types of accidents.	0.56±0.38	1.22±0.35	14.44	<0.001**
The most common place for accidents	0.45±0.89	1.33±0.46	21.52	<0.001**
Prevention of accidents.	1.08±0.26	2.10±0.29	16.43	<0.001**
First aid management of accidents such as burns, electrical shock, poisoning, chokingetc.	0.37±0.45	1.34±0.22	14.06	<0.001**

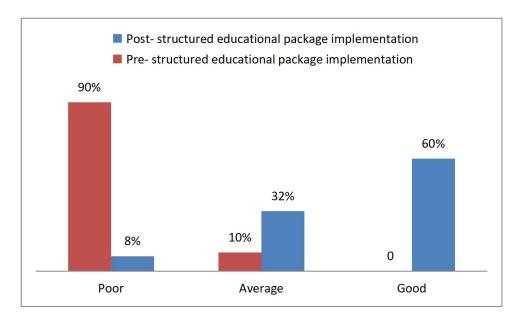


Figure (2): Total knowledge level among the studiednew mothers concerning first aid among their children pre and post-structured educational package implementation (n=200).

Table (3): Mean differences regarding newly mothers reported practices concerning first aid pre and post-structured educational package implementation (n=200).

Variable	Pre- structured educational package implementation	educational package	t-test	P-value
First aid management for burns	0.57±0.79	1.44±0.35	12.23	<0.001**
First aid management for wounds	0.58±0.36	1.24±0.36	14.44	<0.001**
First aid management for fractures	0.57±0.82	1.33±0.67	19.32	<0.001**
First aid management for electrical shock	0.37±0.79	1.44±0.22	17.42	<0.001**
First aid management for poisoning	0.44±0.78	1.30±0.55	18.33	<0.001**
first aid management for chocking	0.45±0.88	1.24±0.78	22.22	<0.001**

(*) Statistically Significant at p≤ 0.001

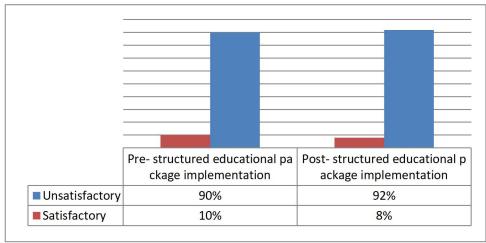


Figure (3): Total practice level among the studiednew mothers concerning first aid among their children pre and post-structured educational package implementation (n=200).

Table (4): Correlation between total scores of new mothers 'knowledge and practices concerning first aid pre and post-structured educational package implementation (n=200).

	Total Knowledge			
	Pre		Post	
	R	P-value	R	P-value
Total practices	0.26	0.01*	0.73	0.000**

X²: chi square test

*Significant at p ≤ 0.05

Table (5): Correlations between farmers' knowledge and practices of first aid management and personal data characteristics (n=200).

Scores	Spearman's rank correlation coefficien (r)	
	Knowledge	Practices
Overall pre and post		
Age	303*	253*
Education	.305**	.354**
Residence	137	042
Crowding index	.087	005

(**) statistically significant at p<0.01

Discussion:

Children are vulnerable to injuries due to their innate desire to explore the world. Hence putting them at risk so minor injuries are inevitable by providing a safe home environment and close supervision. Furthermore, appropriate first-aid measures for minor injuries may be sufficient to avoid a medical consultation (Al Rumhi et al., 2020). Most children's injuries that occur at home can be prevented or decreased if mothers know how to deal as early as possible so the current study aimed to evaluate the impact of a structured educational package on new mothers' knowledge and practice regarding first aid management among their children

The findings of the current study indicated that, with a mean age of 25.4±5.6 years the majority of the new mothers under study were between the ages of 18 and 29. From the research point of view, young age may be the cause of knowledge deficit due to little experience.

The findings of the current study indicated that all of the studied new mothers had never taken a first aid management course before. From the researchers' point of view, this result reflects that new mothers had the need to improve information and reflected the importance of the present study and allowed mothers to be engaged in such a structured educational package to improve their knowledge and practices about first aid management.

Concerning the total knowledge score of mothers regarding first aid management, the findings of the present study highlighted that highly statistically significant differences were observed between mothers' knowledge regarding first aid management pre and post-structured educational package implementation. Also, these differences indicated improvement in mothers' knowledge regarding first aid management pre and post-structured educational package implementation which reflected the positive effect of the structured educational package implementation.

The findings of the present study revealed that most of newly mothers had poor total knowledge level prestructured educational package implementation regarding first aid management which decreased to (8%) post-structured educational package implementation. From the researchers' point of view, it confirmed that structured educational package implementation was effective in increasing mothers' knowledge.

This result is not in line with the study conducted by Suguna (2020) in India who found that less than half of the studied mothers had average knowledge of first aid in accidents. On the contrary, a study conducted by Harere et al. (2020) In Saudi Arabia to assess the parents' and caregivers' knowledge of first aid for common emergency conditions in children indicated that the majority of the studied sample had inadequate knowledge. The variance may be attributed to differences in socio-demographic characteristics of

studied samples.

Concerning first aid practices, the results of the current study revealed that highly statistically significant differences were observed between mothers' reported practices regarding first aid management pre and post-structured educational package implementation with the improvement of mothers' knowledge post-structured educational package implementation. From the researchers' point of view, it confirmed the success of structured educational packages that help in improving mothers' reported practices regarding first aid management.

Concerning first aid practices, the results of the current study revealed that most of the studied new mothers had an unsatisfactory level of total reported practice prestructured educational package implementation regarding first aid management, but post-implementation of the structured educational package, there was an improvement of their practice, most of them had a satisfactory level of total reported practice.

These findings were consistent with the study done in Iraq (2016) which indicated that the participants had poor practices regarding immobilization of children. Otherwise, these results disagree with Ganfure et al. (2018) who found that almost all respondents avoided head and neck movement and kept the child's body straight.

These findings were consistent with the study done by Al-Bshri and Jahan (2021) in Saudi Arabia. Otherwise, this result disagreed with the study done by Nour et al. (2018) who found that mothers' knowledge and practices regarding electric injuries are generally lacking. This might be explained by the inability of mothers to control the situation leading to electrical accidents due to circumstances beyond their control and the pressure of modern-day society that dramatically cuts down time spent with children in an average household.

These results were compatible with various studies for example, a study conducted by Chornopyshchuk et al. (2021), Phuyal et al. (2020), as well as Qtait et al. (2019) who reported that most of the participants using traditional practices for the first aid. Otherwise, the current study contradicted the study done by Yilmaz and Andsoy (2020) in Turkey which indicated that the majority of participants used modern practices. The variance may be attributed to the disparity in beliefs, traditions, values, and culture of the societies.

This finding comes in line with the result of **Sonavane** et al. (2020) in India who found that approximately half

of mothers didn't know what is the proper first aid for poisoning. As well as these results were confirmed by **Mohammed et al. (2023)** in Egypt. From the researcher's point of view these findings may be attributed to the culture of the societies, values that have become an integral part of societies shape the attitudes, behaviors, and beliefs which, in turn, may shape their health behaviors.

These results were similar to the finding of Al-Turkistani (2024) who reported that the most of participants were unaware of pediatric cardiopulmonary resuscitation (CPR). Besides, These results were harmonious with the study done by Habeeb and Alarfaj (2020). However, a different picture was reported in the study done by Midani et al. (2019) in UAE who indicated that 80.6% of the participants knew how to deal with choking. This difference may be attributed to variations in the educational background and attendance of first aid training courses. These results are agreeable with a study conducted by Habeeb and Alarfaj (2020) in Saudi Arabia. In the researcher's view, this result attributed to that the mothers didn't have adequate self-efficiency to deal with emergency incidence.

Different proven methods could minimize the occurrence and the severity of childhood home injuries and nearly 90% of cases could be prevented by public education and environmental modification. Therefore, it is important to improve mother's knowledge and practice continuously to care for their children. Consequently, community health nurse involvement in certain areas such as homes is necessary to identify household risks, reduce environmental hazards, achieve public policies, and apply for the program through a broad range of interventions such as parental education (Whelan, 2020).

The results of the current study revealed that there was a statistically significant difference with a positive correlation between total scores of new mothers' knowledge and practices regarding first aid management post-structured educational packages. The aforementioned findings indicate that mothers' practices are influenced by their level of knowledge about their children. This can lead to improved practices for child care and an enhancement of the mothers' caring roles. This explanation aligns with the findings of Ozel et al. (2018), who stated that caregivers can adopt new, healthy behaviors or modify unhealthy ones by learning the basics about their children's condition, developmental trajectory, and available treatment options.

The results of the current study revealed that there was a statistically significant relationship between the educational level of the new mothers and overall knowledge and practices throughout the phases of the structured educational package. From the researcher's point of view, it can explained that older mothers and educated mothers are mature enough and can acquire more information that enhances their practices than young mothers and non-educated mothers.

Conclusion:

Based on the findings of the present study, it could be concluded that a structured educational package has a positive effect on improving new mothers' knowledge and practice regarding first aid management among their children.

Recommendations:

Based on the findings of the study, the investigator proposes the following recommendation for future research:

- -Mothers in pediatric settings need to be given first-aid training courses. First aid instruction should be continued by healthcare professionals.
- -Media such as TV should also, introduce information about common children's injuries, and first aid management.
- The study can be replicated on large samples in different settings to have a wider generalization of findings.
- A comparative study can be conducted on the knowledge and practices of mothers in urban and rural communities.

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