

## **Webinar Effectiveness in Teaching Mothers regarding Accident Prevention and First Aids in Children during Corona Virus Pandemic**

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### **Abstract:**

**Background:** Webinar is helpful to the audience in improving knowledge and update skills by inputting the latest techniques and methods related to their respective fields especially with the presence of the coronavirus. **Aim:** Evaluate Webinar Effectiveness in teaching mothers regarding Accident Prevention and First Aids in children during Corona Virus pandemic. **Design:** A Quasi-Experimental research design (one group pre/post design) will be used in this study. **Setting:** The study was carried in Sohag City, Egypt. **Subjects:** This study was carried out on a purposive sample of 250 mothers. **Tools:** A self-administered questionnaire was used in this study; it includes four parts: Mothers' demographic data, mothers' accidents prevention, and first aids knowledge, mothers' first aids practical knowledge, and webinar characteristics. **Results:** It noticed that webinar presentation had a statistically significant effect on improving both accident prevention and first aids knowledge among mothers immediately after the webinar presentation ( $P=0.000$ ). The webinar had a statistically significant effect on improving first-aids practical knowledge among mothers immediately after the webinar presentation ( $P=0.000$ ). **Conclusion:** The majority of the mothers reported that online webinar was an effective method in improving mothers' knowledge and practical knowledge regarding accident prevention and first aids in children during coronavirus pandemic. **Recommendations:** A well-planned health education about the topic could be introduced to the mothers by using a webinar presentation.

**Keywords:** *Accident prevention Coronavirus, First aids, Mothers' knowledge, Practices & Webinar*

### **Introduction:**

The coronavirus disease (COVID-19) pandemic affected both physical and mental health (Acter et al., 2020). Countries have adopted several measures to minimize the transmission of the disease between people, which include staying at home, limiting access to nursing homes, and preventing gatherings at places (Masonbrink & Hurley, 2020). The closure of schools, offices, and other organizations has resulted in higher use of digital media for interpersonal communications and other organizational activities (Robbins et al., 2020).

Accidents are responsible for approximately 9% (about 5.12 million) of all causes of death in the world and about 16% of the disabilities are reported due to accidents. About 3.6 million people die of unintentional home injuries globally every year (World Health Organization 2020; & Moncatar et al., 2020).

In Egypt; several studies were carried out to estimate the magnitude of accidents as a study carried out in Sharkia Governorate by Sabely, et al., (2014) and showed that the prevalence of home injuries among children in a rural area was (84.7%).

The common types of accidents are falls, wounds, fire and burns, choking, suffocation, drowning, poisoning, and firearms. Falls are considered the

majority of non-fatal accidents. The responsibility of the parents is to provide a safe environment to protect children and to audit the safety of living spaces of the children. Parents' knowledge and practice about first aid measures are very important to prevent deaths due to accidents and improve children outcomes. First aid is providing initial care for an illness or injury, usually by a non-expert but the trained person (Akturk & Erci, 2016).

Webinar creates opportunities for both educators and learners to experience different levels of interaction online. It helps to exchange information in a real-time and two-ways format, these opportunities are essentially different from other communication approaches such as discussion-board postings and e-mails as well as support for many numbers of presenters, and provide an option for prerecording the video or voice (Parupalli, 2019).

The child care has been put directly on to parents, they try during the COVID-19 to participate in a webinar to gain knowledge about how to care with their children during emergencies and included early guidance that emphasizes on the provision of information to families and parents about normal growth and development in childhood such as specific information about security at home (Testers et al., 2019).

The 'webinar' has been defined as an internet workshop or seminar which involves a presentation, discussion, demonstration, or any other instructional event that allowing participants in different locations to see and hear the presenter and ask questions. In general, a webinar is a virtual and live event that is performed online. It provides the ability to connect geographically distant members by offering real-time training communication (Gegenfurtner et al., 2017). The modern man can view the latest updates through the internet with the help of mobile devices just by staying at home. It serves the educational process of learning and teaching. In recent years, webinars have attracted increasing attention for training purposes (Ebner and Gegenfurtner, 2019).

The pediatric nurses play an important role in establishing a unique relationship with each patient, family, and community and implement health education interventions by sharing their knowledge to improve disease prevention and health promotion. Enhance the autonomy of parents/guardians in childcare-related to the prevention of accidents (Poll et al., 2013). Provide health interventions which include actions that simplify the access to information, sensitize parents about the risk and protective factors in the prevention. Hence, this study aimed to evaluate webinar effectiveness in teaching mothers regarding Accident prevention and first aids in children during corona virus pandemic. (Tavares et al., 2013).

#### Significance of the study:

Children are at risk for accidents that lead to morbidity and mortality, and it is considered a major public health problem. Annually, 830,000 children died due to accidents worldwide and reported 2,000 child deaths per day. Also, millions of children were referred to the hospital due to accidents resulting in lifelong disabilities (Peden, 2008). With the policies during covid-19 as staying at home, limiting access to nursing care, prohibiting gatherings at hospitals and health centers care (Altmann et al., 2020), it was important to improve mothers knowledge and practices regarding accidents prevention and first aids during this period of the covid-19 through webinars, immediately after the occurrence of accidents that would prevent the occurrence of disabilities or leaving effects in the children that would affect their quality of life later.

**Ebner and Gegenfurtner (2019)** reported in their study that webinar- was more effective in promoting and developing trainer knowledge and skills. So, a webinar-based program regarding accident prevention and first aids was necessary to improve

mothers' knowledge and practices and reserve safety and among children.

Nowadays due to these technological changes webinar is become live, performed online and, persons can easily communicate with other people who live in different parts of the world and improving their knowledge when even they are at home with low cost.

#### Aim of the study:

The present study aimed to evaluate webinar effectiveness in teaching mothers regarding accident prevention and first aids in children during corona virus pandemic.

#### Research hypothesis:

H1: Mothers' knowledge will improve after exposure to the proposed webinar regarding accident prevention and first aids in children during the coronavirus pandemic

H2: Mothers' practices will improve after exposure to the proposed webinar regarding accident prevention and first aids in children during the coronavirus pandemic

#### Subjects and Methods:

##### Research design:

A Quasi-Experimental research design (one group pre/post design) was used in this study.

##### Setting:

The study was carried in Sohag City, Egypt.

##### Subjects:

A purposive sample of 250 mothers was participated in the current study in Sohag City, through a Google form spreadsheet presented in Facebook and Whats App groups. All the studied mothers meet the following criteria:

##### Inclusion criteria of the studied mothers:

- Aged from 18-30 years
- Mothers of children aged from 3-12 years
- Educated mothers
- Agree to participate in this study.
- Mothers who completed the online questionnaire

##### Tools and techniques of data collection:-

Data collection tools used in the current study as follows:

**Tool:** A self-administered questionnaire was used in this study and developed by the researcher after reviewing related literature; it includes four parts:

**Part (1):** Demographic characteristics of mothers: This included age, educational level, residence, and working status.

**Part (2):** Mothers' accidents prevention and first aids knowledge that was applied as pre- post and follow

up tests for the studied mothers. It consisted of thirty-five (35) multiple-choice questions (MCQs) questions divided into two parts:-

- a- It was included mothers' knowledge about accidents prevention, It consisted of twenty (20) MCQs questions (Q1-Q20) that related to the following topics:-
- Definition of accident
  - Risk factors for accident occurrence for children.
  - Is the accident can be prevented?
  - Most frequent accidents among children.
  - Methods of prevention
  - Preventive measures for accidents such as falls, poisoning, drowning, foreign body aspiration, and burn.
- b- It was included mothers' knowledge about the first aids, It consisted of fifteen (15) MCQs questions (Q21-Q35) that related to the following topics:-
- Definition of first aids.
  - Purposes of first aids.
  - First aids box and its contents.
  - Basic principles for first aids.
  - Most common injuries, signs, and symptoms and basic first aids tip.

#### Scoring system:

The correct answer for each question was allowed one grade score, while the wrong answer was zero scores.

#### The total knowledge scores Abd El-Hay et al., (2015):-

- More than 70% (more than 24 grades ) = Good knowledge
- From 50% to 70% (from 18 to 24 grades)= Average or fair knowledge
- Less than 50% (less than 18 grades)=Poor knowledge

**Part (3):** Mothers' first aids practical knowledge: It was developed by the researcher after review literature to assess practices of mothers regarding common first aids to all types of accidents before and after the webinar-based program. It was included parts as follow:

- First aids for falls, consisted of 4 steps
- First aids for poisoning, consisted of 4 steps
- First aids for drowning, consisted of 4 steps
- The first aids for burn consisted of 4 steps

#### Scoring system:

If the step was done score = 1 and if the step was not done score= zero.

#### The total first aids for reported practices scores system Mohamad et al., (2018):-

- If mothers' reported practices 60% or more (10 grades or more), they had satisfactory practices.

- If mothers' reported practices less than 60% (less than 10 grades), they had unsatisfactory practices

**Part (4):** Webinar characteristics: This included did the webinar contents enough, the length of the ideal webinar session, satisfaction with the webinar, did webinar improve your knowledge and practices, a suitable time for attending the webinar, advantages of the webinar, and disadvantages of the webinar

#### Validity and reliability:

Face validity of the tool for clarity, comprehensiveness, and relevance was assessed by a board of five experts in pediatric nursing, critical care nursing, and community health nursing with more than ten years of experience in the field. The Reliability of the tool was assessed through Cronbach's alpha test  $\alpha=92\%$ .

#### Ethical considerations:

Official permission was obtained through an issued letter from the Dean of Faculty of Nursing, Sohag University to conduct this study. An informed consent form was included on the first page of the online questionnaire. Mothers filled out the questionnaire after reading the consent form and agreeing to participate in the study voluntarily. The objective of the study was explained to mothers in the first part before starting the administered questionnaire, the researcher informed mothers that the study was voluntary, they were allowed to refuse to participate and they had the right to withdraw from the study at any time, without giving any reason. Moreover, they were assured that their information would be confidential and used for research purposes only.

#### A pilot study

A pilot study was conducted on 10% of the mothers (25 mothers) of children to test the clarity and the feasibility of the research process and needed time for data collection. No modifications were required in the pilot study. The sample of the pilot study was included in the total sample.

#### Fieldwork:

The researchers started by introducing themselves to mothers and giving them a brief idea about the nature and purpose of the study. Assessment of each mother was done using Tool I as (pretest) before the webinar presentation to gather the baseline data.

The zoom link was shared with mothers of children aged from 3–12 years for a limited period from 30 May 2020 to 15 June 2020, after lockdown. This link was represented in Facebook and whats App groups. On the first page of the online questionnaire, mothers were informed about the objectives and expected outcomes of the study. Zoom link is presented in

Facebook and WhatsApp groups. The link of the survey was used for the questionnaire and the presentation about accident prevention and first aids were sent to the respondents' mothers via Facebook and WhatsApp groups during the COVID-19 pandemic in Sohag city. The webinar was conducted from 6-8 pm. The average time spent for mothers' completion of the online administered questionnaire was approximately 20 minutes. Each mother involved in the study was informed about the aim of the study, the contents of the tools, and how to answer the online questionnaire.

The online administered questionnaire was used twice. For the first time, these were used as a pretest for the assessment of mothers' knowledge about accident prevention and first aids and their practical knowledge. Then, this tool was used another time immediately after the end of the webinar presentation as a posttest to evaluate the effect of webinar presentation on mothers' knowledge and practices and immediate feedback about using the webinar to reinforce what they knew and correct mistakes.

During the webinar presentation, the host presenter chose to do one-way video broadcasting, so the

learners could sense the presence of the instructor. All presenters decided to allow two-way audio transmission, so users could ask questions or clarify details at any time with audio or text chatting.

All 250 mothers attended the program simultaneously for one time. Skills were introduced and taught via webinar by preparing a scientific material that was displayed through pictures, presentations and videos about cardiopulmonary resuscitation of children, how to avoid injuries, and first aid when any injuries occurred.

#### Statistical analysis:

Data analysis was performed using SPSS version 20. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables and mean and SD for quantitative variables and mean values were compared using an independent t-test. Differences were considered significant at p-values of less than 0.05. Chi-square ( $\chi^2$ ) test of significance was used to compare proportions between qualitative parameters.

#### Results:

**Table (1): Frequency and percentage distribution of the studied mothers regarding their demographic characteristics (N=250)**

Demographic characteristics	No	%
<b>Age (years):</b>	185	74.0
- 18- < 24	65	26.0
- 24 $\geq$ 30		
<b>Mean and SD (28.3<math>\pm</math>1.2)</b>		
<b>Educational level:</b>		
- Postgraduate	15	6.00
- Bachelor's degree	97	39.00
- Technical Institute	63	25.00
- Secondary school diploma	75	30.00
<b>Residence</b>		
- Urban	182	73.00
- Rural	68	27.00
<b>- Working status:</b>		
- Working	153	61.00
- Not working	97	39.00

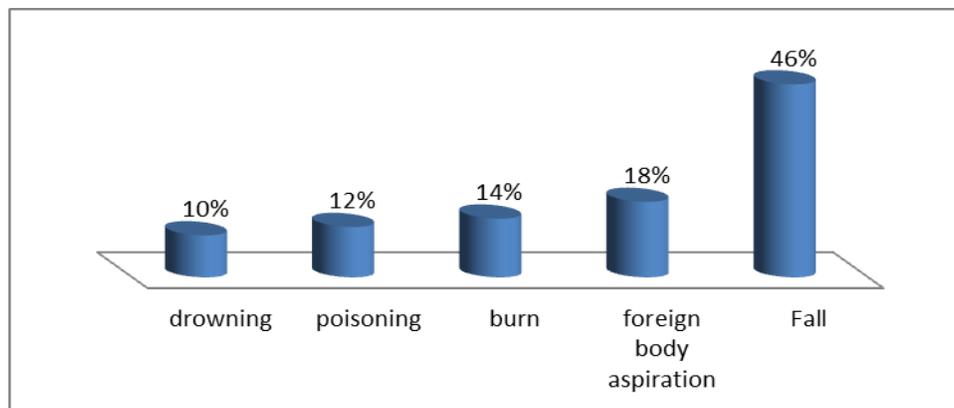


Figure (1): Frequency and percentage distribution of the studied mothers regarding their knowledge about the most common type of accident among children

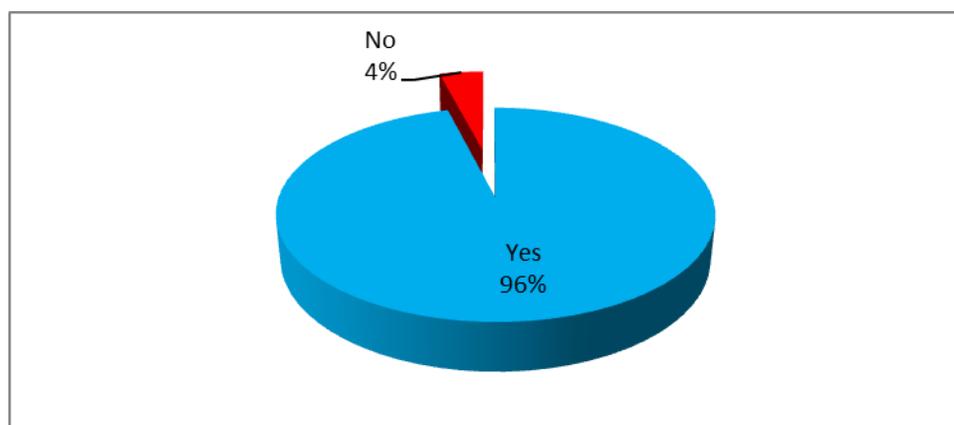


Figure (2): Frequency and percentage distribution of the studied mothers regarding attendance of first aids courses before

Table (2): Frequency and percentage distribution of the studied mothers regarding their feedback about webinar presentation characteristics during coronavirus pandemic (N=250)

Webinar presentation characteristics	the studied mothers(N=250)	
	No	%
<b>Webinar contents enough:</b>		
- Yes	245	98
- No	5	2
<b>The length of the ideal webinar:</b>		
- 60 minutes	225	90
- 45 minutes	18	7
- 30 minutes	7	3
<b>Satisfaction about webinar</b>		
- Yes	245	98
- No	5	2
<b>Did webinar improve your knowledge and practices</b>		
- Yes	250	100
- No	0	0.0
<b>Suitable time for attending the webinar:</b>		
- In the morning	15	6
- In the afternoon	35	14
- At 6-8 pm	200	80

Webinar presentation characteristics	the studied mothers(N=250)	
	No	%
<b>Advantages of the webinar:</b>		
- Active participation	225	90
- Participants can get a chance for live chat.	213	85
- Participants can attend it at any place.	245	98
- They offer calendar scheduling and invites.	225	90
- They promote the participants to share the screen.	238	95
<b>Disadvantages of webinar</b>		
- Internet interruption	245	98
- The inability of participants to attend a webinar with a large sample	5	2

**Table (3): Differences in knowledge of the studied mothers before and after webinar education about accidents prevention and first aids in children during coronavirus pandemic (n=250)**

Items	N=250				P- value
	Pre-Program		Immediate-post program		
	No	%	No.	%	
Definition of accident		43		97	0.000
Risk factors for accident occurrence for children.		27		78	0.000
Is the accident can be prevented?		24		65	0.000
Most frequent accidents among children.		19		93	0.000
Methods of prevention		17		92	0.000
Preventive measures for accidents such as falls, poisoning, drowning, foreign body aspiration, and burn.		37		95	0.000
Definition of first aids.		9		93	0.000
Purposes of first aids.		12		87	0.000
First aids box and its contents.		7		63	0.000
Basic principles for first aids.		8		58	0.000
Most common injuries, signs, and symptoms and basic first aids tip.		21		89	0.000
Knowledge mean scores as pre, immediate post program (Mean± SD)		13.00± 3.00		24.28 ± 1.63	0.000

(\* ) Statistically Significant at  $p \leq 0.05$

**Table (4): The mean differences between before and after webinar education of practical knowledge of the studied mothers about accidents prevention and first aids in children during coronavirus pandemic (n=250)**

Item	Maximum score	Before webinar Mean ± SD	Immediately after the webinar Mean ± SD	t-test P1
<b>Falls</b>	4	1.08±0.77	3.16±0.29	20.806 (0.000)*
<b>Poisoning</b>	4	1.28±0.73	3.24±0.73	12.907 (0.000)*
<b>Drowning</b>	4	1.36±0.20	3.88±0.03	20.640 (0.000)*
<b>Burn</b>	4	1.70±0.25	3.04±0.29	22.625 (0.000)*
<b>The total mean score of first aid Practices</b>	16	6.120±2.72	13.3±3.34	20 (0.000)*

(\* ) Statistically Significant at  $p \leq 0.05$  Paired t-test (P1)

**Table (5): The differences in the levels of the studied mothers' knowledge and practical knowledge through webinar education about accidents prevention and first aids in children during coronavirus pandemic**

Item	Before webinar		Immediately after webinar		t-test P1
	No	%	No	%	
<b>Knowledge</b>					
Poor	243	97	5	2	30.640 (0.000)*
Average	7	3	17	7	
Good	0	0	228	91	
<b>Practical knowledge</b>					
Satisfactory	7	3	240	96	21.637 (0.000)*
unsatisfactory	243	97	10	4	

(\*) Statistically Significant at  $p \leq 0.05$ , Paired t-test (P1)

**Table (6): Correlation coefficient between the studied mothers knowledge and practical knowledge about accident prevention and first aids in children pre and immediately after webinar presentation during coronavirus pandemic**

Items	Practice			
	N =250			
	Before webinar		Immediately after webinar	
	R	P	R	p
- Total knowledge pre program	0.034	0.811(N.S)	---	---
- Total knowledge post program	---	---	0.243	0.005

\*\* Correlation is significant at the 0.01 level

**Table (1):** Showed the characteristics of the studied mothers. It was noticed that nearly three quarters (74%) of the studied mothers were aged ranged from 18 to 24 years with a mean age of  $22.3 \pm 1.1$  years. Concerning educational level, more than a quarter (39.0 %) of them had bachelor's degree, nearly three-quarter of them (73%) were living in urban areas and 61% of mothers were working.

**Figure (1):** Illustrates the distribution of the studied subjects according to their knowledge about the most common type of accident among children. It was observed that nearly half of the studied mothers (46%) reported that fall is the most common accident among children.

**Figure (2):** Showed the studied mother's previous attendance of first aids courses before. It was observed that the majority of the studied mothers (96.6%) didn't attend any first aids courses before.

**Table (2):** Showed the percentage distribution of the studied mothers regarding their feedback about webinar presentation characteristics. It was noticed that most (98%) of the studied mothers reported that webinar contents were enough, (90 %) of them said that the ideal length of the webinar was 60 minutes, and nearly all of them (98%) reported that webinar has improved their knowledge. Regarding suitable time for attending webinar (80%) of mothers reported at 6-8 pm

**Table (3):** Showed the differences in knowledge of the studied mothers before and after webinar education about accidents prevention and first aids in children during coronavirus pandemic. It was noticed that webinars had a statistically significant effect on improving both accident prevention and first aid knowledge among mothers immediately after the webinar presentation ( $P=0.000$ ).

**Table (4):** Concerning the effect of the webinar about accidents prevention and first aids in childhood on practices of types of the first aids among the studied mothers during coronavirus pandemic, it showed that webinar had a statistical significant effect on improving first aids practices among mothers in dealing with fall, poisoning, choking, drowning, and burn immediately after the webinar presentation ( $P=0.000$ ).

**Table (5):** Demonstrated the effect of the webinar about prevention and first aids in childhood on the level of knowledge and practices of the studied mothers during the coronavirus pandemic. It was observed that the majority (97%) of studied mothers had poor knowledge before webinar presentation, 91% of them immediately after the webinar presentation had good knowledge. Thus accident prevention and first aid webinar presentation had a statistically significant effect on improving knowledge of studied mothers immediately after

webinar presentation ( $P=0.000$ ). Concerning the level of practices, it was noticed that 97% of the studied mothers had unsatisfactory practices regarding first aids before webinar presentation compared with 96% of them immediately after webinar presentation had satisfactory practices regarding first aids. It should be pointed out that accident prevention and first aid webinar presentation had a statistically significant effect on improving practices of studied mothers immediately after webinar presentation ( $P=0.000$ ).

**Table (6):** Showed the correlation between studied mothers' knowledge and practices about accident prevention and first aids in childhood before and immediately after webinar presentation during coronavirus pandemic. This table showed that before and immediately after the webinar presentation a positive highly significant relation was detected between the total knowledge and the total practices evidenced by ( $P=0.005$ ). There was a statistical significant strong positive correlation between total practices and total knowledge before and immediately after webinar presentation. That indicated the higher level of knowledge, the better practices of the studied mothers.

### Discussion:

Accident prevention teaching and education can help the public and inform them about the risks and safety topics and help people behave safely like, and provides parents with information about how to properly practice first aids with children (**Elayne et al., 2016**). After data are collecting, it was observed that the mothers did not have enough information about prevention of accidents in children before the webinar presentation. By analyzing the mothers' knowledge and practical knowledge before and after the webinar presentation, there are significant improving in their knowledge and practical knowledge compared to before the webinar presentation. Therefore, it ensures the importance of regular implementation of such webinar presentations about this topic in communities. Hence, this study was aimed to evaluate the webinar effectiveness in improving mothers' knowledge and practical knowledge regarding accident prevention and first aids in children during the coronavirus pandemic.

Results of the current study revealed that nearly one-half of the studied mothers reported that fall is the most common accident among children. These results were in the same line with a study about falls of children and teens: preventing injuries through health education conducted by **Poll et al., (2013)** and pointed out that the higher prevalence of fall accidents in children fell. This result of increased frequency of falls among children may be due to

unsafe environment for children and lack of supervision from the mother when doing daily activities at home.

This result is in agreement with **Mohammed et al., (2018)** who found in their study about "First Aids Program for Nursery School Teachers" that falls represented the highest percentage among children injury. Also, this is similar to studies were done by **Zaidi et al., (2013)** in India, and **Shriyan, (2014)** in India who found that falls are the most type of accidents among children. On the contrary to these results, other studies found that cut wounds represented the highest percentage of accidents among the children as **Eldosoky, (2012)** in Qalubeya governorate about " Home-related injuries among children: knowledge, attitudes, and practice about first aid among rural mothers" and **Megahed et al., (2016)** in Menoufia governorate about knowledge, attitude and practice of rural mothers towards home injuries among children under 5 years of age.

The findings of the current study revealed that the majority of the studied mothers didn't attend any first aids courses before. It is indicated the importance of the current study to be done and allow mothers to be engaged in such activities because of lockdown through a webinar to improve their knowledge and practices about accident prevention measures and first-aids practices.

The findings of the current study found that webinar feedback characteristics that most of the studied mothers reported that webinar contents was enough and concerning, the ideal length of the webinar, the majority of the studied mothers reported that was 60 minutes, this may be explained by that attending long webinar leads to loss of attention and concentration. These results were in the same line with **Andreas et al., (2020)** who found in his study about " Evaluating webinar-based training: a mixed-methods study of trainee reactions toward digital web conferencing "that trainers were preferred webinars no longer than 90 min.

The findings of the current study reflected that nearly all mothers reported that webinar has improved their knowledge during coronavirus pandemic. This is may reflect the effectiveness of webinars in improving knowledge and practical knowledge regarding accident prevention and first aids. These results agree with the results conducted by **Andreas et al., (2020)** who stated that webinars were more effective in promoting achievement than traditional face-to-face seminars.

The findings of the current study reflected that the effect of webinar regarding accident prevention and first aids in children on knowledge among the studied mothers, and noticed that webinar had a statistical

significant effect on improving both accident prevention and first aids knowledge among mothers immediately after the webinar presentation ( $P=0.000$ ) during coronavirus pandemic. This result was not similar to **Carrick et al., (2017)** study about "Randomized controlled study of a remote flipped classroom neuro-otology curriculum", *Frontiers in Human Neuroscience* "who reported that webinars are not always successful in promoting learning outcomes in comparison to face-to-face classrooms.

The findings of the current study revealed that webinars had a statistically significant effect on improving first-aid practical knowledge among mothers in dealing with fall, poisoning, choking, drowning, and burn immediately after the webinar presentation ( $P=0.000$ ) during coronavirus pandemic. This is confirmed that the prevention of accidents must be shared with parents of the children by health care providers because this interaction in health care is considered a major factor in risk prevention.

Similar to the present study, **Eduardo et al., (2014)** found in their study about " Webinar Software: A Tool for Developing More Effective Lectures (Online or In-Person)"that it is important to provide subsidies to children's caregiver that aims to reduce the incidence of accidents and deaths from these preventable causes through early guidance.

**Hockenberry et al., (2013)** recommended that early guidance should focus on providing families information about security at home to provide them with safety measures and first aids need to be performed early to minimize risks.

The findings of the current study revealed that accident prevention and first aids webinar presentation during coronavirus pandemic had a statistical significant effect on improving knowledge of the studied mothers immediately after webinar presentation ( $P=0.000$ ) and pointed out that accident prevention and first aids webinar presentation had a statistical significant effect on improving practical knowledge of the studied mothers immediately after webinar presentation ( $P=0.000$ ) during coronavirus pandemic. This may reflect the urgent need for the development and implementation of interventions through a webinar that stimulates and maintain child health promotion on the prevention of accidents. This study agrees with a study conducted by **Elayne et al. (2011)** who studied "The Effect of Educational Intervention Regarding the Knowledge of Mothers on Prevention of Accidents in Childhood "and concluded that there was an increase of knowledge of mothers on the prevention of accidents in childhood through educational intervention.

### Conclusion:

The majority of the mothers reported that the online webinar-based program was an effective method of improving mothers' knowledge and practical knowledge regarding accident prevention and first aids in children during the coronavirus pandemic. This was proved by highly significant differences between before/immediately after the webinar presentation regarding knowledge and practical knowledge

### Recommendations:

Encourage online webinar-based programs to improve mothers' knowledge and practical knowledge regarding accident prevention and first aids in children.

### Limitations of the study:

The current study had one limitation, there was sampling bias being conducted to only educated mothers with internet access that did not represent and reflect the whole mothers.

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