



RESEARCH ARTICLE

THE EFFECT OF FIRST AID TRAINING PROGRAM FOR NURSERY AND KINDERGARTEN SCHOOL TEACHERS IN MOSUL

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ABSTRACT

Children are the most liable group for accidental injuries. Nursery and kindergarten teachers have a major role in preventing accidents and saving lives of those injured children, the study aimed to study the effect of first aid training program on nursery school teachers' knowledge and practice. after obtaining a formal consent from the clinical nursing department. A convenient sample of 56 teacher from both public and private nursery and kindergarten were selected in this pretest/posttest study. A pre designated questionnaire sheet was used to collect data from teachers which include :demographic data, question about knowledge and measures about first aid practical skills for affected children. There was an observed improvement in the number and percentage of the correct answers of all items of knowledge and practical measures between pretest and posttest after implementing a training program on a statistical significant difference of a p-value of 0.0001. There was an observed increase in the teachers' knowledge and practical skills after applying first aid training program by the investigator. The study recommend for an obligatory engagement in a training first aid programs for nursery teachers pre and post their employment.

Keywords: First Aid, Teachers, Training



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INTRODUCTION

First aid is an immediate intervention that has been conducted for a victims undergo sudden injury or illness, the early the intervention the less morbidity and mortality (Shaima, et al, 2018).

It is generally consist of series of simple and life saving techniques that an individual trained on with minimal equipment (Yosra ,K.H,2013) .

Emergency cases takes place any where and at any time, at street , at home ,even at school or kindergarten or nursery and small children susceptible to accidental injuries or sudden illness as they spend most of their day in kindergarten or nursery which is the best place to care of them in the absence of their parents (Muneeswari,2014) .

Children are at risk for injury due to some factors related to their developmental and behavioral characteristics and their poor awareness of the danger of certain surrounding environmental risks and their small bodies, narrow air ways and more sensitive skin layer (Peden, et al, 2009).

Teachers are the first line of children protection and the responsible for their safety which is complements parent role, they must be well prepared to deal properly and promptly with any urgent child injury or event.(Lingard,H.,2002).

Teachers should be always ready to deal with both serious and mild accidents in a safe manner, generally serious injuries might takes place like : car accident ,falls ,drowning ,burns , suffocation , poisoning , which are the most common cause of children injuries and death, even minor injuries can form a big challenge to teachers who are not be able to intervene because they dot have proper knowledge about first aid and not trained well to deal with such cases .(Shaima, et al, 2018).

The Aim of the study : To study the effect of first aid program on nursery and kindergarten school teachers.

Objectives of the study :

1. Assess the nursery and kindergarten school teachers knowledge and practices about first aid measures for childhood injuries and illness.
2. Organize and apply first aid program for the teachers.
3. Evaluate the effect of the program on nursery and kindergarten knowledge and practice.

Rational of the study: Kindergarten and nursery is the second setting in which children spend long period of time after home ,emergencies may occur at any time as injuries or sudden illness in the absence of parents.(Muneeswari,2014).

Teachers of nursery and kindergarten play multi role in this period as care giver , supervisor, teacher, and preventer of unpredictable emergency health problems, so they should well prepared and trained for life saving measures with a sufficient knowledge and practice (Olympia et al, 2010).

METHOD

-Study Design:

To achieve the objectives of the study an experimental research design (pre- posttest) was adopted in the present study.

-Setting of the study:

The study was conducted in three nurseries and kindergarten in Mosul city (the nursery &kindergarten of the University of Mosul which is governmental nursey &kindergarten (,Al-khutwa Al Oula and Janat Addan) which are private nursery &kindergarten) .

-Sample and sampling technique :

A convenient sample of 56 nursery &kindergarten school teachers was selected , 28 from governmental and 28 from private nurseries after a verbal ethical agreement taken from them .

-Period of the study :

The investigators were engaged in the study since (10 / January/ 2021) when the researchers select the subject of the study with their supervisor , data collected during a period of 1 month from 20 / 1 /2021 to 20 / 2 /2021 .

-Tool of the study:

In order to achieve the study aim and objectives a questionnaire sheet was constructed and organized depending on related literatures , it is constructed in Arabic language ,based on knowledge and practical multiple chose questions arranged as pre/ posttest to evaluate knowledge and skills or steps taken by nursery and kindergarten school teachers about first aid when a child injuries takes place, it is composed of two parts:-

Part 1 :- This part include (7) items which focused on the teachers demographic characteristics such as (age ,sex , residence, marital status,, level of education , years of experience as a teacher in nursery or kindergarten and type of training on first aid if it present).

Part 2 :- This part including the forma of pre/ posttest with multiple choice questions about the knowledge and steps of first aid taken in

consideration the main and common childhood injuries and accidents starting from the simple to the more serious one that may happened at any time in the nursery or kindergarten , these questions divided into four main areas ,each area have five sub question as the following:

injuries of head & face (epistaxis, foreign body in eye, foreign body in nose and ear ,head injury or fall, fainting or sudden loss of consciousness after head trauma),injuries of the limbs(insect bite, simple burn, wound, electrical burn and shock , fractures) , injuries or affection of respiratory system (aspiration of foreign body ,drowning, gases inhalation, asthmatic attack ,hemlock maneuver) , and lastly cardiopulmonary resuscitation (positioning , clearing airway, assess vital singe ,artificial breathing or lung aerations, cardiac massage) ,one degree given to correct answer, while zero given to incorrect answer . Teachers knowledge was considered satisfactory if the result 50% or more and unsatisfactory when it is less than 50%. Appendix (II) .In between pre and posttest the researchers organized a training first aid program ,it was a review of all the previous types of injuries for the teachers of nursery & kindergarten , this course include the knowledge and steps to save the life of these injured children ,training methods used include lectures , discussions, photos and life demonstration , the time of

program was at the free rest time of the teachers in the nursery, the program lasting 1-2 hours which nesses ate repeated frequent training programs in order to cover all of the selected sample.

-Validity and reliability:

The data collection tool was tested for content and validity and re organized according to the opinion of a panel of experts in the clinical nursing department to be more valid and suitable with the main aim and objectives of the study , the Cronbach alpha coefficient test were used to assess reliability of the tool..

Statistical analysis

The collected data were compiled and analysed using percentages, mean, median, and Chi-square tests using SPSS version 20. P values of 0.05 were used as a cut-off point for the significance of the statistical test.

RESULTS

Table 1, show majority of the sample aging between 20-25 years , all of the teachers from Mosul , 51 % of them were married and 51 % have between 5-10 years experience,the qualification of teachers were mainly bachelor.

Table 1. Socio-demographic data of the selected sample

	Variables	No.	%
Age	20-25	24	43
	26-30	18	32
	> 30	14	25
	Total	56	100
Residence	Inside Mosul	56	100
	Outside Mosul	0	0
	Total	56	100
Marital status	Single	20	36
	Married	29	51
	Widowed	2	4
	Divorced	5	9
	Total	56	100
Years of experience	< 5years	12	21
	5-10	29	51
	11-15	10	19
	>16	5	9
	Total	56	100
Qualification of teachers	Secondary school	8	14
	Bachelor	32	57
	Institute	16	29
	Total	56	100

Figure 1. Distribution of the Studied Teachers According to their attendance to first aid program (No. = 56)

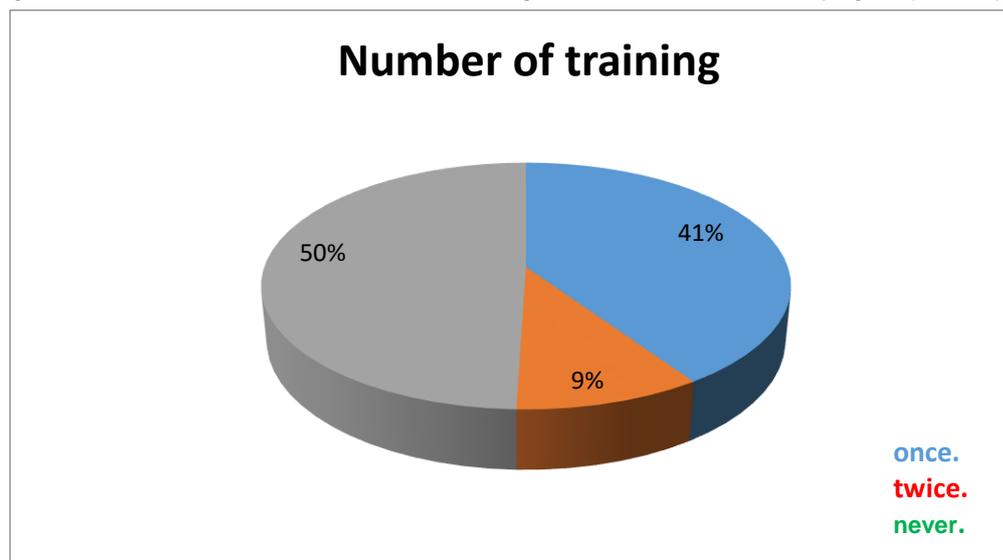


Table 2. Teachers' knowledge about First Aid in Pretest and Posttest according to the correct answer

Knowledge	Pretest		posttest		χ^2	P-value
	No.	%	No.	%		
epistaxis	35	64	54	96	22.5	.0001
Foreign body in eye	40	71	48	86	9.9	.0001
Foreign body in nose & ear	42	75	52	93	9.3	.0001
Head trauma	23	41	54	96	61.7	.0001
Insect bite	44	79	54	96	9.3	.0001
Burn	35	64	48	86	7.4	.0001
Wound	47	83	50	89	7.5	.02
Fracture	43	77	52	93	9.3	.0001
Chocking	31	55	53	95	35.2	.0001
Poisoning	34	61	54	96	22.5	.0001

Table 3. Teachers Practice about First Aid in Pretest and Posttest according to the correct answer to practical questions

Practice	Pretest		posttest		χ^2	P-value
	No.	%	No.	%		
Chocking	23	41	51	91	61.7	.0001
CPR	25	45	49	89	43.6	.0001
Wound	33	60	42	75	18.1	.008
Fracture	40	71	49	89	9.3	.000
Burn	33	60	41	73	20.6	.007

DISCUSSION

Children in nursery or kindergarten liable for many types of injuries and accidents such as trauma of unsafe playing or running, fall, burn, and poisoning with some types of toys Allender et al,(2013). These accidents may be also attributed

to a large number of children within the class and to presence of hyperactive children among them. The researcher in this study notice that there was a real need to apply a program that helping teachers to tide over these problems and reduce the complication among children after accident and injuries by educate and train teachers the first aid measures, the researcher also notice a desire and interest from majority of teachers to be engaged in this program and to share in first

aid training as a source of knowledge and skills mainly among those who were newly employed with less than five years experience who were forming half of the sample and not attending any training on first aid which simulate the result of Mersal & Ali (2016), those regarding this training is life saving for children at nursery or even within their families.

Regarding personal data it was observed that two third of teachers aged less than 25 years which is go with Shaima et al (2018), half of them were married which is consistent with Younis & Sharma(2015), half of the selected sample having 5-10 years teaching experience in nursery and kindergarten, this may affect their interest to have training in this vital area of children's health. Majority of teachers selected in this study have bachelor in this field of teaching.

Knowledge and practices about first aid were insufficient in pretest which necessitate the implementation of training program, this lack of knowledge and practice may be due to either lack of interest, or poor coverage of first aid in schools teaching curriculum and lack of obligatory continuous education courses.

Generally the teachers knowledge showed immediate posttest improvement among majority of teachers about epistaxis, foreign bodies in eye, ear, nose, insect bite, burn, wounds, fractures, choking, poisoning, this result similar to the result conducted by Ali et al (2010) of applying a first aid training program. The improvement of percentage of correct answer between pretest and posttest among the majority show highly significant difference at P-value 0.0001, this result may contributed to their eagerness to learn, knowledge about wound show just significant result and this is because wounds is a common injury in the nursery and schools and regarded as minor type of injuries previously experienced by teachers which simulate the result of Masih et al(2014).

About teacher practices toward common first aid emergency tested by practical questions and the result was significant differences between pretest and posttest about Chocking, CPR, Wounds, Fractures, Burn, this consistent and go with the result of Mersal & Ali (2016).

CONCLUSIONS

According to the result of the study which is concluded that majority of the sample aging between 20-25 years, all of the teachers from Mosul, half of them were married and half of sample have between 5-10 years of experience, the qualification of teachers were mainly bachelor.

The knowledge and practices about first aid of children injuries and accident showed significant increase with significant statistical differences in all items between pre and posttest with a value of 0.0001.

RECOMMENDATIONS

The study recommended for:

1. Mandatory pre and post employment continuous education training programs, including first aid.
2. First aid programs should be parts of teaching curriculum for high education.
3. Conduct further studies as a follow up for teachers' knowledge and practice.
4. Provide posters, videos, brochures and other facilities for teachers.

ETHICAL CONSIDERATIONS COMPLIANCE WITH ETHICAL GUIDELINES

An administrative agreement was obtained from head of the clinical nursing department, and approved by the College of Nursing, University of Mosul, Iraq. The participants were informed about the research's purpose and ensured anonymity and confidentiality of the information. A written informed, voluntary participation consent was obtained from each participant.

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AUTHOR'S CONTRIBUTIONS

Study concept; Writing the original draft; Data collection; Data analysis and Reviewing the final edition by the author.

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