

# Effectiveness of An Educational Program upon Nurse's Knowledge concerning Facilitated Tucking Position during Venipuncture at Neonatal Intensive Care Unit at AL-Battol Teaching Hospital in Diyala Governorate

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## **Abstract:**

**Objectives:** To assess nurses' knowledge regarding the facilitated tucking position during venipuncture, and assess the effectiveness of education program among nurses by comparing the pre- and post-test knowledge scores regarding the facilitated tucking position, and it is also, to determine the relationship between the pre- and post-test knowledge scores and the demographic variable of nurses by a Non-probability (purposive sample) of (25) all of them day shift working in Neonatal intensive care units (NICU) at AL-Batool teaching hospital.

**Methodology:** A semi experimental study is conducted throughout the period of (November 24th 2017 until June 30th ,2017). The Sample is selected for the purpose of the study. The reliability of the questionnaire which is determined through a pilot study and the validity are achieved through a panel of (13) experts. The overall items, which are included in the questionnaire, are (26). These items are divided into (4) sections which include nurses' knowledge toward pain, nurses' knowledge toward facilitated tucking position, nurses' knowledge about the importance of facilitated tucking position, and nurses' knowledge about action of facilitated tucking position. The data have been collected by using self-administration method to answer questionnaire format, Implementation of the Educational program required (3) lectures at (10) days interval period. The (pretest) data collected before application of the program. Then the (post-test 1) data collected immediately after application of the program and recollected the (post- test 2) after (1) month from (first post- test) data collection.

**Results:** The study results indicate that the sample gender just female, number of years of experience in nursing field 20(80.0%) had service of (1-4) years in the employment. The nurses' knowledge discovered that their knowledge at low level before the beginning of an educational program and become moderate level after first and second follow up of an education program post one and post two.

**Conclusion:** *The study concludes, that Most of the study sample cannot use facilitated tucking position to relief pain before conducted program, as well as, a measurable huge relationship between attendants' learning and their general data ((age , level of education, Years of experience in nursing field, Years of experience in neonatal intensive care units) there is statistical significant association between their general information related to (Ability to relief pain for infant during venipuncture, pharmacological method, facilitated tucking position, breast feeding and other) at the post test.*

**Recommendation:** *The study recommends that the decision makers need to direct their emphasis toward the educational aspects at neonatal intensive care unit by providing educational posters, guidelines, pamphlets and manuals, and initiate policy to providing a special educational session for using non-pharmacological methods to relief pain.*

**Key words:** *Effectiveness, Education Program, Facilitated, Tucking Position, Venipuncture, Nurses.*

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## I. INTRODUCTION

Pain is a complex and multidimensional phenomenon that preterm infants experience in the neonatal intensive care unit (NICU) In the NICU; infants are exposed to a high number of painful procedures. Neonatal care involves many diagnostic and therapeutic procedures that are associated with pain <sup>(1)</sup>. It is estimated that infants in the NICU will undergo an average of 14 painful procedures each day. Despite this number, pain relief measures are used inadequately in the NICU <sup>(2)</sup>. Exposure to pain at this young age can have long-term consequences on the development of an infant's brain, due to the deleterious effects on nociceptive neural circuits. Alterations of the pain system during early development can lead to lower pain thresholds, as well as cognitive and behavioral deficits as the infant matures, therefore, Stress reduction and pain management are essential components of neonatal care <sup>(3)</sup>. From the above-mentioned, it is obvious that effective pain management is an important indicator of the quality of care provided to neonates, not only from an ethical standpoint, but also in terms of protecting the long-term outcome. Neonates cannot assert their rights, and their reactions to pain are not as evident as in adults <sup>(4)</sup>. Pain management can be classified as either pharmacological or non-pharmacological. A study of the effect of continuous administration of morphine in ventilated preterm infants showed no beneficial analgesic effect. Pharmacological management of pain has been rendered more difficult by the lack of good and reliable measures of a baby's response to pain <sup>(5)</sup>. In the last decades, non-pharmacological analgesic interventions were developed and published with the objective to reduce minor short term pain and discomfort after invasive interventions. These non-pharmacological analgesic interventions can be beneficial in minor pain and discomfort and may replace or be given in addition to analgesic pharmacological agents. Several intervention methods are tested in NICU settings <sup>(6)</sup>. The use of non-pharmacological techniques is important for Nursing practice because their use is determined from the nurse's assessment and can be Performed independently <sup>(7)</sup>.

## II. METHODOLOGY

**Objectives of the study:** The study aims at:

1. Assessing the effectiveness of education program among nurses by comparing the pre- and post-test knowledge scores regarding the facilitated tucking position.
2. Finding the relationship between the pre- and post-test knowledge scores and the demographic variable of nurses.

**Study Design:** A quasi experimental design study was conducted on all nurses working at day shift in neonatal intensive care units (NICU) at Al-Batool teaching hospital between November 24th 2017 until June 30th ,2017.

**Sample of the study:** Non-probability (purposive sample) of (25) all of them day shift working in Neonatal intensive care units (NICU) at Al-Batool teaching hospital.

**Study instrument:** A questionnaire was designed and Constructed by the investigator for the Purpose of the Study to assessing of nurses' needs for knowledge toward facilitated tucking position during venipuncture depended on relevant scientific literature and previous studies (8), translated to Arabic language according to education levels of Study Samples, The study questionnaire consist of Two Parts: the First Part is related to Nurses' General Information (6 Items) and The Second Part is related to Nurses' Knowledge toward Facilitated tucking position during venipuncture consist of (26) Items divided into (104) sub items, These Items have been Scale of the questionnaire is (multiple choice) the correct answer code was (2) and the wrong answer code was (1). The questionnaire form consists of two parts include:

Part I: the demographic data include nurses' general information such as: (age , level of education, Years of experience in nursing field, Years of experience in neonatal intensive care units , Did you now the non-pharmacological methods to relief pain during, Can you relief pain for child during venipuncture, If the answer is yes and Witch methods).

Part II: Part 2 is concerned with Assessment of Nurses' Knowledge before and after program was composed of (26) Items divided into (104) sub items. The test covers relevant points from major content area of educational program, for the purpose of this study, the number of correct response or The knowledge questionnaire is used as the measure level of knowledge. The nurses in the study have been given knowledge test prior to the implementation of educational program and were retested after implementing the educational program.

**Validity and Reliability:** The content of validity for the early developed instrument and program was determined through the panel of expert who has had more than 7 years' experience in their specialty field. They have been asked to review the program and instrument for content, clarity,

relevancy, and adequacy .Changes and modification were made with respect to the experts' suggestions and recommendations.

**Statistical analysis:**The statistical data analysis approach by using (SPSS-ver.20) is used in order to analyze and evaluate the data of the study. A descriptive statistical data analysis approach used to describe the study variables: which include frequencies, percentages, and stander deviation; and Inferential statistical data analysis approach: used by application of the Chi-square test.

### III. RESULTS

**Table (1): Socio-Demographic Characteristic of the Study Sample**

Demographic data		Rating	Frequency	Percent
Age		20 to25	15	60.0
		26 to31	8	32.0
		32 to 38	2	8.0
		Total	25	100.0
		Mean $\pm$ S.D	1.48 $\pm$ 0.653	
Level of education		Junior Nursing	15	60.0
		Nursing Institute	4	16.0
		College of Nursing and Older	6	24.0
		Total	25	100.0
Years of experience in the field of Nursing		1 to 4	20	80.0
		5 to9	2	8.0
		10 to 14	3	12.0
		Total	25	100.0
Years of experience in the Neonatal intensive care unit		1 to 3	20	80.0
		4 to 7	2	8.0
		8 to 11	3	12.0
		Total	25	100.0
Did you now the non-pharmacological methods to relief pain during venipuncture		No	12	48.0
		Yes	13	52.0
Can you relief pain for child during venipuncture		No	10	40.0
		Yes	15	60.0
		Total	25	100.0
If yes what the methods	Pharmacological methods	No	8	32.0
		Yes	7	28.0
		Total	15	60
	Facilitating tucking position	No	13	52.0
		Yes	2	8.0

		Total	15	60
Breast feeding	Yes		6	24.0
	No		9	36.0
	Total		15	60
Music	Yes		0	0
	No		15	60
	Total		15	60
Other	Yes		10	40.0
	No		5	20.0
	Total		15	60

$\bar{x} \pm S.D$  = Mean and Stander deviation

Results reveals that the majority 15(60.0%) of nurses in the study sample are within the age group (20 - 25). Concerning the level of educational, most of nurses 15(60.0%) in the study sample were junior. In relation to the number of years of experience in nursing field 20(80.0%) nurses in the study sample had a service (1-4) years in the employment while years of experience in neonatal intensive care unit 20(80.0%) of nurses had an experience of (1-3) years. The knowledge of nurses about the non-pharmacological methods to relief pain during venipuncture the nurses answer by (NO) 12 (48.0%) and the other answer by (YES) 13 (52.0%). The ability of nurses to relief pain for child during venipuncture answer by (YES) 15 (60.0%) and the other answer by (NO) 10 (40.0%), if yes what is the method, the first question about the Pharmacological methods answer by NO 8(32.0%) and the other answer by YES 7(82.0%). Second question about the facilitated tucking position if she known use it and the answer is NO 13(52.0%) and other answer by YES just two(8.0%). The third question about the using breast-feeding and the answer was NO 9 (36.0%) and other by YES was six (24.0%). Fourth question in this figure about music method all body answer by NO 15(60.0%). Last question about using other method for relief pain the answer was YES 10(40.0%) and the other answer NO 5(20.0%).

**Table (2) Distribution of study sample by their Overall of Nurses Knowledge toward Facilitated Tucking Position during Venipuncture**

Overall assessment for study sample	Pre-test					Post-test				
	Freq	%	M.s.	S.D	Ass	Freq	%	M.s.	S.D	Ass
Pass	0	0	1.26	.09722	F	21	84	1.66	.16755	P
Fail	25	100				4	16			
t-value( -8.803), d.f. (24), significance (0.000)										

Ms: Mean of score (1.5) more than (1.5) p: pass less that (1.5) (F) failure, (Ass) assessment, (S.D) stander deviation, (t-value)

t-test, (d.f) degree of freedom

Regarding subjects of nurses knowledge concerning Facilitated Tucking Position during Venipuncture table (4-6) shows summary statistics such that, frequency, percentage, mean of score, and standard deviation are included for assess responding levels for studied sample either for pre period of time or after applying educational program for studying questionnaire's items concerning overall nurse's knowledge.

Results show that all of questionnaire's items in light of this part are assigned meaningful improvements as compared pre-post test (mean of score more than 1.5).

**Table (3): Distribution of Study Samples by their Overall of Nurse Knowledge toward Nurses' knowledge about Action of Facilitated tucking position.**

Overall assessment for study sample	Pre-test					Post2-test				
	Freq	%	M.s.	S.D	Ass	Freq	%	M.s.	S.D	Ass
Pass	0	0	1.26	.09722	F	20	80	1.68	.220	P
Fail	25	100				5	20			
t-value(-7.518115), d.f. (24), significance (0.000)										

Ms: Mean of score (1.5) more than (1.5) p: pass less that (1.5) (F) failure,( Ass) assessment, (S.D) stander deviation, (t-value) t-test, (d.f) degree of freedom

Regarding subjects of nurse's knowledge concerning action of facilitated tucking position, shows summary statistics such that, frequency, percentage, mean of score, and standard deviation are included for assess responding levels for studied sample either for pre period of time or after applying educational program for studying questionnaire's items concerning overall nurses knowledge. Results shows that all of questionnaire's items in light of this part are assigned meaningful improvements as compared pre-post test (mean of score more than 1.5)

**Table (4): Distribution of study sample by their Overall of nurse knowledge toward Nurses' knowledge concerning Facilitated Tucking Position during Venipuncture**

Overall assessment for study sample	Post1-test					Post2-test				
	Freq	%	M.s.	S.D	Ass	Freq	%	M.s.	S.D	Ass
Pass	21	84	1.6662	.16755		20	80	1.68	.220	
Fail	4	16				5	20			

<b>t-value (-.273), d.f. (24), significance (.787)</b>
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Ms: Mean of score (1.5) more than (1.5) p: pass less that (1.5) (F) failure, (Ass) assessment, (S.D) stander deviation, (t-value) t-test, (d.f) degree of freedom, Sig.) Significance, C.S.: Comparison, Significant

Regarding subjects of nurses knowledge concerning action of facilitated tucking position, results shows summary statistics such that, frequency, percentage, mean of score, and standard deviation are included for assess responding levels for studied sample either for after applying educational program in first period and after applying educational program in second period for studying questionnaire's items concerning overall nurses knowledge. Results shows that all of questionnaire's items in light of this part are assigned meaningful improvements as compared post 1-post2 test (mean of score more than 1.5)

**Table (5): Distribution of study sample by their Overall of nurse knowledge toward Nurses' knowledge concerning Facilitated Tucking Position during Venipuncture**

Overall assessment for study sample	Pre - Test			Post1 - Test			Post2 - Test		
	Freq	%	M.s.	Fr eq	%	M.s.	Freq	%	M.s.
Pass	0	0	1.2631	21	84	1.6662	20	80	1.68
Fail	25	100		4	16		5	20	
<b>F-value(56.522), significance (0.000)</b>									

Ms: Mean of score (1.5) more than (1.5) p: pass less that (1.5) (F) failure,( Ass )assessment, (S.D) stander deviation, (t-value) t-test, (d.f) degree of freedom, Sig.) significance, C.S. : Comparison, Significant

Regarding subjects of nurses knowledge concerning action of facilitated tucking position, results shows summary statistics such that, frequency, percentage, mean of score, and are included for assess responding levels for studied sample either for after applying educational program in pre test and first period and after applying educational program in second period for studying questionnaire's items concerning overall nurses knowledge. Results shows that all of questionnaire's items in light of this part are assigned meaningful improvements as compared post 1-post2 test (mean of score more than 1.5) and pre (mean of score less than 1.5) .

**Table (6): Relationship between the overall assessment of the nurses' knowledge regarding Facilitated Tucking Position during Venipuncture post2- test and their demographic data**

Demographic data		Rating	Overall assessment		Chi-square value	d.f	Sign.	C.S
			Fall	Pass				
Age	20 to25	2	13	1.667	2	.435	NS	
	26 to31	2	6					
	32 to 38	1	1					
	Total	5	20					
Level of education	Junior Nursing	3	12	.104	2	.949	NS	
	Nursing Institute	1	3					
	College of Nursing and Older	1	5					
	Total	3	17					
Years of experience in the field of Nursing	1 to 4	0	2	4.896	2	.086	NS	
	5 to9	2	1					
	10 to 14	5	20					
	Total	4	21					
Years of experience in the Neonatal intensive care unit	1 to 3	3	17	4.896	2	.086	NS	
	4 to 7	0	2					
	8 to 11	2	1					
	Total	5	20					
Did you now the non-pharmacological methods to relief pain during venipuncture	No	3	9	.361	1	.548	NS	
	Yes	2	11					
Can you relief pain for child during venipuncture	No	3	7	1.042	1	.307	NS	
	Yes	2	13					
	Total	5	20					
If yes what the methods	Pharmacological methods	No	0	8	2.946	2	.229	NS
		Yes	2	5				
		Total	2	13				
	Facilitating tucking position	No	1	12	2.981	2	.225	NS
		yes	1	1				
		Total	2	13				
	Breast feeding	no	0	6	2.153	2	.341	NS
		yes	2	7				
		Total	2	13				
	Music	Yes	0	0	1.042	1	.307	NS
		No	2	13				
		total	2	13				
	Other	no	1	9	1.250	2	.535	NS
		yes	1	4				
		Total	2	13				

(chi) Chi square value , (d.f) degree of freedom ,( Sign.) significant  $p \geq 0.05$

Results shows that there is no statistical difference between nurses knowledge regarding and their demographic data at  $P \geq 0.05$  level.

#### IV. DISCUSSION

The Sample of The Study Consist of (25) Nurses sex of them simply female this concur with consider (Effectiveness of Health Educational Program upon Nurses' practices toward Care of Newborns with Neonatal Jaundice). What's more, can't help contradicting think about (Effectiveness of nursing instruction program on medical caretakers information toward Arrhythmia in Kirkuk's showing doctor's facilities) According to the investigation test they all attendants female in light of the fact that the legislative issues of clinic made the female medical caretakers working in pediatric, neonatal and maternity unit <sup>(9)</sup>.

Throughout the Course of the example of the present investigation, showed that the greater part 15 (60.0 % ) of Nurses in the examination test were inside age gathering (20 – 25 ). This outcome concur with Ali M F. (2015) consider (Effectiveness of Educational Program on Nurse's Knowledge Concerning Management of Cardiogenic Shock at AL-Mosul Teaching Hospitals) and can't help contradicting examine (Effectiveness of nursing training program on attendant's information toward Arrhythmia in Kirkuk's instructing healing centers)<sup>(10)</sup>.

As indicated by the investigation test in connection to level of instruction, most medical attendants 15 (60.0%) in the examination test were School (junior nursing). This outcome comparative the investigation directed investigation (Impact of an Educational Program upon Nurses' Knowledge and Practices Concerning Neurogenic Bladder Rehabilitation for Spinal Cord Injured Persons) who said that the larger part of his examination test were auxiliary nursing school graduates working in neonatal emergency unit there able to work in this units . In connection to the quantity of years of involvement in nursing field, 20(80.0% ) had administration of (1-4 )years in the business ,This outcome comparative the examination directed by (Al-Janabi,2014) in this investigation (Assessment of Nurses' Knowledge towards Cardiopulmonary Resuscitation at Al-Najaf City's Teaching Hospital ) said that of his specimen have (<5 ) years of functioning as medical caretakers . In concerning the experience years at neonatal emergency unit 20(80.0%) of medical caretakers had master (1-3) years, this rate of attendants who are work as a medical attendant in neonatal emergency unit to remain in low level of information . In connection with medical caretaker's information to help torment amid venipuncture by utilizing non-pharmacological technique and the appropriate response (yes or no), the attendants are same level outcome in the two answers <sup>(11) (12) (13)</sup>.

The medical caretakers by what means would relief be able to torment amid venipuncture more than the attendants can't do that, likewise the other five inquiries subject to this inquiry.

Part I: General information of nurses at neonatal intensive care unit

This section exhibits a deliberately sorted out elucidation and sensibly determined dialog of the outcomes with help of the accessible writing and related examinations.

The Sample of The Study Consist of (25) Nurses sex of them simply female this concur with Suad H. (2016) consider (Effectiveness of Health Educational Program upon Nurses' practices toward Care of Newborns

with Neonatal Jaundice). What's more, can't help contradicting (Effectiveness of nursing instruction program on medical caretakers information toward Arrhythmia in Kirkuk's showing doctor's facilities) According to the investigation test they all attendants female in light of the fact that the legislative issues of clinic made the female medical caretakers working in pediatric, neonatal and maternity unit <sup>(10)</sup>.

Al-Batool Teaching Hospital in diyala City Throughout the Course of the example of the present investigation, showed that the greater part 15 (60.0 % ) of Nurses in the examination test were inside age gathering (20 – 25 ). This outcome concur with Ali M F. (2015) consider (Effectiveness of Educational Program on Nurse's Knowledge Concerning Management of Cardiogenic Shock at AL-Mosul Teaching Hospitals) and can't help contradicting examine (Effectiveness of nursing training program on attendant's information toward Arrhythmia in Kirkuk's instructing healing centers) <sup>(14)</sup>.

As indicated by the investigation test in connection to level of instruction, most medical attendants 15 (60.0%) in the examination test were School (junior nursing). This outcome comparative the investigation directed investigation (Impact of an Educational Program upon Nurses' Knowledge and Practices Concerning Neurogenic Bladder Rehabilitation for Spinal Cord Injured Persons) who said that the larger part of his examination test were auxiliary nursing school graduates working in neonatal emergency unit there able to work in this units . In connection to the quantity of years of involvement in nursing field, 20(80.0% ) had administration of (1-4 )years in the business ,This outcome comparative the examination directed by (Al-Janabi,2014) in this investigation (Assessment of Nurses' Knowledge towards Cardiopulmonary Resuscitation at Al-Najaf City's Teaching Hospital ) said that of his specimen have (<5 ) years of functioning as medical caretakers <sup>(11)</sup>.

In concerning the experience years at neonatal emergency unit 20(80.0%) of medical caretakers had master (1-3) years, this rate of attendants who are work as a medical attendant in neonatal emergency unit to remain in low level of information . In connection with medical caretaker's information to help torment amid venipuncture by utilizing non-pharmacological technique and the appropriate response (yes or no), the attendants are same level outcome in the two answers. The medical caretakers by what means would relief be able to torment amid venipuncture more than the attendants can't do that, likewise the other five inquiries subject to this inquiry.

**Part II:** Association between nurses' knowledge and four section that are contain (toward pain, Facilitated Tucking Position, Importance of Facilitated Tucking Position and action of Facilitated Tucking Position) in neonatal intensive care unit among the three period (pre, post-1 and post-2) of an educational program

Twenty six Items of the survey separated into (104) sub things (supplement D) were utilized to evaluate medical caretakers' information at neonatal emergency unit. The outcomes demonstrated that the medical attendants' learning uncovered that their insight at low level before the start of an instructive program and turn out to be abnormal state after first and second follow up of a training program post one and post two. This outcome mirrors that medical attendants' information is influenced by the instructive program .

The demonstrating the outcome for pre-test, post-test 1 and post-test 2 high noteworthy with questions expect four inquiries likewise critical with other three inquiries .One technique for surveying these frameworks in

blend is the Premature Infant Pain Profile (PIPP). This appraisal instrument perceives torment as a mind boggling, multidimensional wonder among babies conceived preterm. The PIPP measures physiological movement, behavioral state, and facial action. These three components are accepted to best reflect difficult encounters of babies conceived preterm. At the point when the PIPP is utilized, target information demonstrates that agony exists in newborn children conceived preterm; in this way, discovering approaches to deal with this torment is basic (Sharon Hill et al 2005).

In Iraq most neonatal medical attendants don't utilize the Premature Infant Pain Profile (PIPP) to survey torment degree that are ensured our investigation find non-critical with question of medical caretaker's information toward (PIPP) and physiological markers of agony. Venipuncture for blood testing is an every now and again performed excruciating methodology in the NICU, a system whereby the procedure influences the level of torment. One of the favored agony alleviation non-pharmacological ways to deal with torment help would be the utilization of encouraged tucking position (FT). In Iraq, little healing centers are 'infant agreeable' and the act of encouraged tucking is accepted non-powerful to diminish torment, obviously, we discover the outcome non-huge with attendant's information being referred to (The Facilitated tucking position is). Via look, we don't find any program about encouraged tucking position amid venipuncture however other examination was directed semi-test ponder, 70 preterm newborn children conceived at normal 32 to 36 weeks' Gestational age (GA), who required routine blood gathering, were allotted to two intercession (35 neonates) and control (35 neonates) gatherings<sup>(15)</sup>.

Its outcome demonstrated that the term of crying in the wake of examining in the two gatherings was factually huge contrast, this length in control amass was higher than the mediation gathering ( $P < 0.05$ ).

Johnston et al. 2011 inferred that the impacts of encouraged tucking have been analyzed in both preterm and extremely preterm newborn children experiencing ordinarily performed tissue softening strategies up the NICU and have been appeared to decrease the extent of physiological and behavioral agony reaction.

### **Part III: Association between Facilitated tucking position Nurses' knowledge and their General Information**

Association between nurses' knowledge and their age

Association between nurses' knowledge and their level of education

The discoveries demonstrate that there was no measurable noteworthy relationship between medical attendants' learning and their instruction level ( $p > 0.05$ ). The consequences of this investigation contrasted with Zaid W. Ahjil, (2012). The discoveries demonstrated a factual huge relationship between medical attendants' instruction level and their insight.

Association between nurses' knowledge with their years of experience in nursing field

The discoveries demonstrate that there was no factual critical relationship between attendants' information and their times of involvement with nursing field ( $p > 0.05$ ) upheld this outcome, Their discoveries demonstrate no distinction of experience.

Association between nurses' knowledge and their years of experience at Neonatal intensive care unit

The finding uncovered that there was no measurable noteworthy relationship between attendants' information and their times of involvement with neonatal emergency unit. This outcome concurs with Fatima H.

(2013) and couldn't help contradicting study that their investigations indicate measurable critical relationship between attendants' learning and their times of involvement with attendants who work in the heart therapeutic ward.

The last piece of that are indicating medical attendants learning about non-pharmacological strategy to alleviation torment amid venipuncture and the appropriate responses (yes or no), likewise no critical. The other inquiry that are worried with capacity of medical attendants to utilizing the strategies amid venipuncture and result high critical with attendants who can utilizing techniques to alleviation torment additionally worthy with other examination. In the event that yes what the techniques? Five technique there are medical attendants browsed the strategies, statically critical with (Pharmacological techniques, encouraging tucking position, Breast bolstering and other) however non-noteworthy with music <sup>(16)</sup> <sup>(17)</sup> <sup>(18)</sup>.

## V. CONCLUSIONS

The study sample only female. More than half of study sample were age (20-25) years. Most of the study sample were Junior Nursing graduate. Majority of the study sample had (1-4) years at nursing field . Most of the study sample had (1-4) years of the experience at neonatal intensive care unit . More than half of study sample can relief pain for child during venipuncture. Most of the study sample cannot use facilitated tucking position to relief pain before conducted program. There was measurable noteworthy relationship between medical attendants' learning of a training program pre test, post (1) and post (2) the instruction program impact on medical caretakers' information. The investigation affirmed that there was a high learning level among medical caretakers at neonatal emergency unit encouraged tucking position in post instructive program while low-level information at pre apply program. There was no measurable huge relationship between attendants' learning and their general data (age, level of training, years of experience, years of involvement in neonatal emergency unit) there is statistical significant association between their general information related to (Ability to relief pain for child during venipuncture, pharmacological method, facilitated tucking position, breast feeding and other) at the post test.

## VI. RECOMMENDATIONS

Inordinate emphasis had better be directed toward the educational aspects at neonatal intensive care unit by providing educational posters, guidelines, pamphlets and manuals. Neonatal nurses should initiate policy to providing a special educational session for using non-pharmacological methods to relief pain. Encourage the nurses to use facilitated tucking position during venipuncture. Modern educational facilities for neonatal nurses at neonatal intensive care unit should be provided to enhance nurses' knowledge. It is necessary to initiate lectures of non-pharmacological care for neonate during nursing colleges and institutes. Applying global educational standards to promote nurses knowledge toward facilitated tucking position. Applying facilitated tucking position in primary health care during HIV vaccination. Conduct study for this procedure on the field directly on the neonate and using appropriate pain scale.

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