

## Effect of Intervention Program on Quality of End of Life Care Provided by Pediatric Critical Care Nurses

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**Abstract:**End of life care is a rising nursing claim to fame and is building up a committed spot in the field of pediatrics. As a specialty, End of life care concentrates on quality of life and side effect administration for patients who are living with incessant and life-undermining sicknesses. In pediatrics, progress in human services imply that numerous children are living longer with these conditions and could profit by administrations that concentrate on personal satisfaction and unrivaled indication administration. Palliative care can be furnished simultaneously with remedial treatments and is logically comparative yet particularly from hospice administrations. Medical caretakers can give the ideal end of life tend to child comprehends of death, empowering early start of palliative care benefits, and enhance the usage of palliative care in. The aim of the current study was to evaluate Impact of Intervention Program on Quality of End of Life Care Provided by Pediatric Critical Care The study utilized a quasi-experimental research design. The study sample consisted of 80 nurses they were randomly assigned into the study using simple random sampling. The study was conducted in the NICU, PICU and oncology at Benha Specialized Pediatric Hospital. The required data were collected using the following tools, structured interview sheet; Socio-demographic sheet and Knowledge and attitude assessment sheet- The study results revealed that nurses who received the educational program demonstrated a significantly higher mean score of knowledge and reported attitude regarding palliative care of children than those in the control group. The highest percentages of nurses had been involved in the educational program had more awareness of the goal and objectives of children palliative care than those in the control group. These results support the proposed study hypotheses. It was recommended that continues follow up program about palliative care for children.

**Key Words:** Palliative care- educational program-Nurses- Childs

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### I. Introduction

End of life care, is an approach that enhances the personal satisfaction of patients and their families facing the problem associated with life-threatening illness, through the avoidance and alleviation of suffering by a method for early distinguishing proof and immaculate evaluation and treatment of pain and different issues, physical, psychosocial and spiritual. [1] Palliative carefor childrenactive total care of the child's body, brain, and soul, furthermore includes offering toback to the family. When illness is diagnosed, and continues regardless of whether or not a child receives treatment coordinated at the ailment. [1] Health suppliers must assess and alleviate a children's physical, mental, and social pain.

The evaluated worldwide number of children needing palliative care toward the end of life is very nearly 1.2 million [2] .Global Health, reported that, Children dying from congenital anomalies represent over 25% of the weight of end of life care, trailed by neonatal conditions (just about 15%) and protein vitality unhealthiness (14%).and in need of palliative care for progressive non-malignant disease represent the highest proportion of cases for all regions.

. Children with palliative care needs run in age from pre-birth to youthful grown-up. Truth be told, a few grown-ups beyond 21 years old are still considered some portion of this populace since they have conditions observed by pediatric specialists or have formative and additionally physical difficulties that are ideally serviced by pediatricians. PP/HC groups should along these lines have the capacity to watch over patients with far reaching determinations and sickness directions while giving formative suitable palliative care administrations [3].

Pediatric palliative care is both rationality and a sorted out program. It frequently incorporates, however, is not restricted to hospice and loss administrations and projects, pain and indication administration, sibling support, group asset referrals, and psychological well-being guiding, and break mind [4]. Advance, individuals from the palliative care group help patients and families with required data to set objectives as they develop and create their life-restricting conditions and settle on choices in regards to their treatment arrangements to improve their quality of life [4].

The World Health Organization [5].Defines a quality of life as "an individual's view of their position in life, with regards to the way of life and esteem frameworks in which they live and in connection to their objectives, desires, models and worries" According to the Center for Disease Control and Prevention [6], "the

idea of wellbeing related personal satisfaction includes those parts of general personal satisfaction that can be obviously appeared to influence wellbeing – either physical or mental" [6]The palliative care nurse professional assumes a vital part by overseeing side effects and for tending to the whole family. Palliative care nurse specialists are gifted in controlling families through the mind-boggling circumstances of hospitalization and care at home. Likewise, Palliative care nurse organizers know about assets inside the healing facility and the group. They have encountered working with organizations that provide children with nursing care, equipment and therapies they need to improve their quality of life. They additionally have a decent feeling of how to help other medicinal services; suppliers cooperate to give an ideal care to children and their families [7].

Specialist palliative care nurses bring a one of a kind arrangement of aptitudes and qualities that improve the care and bolster gave to children confronting the end of life and to the families and groups that bolster them. These abilities and qualities are created through numerous years of interdisciplinary clinical practice and proceeding with training and they are educated by the establishing rationalities of palliative care. In addition to Specialist palliative care nurse's medical attendants exhibit initiative in self-governing and collective practice, in the demonstrating end of life care, and in giving mentorship and instruction to different medical caretakers and social insurance experts. They have extensive knowledge and experience in the management of pain and complex symptoms associated with terminal illness [8].

Furthermore, specialist palliative care nurses work collectively and with other professional groups to advance the body of knowledge about the end of life care, initiating and conducting research and incorporating research findings where appropriate. They work collectively and with others to advocate for change and provide policy advice to Government and professional organizations regarding a wide range of clinical, professional and service related issues [8].

The nurse must care for the child in the setting of the family [9]. There is likewise a need to comprehend the family as a concentration of nursing consideration, and to think about the requirement for propelling the scan for building learning with a dynamic cooperation of relatives. The contextualization of the family in the healing facility environment standing up to the elements of work and the gear utilized as a part of the observing and treatment of the child constitutes an essential minute in the inclusion of the relatives into the doctor's facility surroundings considered, by and large, as unfriendly, far off from the day by day reality due to hard advances and schedules saw to be resolute. Creators call attention to that execution of instructive exercises that consolidate data with down to earth mediations performed to kid with the genuine condition expands the nature of day by day living [10].

## **II. Significance of the Study**

Providing quality care for dying child is the essential concern, critical care nurses are responsible for caring for these dying patients, because most of the children die while hospitalized. Death in the ICU environment can be complicated and is often unnatural. Despite the fact that the ICU is typically viewed as a serious life-saving area, various children die in the unit, and the care provided to these children shifts from a curative focus to one of end-of-life care. Sometimes the transition from critical care to end-of-life care is instantaneous, and the urgency associated with end-of life decisions for these children creates challenges for the nurses providing this care. Therefore nurses whose day-to-day practice focuses on saving lives, a sudden or even gradual change in a child's situation to end-of-life care can cause a disconnect between what nurses routinely do in the ICU setting and what they are now expected to do. Fewer studies could be found that has analyzed the impact of an educational program on nurses provide end of life care.

### **The aim of the study was:**

- To evaluate the effect of intervention program for quality of end of life care provided by pediatric critical care nurses.

### **Research Hypotheses:**

The study results were testing the following hypotheses:

- 1- nurses' who received palliative care intervention program will have a higher mean score of knowledge and reported Attitude than those in the control immediately after program implementation and after follow –up.
- 2- nurses' who received palliative care intervention program will have a positive concern about goal and objective of pediatric palliative care than those in the control immediately after program implementation and after follow –up.

### **III. Subjects and Methods**

#### **Research design:**

A quasi-experimental research design was utilized to conduct the current study.

#### **Sample:**

The study sample consisted of 80 nurses and who were being worked in Critical units (Neonatal Intensive care unit (NICU) Pediatric intensive care unit (PICU) and oncology Unit they were randomly assigned to an experimental or a control group using simple random sampling.

#### **Setting:**

The study was conducted at Benha Specialized Pediatric Hospital.

#### **Data Collection Tools:**

**1-** A structured interview schedule developed by the researchers after extensive review of related literature included three parts:

**Part I:** Involved socio-demographic data concerned with the participated nurses such as, age, level of education, years of experience, the area of specialty and included questions to assess nurses' Education and Experience with PEOL care.

**Part II:** Included questions to assess nurses' knowledge about the end of life care for critically ill children.

**Scoring system:** for Nurse Knowledge, each correct response took two scores, the incomplete one took one score and the wrong response or the not known/ done one took no score with a total score of 14 represent 100%. Total knowledge score above ( $\geq 75\%$ ) considered good, score between (60% – less than 75%) considered average, meanwhile mothers' total score (less than 60%) was considered poor.

**Part III:** Included questions to assess perceive of the nurse to PEOL goal and objectives have 10 items score are 30 divided as agree=1, natural=2 and disagree = 3 except in items 1 and 6 the score is opposite.

**Part IV:** Nurse's attitude sheet, developed by the researchers to evaluate the nurses attitude toward the pediatric end of life care. It includes an attitude of the nurse regarding the ethical concern, total score 24 and its divided into 3 scores ( disagree =3, natural +2 and agree + 1) except in the Items number 4 the score is opposite.

**Part V:** Scaletto measures the obstacles size between the nurses after program implementation. It is adopted from <sup>[11]</sup> and modified by the researcher. The scale used for obstacle size ranged from 0 (not an obstacle) to 5 (extremely large). An obstacle's perceived magnitude or impact was determined by multiplying its mean size

#### **Description of Palliative care Educational Program:**

The palliative care educational program was designed by the researchers after an extensive review of related literature. It consisted of 10 parts that included: Definition, Aims, Principles, Palliative care domains, Palliative care competences skills, Palliative care plan, Skills need in palliative care, Role of nurse in palliative care, care of the family and barriers providing palliative care, the program was conducted in four session each 10 nurses in the sessions, the posttest done immediately after program implementation and follow-up care was done after three months of program implementation.

#### **Validity and Reliability:**

Data collection tools were submitted to five experts (two pediatricians and 3 neonatal/ pediatric nursing) to test the content validity. Modifications of the tools were done according to the expert's judgment on clarity of sentences, appropriateness of content and sequence of items. The experts' agreed on the content, but recommended minor language changes that would make the information clearer and more precise. The suggested changes were made. Regarding reliability, the reliability coefficients' alpha between questions was 0.72.

#### **Data Collection Procedure:**

An official permission to conduct the study was obtained from the director of the head nurses. After the nurses accepted to participate in the study and were randomly assigned to either the study or control group, the researchers filled the interview sheet from the nurses who had a deal with pediatric critical care. The baseline nurses' knowledge, attitude and perceived of goal and objective about a deal with the pediatric end of life care was assessed. The time spent to fill in the sheet ranged between 30 to 45 minutes for each nurse.

The first part of the pediatric end of life care program was conducted to the study group four days. Nurses in the study group were divided into 5 groups, each group involve 8 nurses. The researchers taught each group of nurses in a classroom setting in a nursing station from 60-90 minutes for two consecutive days for each group of nurses. Information and instructions were presented via / a question/answer session; a discussion

session; demonstration and re-demonstration; and, printed materials in the form of illustrated English booklet prepared by the researchers. It focused on / Definition, Aims, Principles, Palliative care domains, Palliative care competences skills, Palliative care plan, Skills need in palliative care, Role of the nurse in palliative care, care of the family and barriers providing palliative care. The nurses were given an opportunity to discuss their concerns about the pediatric end of life care.

The post-program immediately and after 3month activities, provided by the researchers included a half-hour session with each nurse (both study and control group). Data were obtained by questioning each nurse about knowledge, attitude, and goal and objective of a pediatric end of life care.

The nurses reported obstacles during care of pediatric end of life care in both groups during the follow-up session. Nurses assigned to the control group received routine knowledge. The information involved verbal instructions after finished the study. The data collection procedure took 4months, stated from June to September 2015.

**Pilot Study:**

The refined program was implemented with five nurses and. Based upon the program implementation few changes were made in the program, such as the omission of some items related to items that support palliative care.

**Ethical consideration:**

All nurses received written and verbal explanations about the nature of the study; voluntary participation; what study involvement would entail; anonymity and confidentiality issues; and, the right to withdraw from the study at any time without repercussions For research ethical consideration and based on the basic ethical principle of beneficence, upon the completion of the educational program, the researchers provided the nurses in the control group 20 to 30 minutes of verbal information regarding pediatric palliative care.

**Statistical Analysis:**

The collected data were categorized, tabulated, and analyzed using the SPSS computer program Version 21. Numerical data were expressed as the mean and standard deviation. Qualitative data were expressed as frequency and percentage. The paired-sample t-test was used to compare the study and control group mothers' knowledge, perception and attitude mean scores at pre-test, post immediately and after three months of program implementation. The paired-sample t-test was used to compare differences, between the study and control group. Correlation among variables was done using Pearson correlation coefficient. The level of significance at  $p < 0.05, 0.01, 0.001$  were used as the value for statistical significance.

**IV. Results**

Table (1) revealed that the mean age of nurses in the study group was  $28.80 \pm 6.36$  years and  $27.68 \pm 6.89$  years for the nurses in the control group. More than half (55%) of nurses in the study group were had a diploma of nursing, while the highest percentage (60%) of nurses in the control group were diploma in nursing. The highest percentages (40%) of nurses in the study group were work in Neonatal Intensive Care Unit, while (42.5%) of control group worked in Pediatric Intensive Care Unit. There were no significant differences between study and control groups in socio-demographic characteristics of nurses ( $p > 0.05$ ).

**Table (1): Percentage Distribution of Nurses' Socio-demographic Characteristics in the Study and Control Group.**

Characteristics	Study Group (n=40)		Control Group (n=40)		X <sup>2</sup>	P
	NO	%	NO	%		
<b>nurses' age/years:</b>					8.80	>0.05
- 20-<25	7	17.5	8	20.0		
- 25 - <30	17	42.5	12	30.0		
- 30-35	12	30.0	15	37.5		
- > 35	4	10.0	5	12.5		
Mean +SD	28.80 ±6.36		27.68±6.89			
<b>Nurses' level of education:</b>					9.64	>0.05
-diploma	22	55.5	24	60.0		
-Technical Institute	11	27.5	11	27.5		
-Bachelors	7	17.5	5	12.5		
<b>Area of specialty:</b>					8.47	>0.05
-NICU	16	40.0	13	32.5		
- PICU	14	35.0	17	42.5		
-Oncology	10	25.0	10	25.0		

Table (2) revealed that the (87.5%) of the nurses in the study group haven't education in end of life care compared to 57.5% of nurses haven't education in end of life care in control group. There were no significant differences between study and control groups in education ( $p>0.05$ ). 42.5% of nurses in the study group cared more than 10 children who have died. While 32.5 % in control group cared for more than 10 children. Most (87.5%, 82.5% respectively) of the nurses in both groups were hadn't personnel experience in a hospice program. The highest percentages (87.5%, 90% respectively) of nurses in both groupshadn't professional experience in a hospice program.

**Table (2): Distribution of Nurses' Education and Experience with PEOL Care**

Characteristics	Study Group (n=40)		Control Group (n=40)		X <sup>2</sup>	P
	NO	%	NO	%		
<b>How much education have you had in end-of-life care?</b>						
- None	35	87.5	23	57.5	5.71	>0.05
- 1-4 hours	5	12.5	17	42.5		
<b>In the past year, how many child have you cared for who have died?</b>					67.87	>0.05
-None						
-1-3 child	0	0.0	0	0.0		
- 4- 6 child	2	5.0	8	20.0		
- 7-10 child	9	22.5	7	17.5		
-> 10	12	30.0	12	30.0		
	17	42.5	13	32.5		
<b>How much personal experience have you had with a hospice program?</b>					2.0	>0.05
-None	35	87.5	33	82.5		
- 1-3	5	12.5	7	17.5		
<b>How much Professional experience have you had with a hospice program?</b>					7.63	>0.05
-None	35	87.5	36	90.0		
- 1-3	5	12.5	4	10.0		

Concerning to the total nurses' knowledge regarding Pediatric palliative care, table (3) indicated that more than half (87.5% & 85% respectively) of them had a poor level of knowledge before program implementation. The mean of the total score of mothers' knowledge in the study group was  $2.75 \pm 2.85$  and  $3.72 \pm 3.02$  for the control group, and there was no statistically significant difference between both groups ( $p=>0.05$ ). After immediately program implementation, 90% of the nurses in the study group had a good level of knowledge, while, (20%) of nurses in the control had the average level. The mean of the total score of nurses' knowledge in the study group was  $12.00 \pm 1.13$  compared to  $5.77 \pm 4.53$  for nurses in the control group, and there was statistically significant difference between both groups ( $p=<0.001$ ).

To evaluate the knowledge retention among nurses after 3 months of program implementation, the same table proved that, more than half (65%) of them had a good level of knowledge and 60% of nurses in the control group had a poor level. The means of the total score of knowledge among mothers in both groups were ( $10.96 \pm 6.65 \pm 3.21$  respectively) and there was statistically significant difference between both groups ( $p<0.001$ ).

**Table (3): Comparison between the Total Mean Score of knowledge among Nurses in Both Groups before Program Implementation, after Immediately and post 3 months of Program Implementation.**

Total Knowledge	Study group n=40						Control group n=40						t-test	P
	Good		Average		Poor		Good		Average		Poor			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Pre-test	2	5	3	7.5	35	87.5	2	5	4	10	34	85	1.97	>0.05
Mean ± SD	2.75±2.85						3.72±3.02							
Post-test	36	90	4	10	0	0	8	20	8	20	24	60	8.7	<0.001
Mean±SD	12.00±1.13						5.77±4.53							
follow-up	26	65	11	27.5	3	7.5	7	17.5	9	22.5	24	60	5.92	<0.001
Mean ±SD	10.96 ±2.25						6.65±3.21							

As shown in the table (4) 82.5% and 90% respectively of nurses had a negative perception about goal and objectives of PEOLC before program implementation. The mean of the total score nurses' perception in the study and control group was ( $17.37 \pm 3.82$  &  $15.95 \pm 3.16$  respectively). There was no statistically significant

difference between both groups ( $p > 0.05$ ). After immediately program implementation 92.5% of the nurses in the study group had a positive level of perception, while, most (85%) of nurses in the control had a negative perception. The mean of the total score of nurses' perception in the study group improved to  $27.60 \pm 2.16$ . On the other hand, it was  $13.32 \pm 4.25$  for nurses in the control group, and there was statistically significant difference between both groups ( $p < 0.001$ ).

Regarding the level of total perception among nurses after 3 months of program implantation, the same table demonstrated that 57.5% of nurses in the study group had a positive perception and the vast majority (92.5%) of nurses in the control group still had a negative perception. The means of the total score of perception among nurses in both groups were ( $23.82 \pm 3.72$  &  $14.40 \pm 2.90$  respectively) and there was statistically significant difference between both groups ( $p < 0.001$ ).

**Table (4): Comparison between the Total Mean Score of Reported Perception about goal and objective of PEOL care among nurses in Both Groups before Program Implementation and post immediately and after 3 Months after of program implementation**

Total Perception	Study group n=40				Control group n=40				t-test	P
	Positive		Negative		Positive		Negative			
	No.	%	No.	%	No	%	No	%		
Pre-test	7	17.5	33	82.5	4	10	36	90	1.45	>0.05
Mean ± SD	17.37±3.82				15.95±3.16					
Post-test Immediately	37	92.5	3	07.5	6	15	34	85	20.11	<0.001
Mean ±SD	27.60±2.16				13.32±4.25					
After 3 Months	23	57.5	17	42.5	3	7.5	37	92.5	12.49	<0.001
Mean ±SD	23.82±3.72				14.40±2.90					

Concerning to the total nurses' attitude regarding Pediatric End of Life Care, table (5) indicated that more than half (87.5% & 90% respectively) of them had a negative attitude before program implementation. The mean of the total score of nurses' attitude in the study group was  $14.55 \pm 3.15$  and  $11.80 \pm 2.80$  for the control group, and there was no statistically significant difference between both groups ( $p > 0.05$ ). After immediately program implementation, 90% of the nurses in the study group had a good level of knowledge, while, (20%) of nurses in the control had an average level. The mean of the total score of nurses' knowledge in the study group was  $22.15 \pm 1.98$  compared to  $11.20 \pm 4.07$  for nurses in the control group, and there was statistically significant difference between both groups ( $p < 0.001$ ).

Regarding to the level of total attitude among nurses after 3 months of program implantation, the same table demonstrated that, 50% of nurses in the study group had a positive attitude and the vast majority (92.5%) of nurses in the control group still had a negative attitude. The means of the total score of attitude among nurses in both groups were ( $17.65 \pm 3.20$  &  $10.20 \pm 2.72$  respectively) and there was statistically significant difference between both groups ( $p < 0.001$ ).

**Table (5): Comparison between the Total Mean Score of Reported Attitude about goal and objective of PEOL care among nurses in Both Groups before Program Implementation and post immediately and after 3 Months after of program implementation**

Total Attitude	Study group n=40				Control group n=40				t-test	P
	Positive		Negative		Positive		Negative			
	No.	%	No.	%	No	%	No	%		
Pre-test	5	12.5	35	87.5	4	10	36	90	3.80	<0.05
Mean ± SD	14.55±3.15				11.80±2.80					
Post-test Immediately	37	92.5	3	07.5	5	12.5	35	87.5	14.40	<0.001
Mean ±SD	22.15±1.98				11.20±4.07					
After 3 Months	20	50	20	50	3	7.5	37	92.5	9.60	<0.001
Mean ±SD	17.65±3.20				10.20±2.72					

Regarding to the level of total obstacles among nurses after program implantation, the same table demonstrated that the item with the highest score was language barriers (score, 3.62) in control group. While in study group the mean score was (1.400). The next obstacles families not accepting poor child prognosis the

mean score of the nurse in control group was(3.70), while the mean score of the nurse in study group was (2.45). Regarding to Nurse not being able to communicate with the child to learn of his/her wishes regarding treatment the mean score of the nurses in control group was (3.85), while the mean score of the nurses in the study group was (1.75). The same table also illustrated that. The control and study nurses have the same mean score regarding to unavailability of the ethics committee to review the difficult child cases. The study nurses didn't have obstacles regarding to nurses not trained regarding the quality of end of life care while the mean score of the control nurses was (3.47) respectively.

**Table(6): Mean Score of the Study and control group According to perceived intensity scores for obstacles in end-of-life care**

Items	Study group	Control group
	Mean± SD	Mean± SD
1.Language barriers	1.400 ± .496	3.62± .490
2. Family continually calls nurse for update rather than the designated contact person	2.02± .479	3.22 ± .767
3.Family not understanding the term "life-saving measures" and its implications	2.400± .496	3.55 ± .503
4. Physicians differing in opinion about care of a child	2.400± .496	1.47 ± .505
5. Physicians evasive and avoid family	1.37 ± .490	0.72 ± .452
6. Nurse too busy offering life-saving measures to provide quality end-of-life care	1.000±.716	3.30 ± .757
7. Families not accepting poor child prognosis	2.425± 1.106	3.70± .464
8. Family members not understanding what "life-saving measures" really means	.525± .505	3.97 ± .158
9. Nurse having to deal with angry family members	1.17± .384	2.67 ±.47
10. Nurse having to deal with distraught family while still caring for the child	1.75 ±.707	3.00 ±.000
11.Nurse not being able to communicate with child to learn of his/her wishes regarding treatment due to sedation or depressed neurological status	1.75 ±.707	3.85 ± .361
12. Physicians won't allow child to die from the disease process	.7500± .438	.600 ± .496
13. Physicians overly optimistic to family about the patient surviving	1.32± .474	1.47± .505
14. Nurse called away from child and family to perform other duties	1.47± .502	3.55 ± .503
15.though painful or uncomfortable	2.00± .000	1.35 ± .483
16. Family fighting about life support	1.47± .505	.750 ± .808
17. Nurse's opinion about child's care not valued	2.55 ± .503	1.87 ± .911
18. Nurse knowing poor prognosis before family	2.900± .303	3.17 ± .384
19. Family members not having private a place to grieve at a patient's bedside	3.45± .503	3.67 ± .474
20. Family legal action is a threat, thus child intensive care continues despite a poor prognosis	1.65± .662	1.47 ± .505
21.A child having pain that is difficult to control or alleviate	2.27± .452	2.77 ± .422
22. Family not with the patient when he/she is dying	3.65± .769	3.60 ± .810
23. Nurse not trained regarding family grieving and quality end-of-life care	.000 ± .000	3.47 ± .598
24. Family visiting hours too liberal	2.97 ± .659	3.72 ± .452
25. Family grieving time limited to accommodate new admissions	1.45 ± .503	2.27 ± .452
26. Unavailability of ethics board or committee to review difficult child cases	3.57 ± .500	3.57 ± .500
27. Family not having a support person	1.05 ± .220	2.47 ± .505
28. Family visiting hours too restrictive	1.25 ± .438	1.17 ± .384
29. Continuing to provide advanced treatments to dying child because of financial benefits to hospital	3.00 ± .000	1.900 ± .303

Table (7) showed that there was statistically significant correlation between the age and level of education of Nurses regarding PEOL care. (p=<0.001). However, there were no statistically significant correlations between the level of education and age of nurses in the study group and their level of knowledge (p=>0.05) respectively.

**Table (7) Correlation between age, level of education and total knowledge and attitude in the study group**

Total Knowledge	Age	Level of Education
R	.048	.018
P	>0.05	>0.05
Total Attitude		

R	-.354	-.339
P	>0.001	>0.001

## V. Discussion

Pediatric palliative care is upgraded the personal satisfaction for all required, in substantial part by counteracting and reducing enduring utilizing the abilities and information of a specific care group that incorporates specialists, attendants, social laborers, ministers, children life advisors, and others. Pediatric palliative care concentrates on pain and side effects management [12] various hindrances remain that anticipate auspicious access to excellent CBPPC for children with life-threatening conditions and their families are incorporate The individual attributes, beliefs, and attitudes of essential medicinal services suppliers definitely and obviously impact the probability and timing of referral of qualified patients for PPC[13].

[14] Added that an expanding quantity of children with life-threatening conditions get PPC have started to see the strain of a social support framework not yet completely prepared to address the issues of this developing population. At present, inadequate quantities of clinicians have the essential preparing to give locally established care to therapeutically complex children, and expanded subsidizing on both national and state levels is expected to bolster instruction and improvement of PPC projects. Furthermore, [15] specified that Preferences, beliefs, or yearnings of the patient or family unquestionably influence access to PPC. Contingent upon how PPC is acquainted with a family, the demonstration of discussion might be mixed up as synonymous with "surrendering" or "setting up hospice which can prompt to a refusal of services. [16] Said that certain patients and families may incorrectly assume that PPC association blocks therapeutic / life-dragging out treatment this misperception ought to be cleared up as right on time as could reasonably be expected to minimize confusion and ensuing loss of possibly valuable services.

As regards the nurses' age, the study results revealed that more than one- third of study subject between age 25 - <30, worked in NICU, and more than half had a bachelors degree in nursing. All the studied nurses were manage with a child during the period of dying and the majority (42.5 %) of them was dealt with more than 10 children during the period of dying. The majority (87.5%) of them they didn't take any previous educational programs about death, dying or about how to take care of dying children. these findings are assertionwith<sup>[17]</sup>. the present study reflected that there was significant difference in nurses' knowledge pre- postintervention regarding care of chronically ill children this supported by<sup>[18&19]</sup>who clarify that palliative care training can make contrast in nurses knowledge and provide information help them to built theirtrust in managing with the moral, and legal issues they experience.

In relation to nurses' attitude pre-post intervention regarding care of children,it was noticed thatchildren end of life care there was a highly significant difference in nurses' attitude pre/post- test intervention related to the care of chronically ill children's. This results supported by<sup>[18&20]</sup>whouncovered that nurses behavior and attitude were changed in the clinical practice and they had a high level of comfort and confidence in the care of chronically ill children after palliative care education for pediatric nurses. Additionally specified thateducation is the key to give pediatric nurses the skills, enhance their attitude they have to do this very imperative work. Furthermore, theresults of the present study are consistent with all other studies<sup>[18, 21, 22, 23& 24]</sup> who demonstrated that training in taking care of dying children affects the nurses' attitude in infants and children wards. This means that nurse'sattitude toward taking care of the dying children in the experiment group was expanded toward the end of the study contrasted with the time before the study.With respect to about objective and targetsof PEOLCthe study revealed the majority of nurses in the study group had a positive level of perception. This outcomebolsteredby<sup>[25&26]</sup>.

As regarding obstacles facing nurse in caring for children in the end of life, the biggest obstacles wasthe discoveries of the present study illustrated that, the most obstacles behaviors in providing end- of- life care to critically ill pediatric patients that perceived by nurses were,Language Barriers. The obstacle with the highest magnitude score was language barriers. The difficulty with communication between practitioner and patient is inherent in virtually all clinical practice settings, but is even more difficult when caring for very young children. Communication difficulties between practitioner and patient are agree with the results of<sup>[27]</sup>found that in her study of pediatric nurses' perception obstacles and supportive behavior in end of life care the mean score of a language barrier was( 4.50) These findings propose a requirement competence and increased nursing education in cultural humility.Family calls a nurse for the update rather than the designated contact person ,and child having pain that is difficult to control or alleviate. This finding supported by<sup>[17,28&29]</sup>.



Other biggest obstacles in the study were a nurse not being to communicate with the child to learn of his/her desires in regard to treatment due to sedation or depressed neurological status. This finding differs with [17&30] that the findings of their studies consider this obstacle the most reduced obstacles.

Families not understanding what lifesaving measures truly implied, family members who did not acknowledge that a patient was dying, nurses having to deal with angry members of a patient's family, these obstacles were agreed with [29].

The least obstacles in this study were that nurse not trained in regard to family grieving and quality end of life care, and nurse too busy offering life-saving measures making it possible to provide end of life care. In the reality training and education of physicians, nurses, and family about caring for dying children is the most supportive to enhance end of life care in their units took after by a composed convention of care.

## **VI. Conclusion**

In view of the findings of the present study, it was concluded that there was a significant difference in nurses' knowledge pre/ post intervention regarding care of end of life children and a highly significant difference in nurses' attitude pre/ post intervention related to the care of end of life children. In addition, the most obstacles behaviors in providing end- of- life care to critically ill pediatric patients that perceived by nurses in control group rather than in the study group in, family calls nurse for update rather than the designated contact person, and also child having pain that is difficult to control or alleviate and nurse too busy offering life- saving measures to provide quality end of life care. The least perceived obstacles were a nurse not trained regarding family grieving and quality end of life care, and nurse too busy offering life-saving measures to provide end of life care.

## **VII. Recommendations**

Nurses who provide end of life care to children and their families are possibly at hazard for creating stress-related health problems. These health issues can negatively affect nurses' ability to care for their patients. Nurses need to be knowledgeable about end- of- life issues to provide quality care. Based on the previous finding, it was recommended that:

- Ongoing end of life education is basic to address the issues of all staff working in PICU & ICU

- Education and training of healthcare professionals are crucial in providing optimal pediatric end-of-life care.

- Communicating with the family is vital and effective from the medical team perspective, respectful communication between physicians and nurses, and other auxiliary healthcare personnel must be useful to patients and their families toward the end of life

- Working within systems to create programs to link hospital's end of-life care programs with the community hospice home care agencies, so that children and their families can return home and receive excellent care.

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