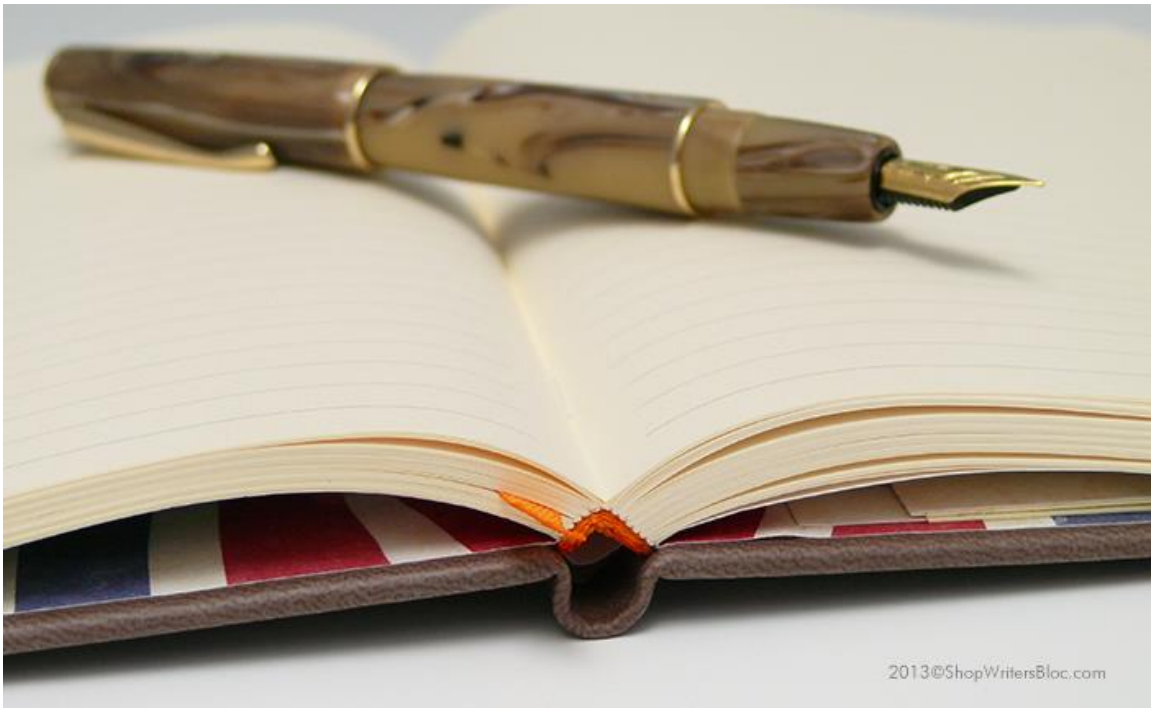
CHAPTER-I

INTRODUCTION

"To invent, you need a good imagination and a pile of junk"



CAPTER -1

INTRODUCTION

"From small beginnings come great things"[1]

T.E. Lawrence

Children are the asset of the nation, the birth of an infant is one of the most inspiring and emotional event that can occur in one's life time. Neonates signify the beginning of the life as an independent individual. It is the single most hazardous period of life confronted with dramatic challenges due to transition from dependent intra uterine existence to independent extra uterine life. Neonates undergo various painful procedures such as collection of blood sample IV cannulation and IM injections during their stay in hospital. Newborn communicate pain only through behavioral and physiological changes[2].

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage[2]. Evaluation of pain in neonates is difficult due to the subjective nature of pain and the inability of neonates to verbally express pain. Surrogate measures used to describe pain in neonates include motor responses facial expression cry and changes in physiological parameters like heart rate, blood pressure, oxygen saturation and respiratory rate[3,4]. various changes have been compiled to create various scores.[5] Validated scores for the assessment of pain include the Neonatal facial coding system(NFCS), Neonatal infant pain scale [NIPS] or Premature infant pain profile (PIPP).[6]

Full term infants exposed to short-term pain early in the life have an increased response to later painful procedure in addition noxious stimuli. The health care practitioners provide effective interventions to manage infants pain to help convey comfort and aid in the prevention of long lasting effects that are potentially harmful to overall health of the infant.[7]

Breast feeding is a normal way of promoting bonding and attachment between neonates and mothers, breast feeding is not just as food source, but a sources of comfort and security. Breast milk contains only 7% lactose and may not be as effective and it may interfere with the regular breast feeding schedule.[8]

Breast feeding links evolutionary biology and medical practice this is of clinical interest because pain is routinely experienced in hospital settings. Even by healthy newborns and natural interventions are not. There are several studies showing that breast milk is associated with pleasant memories of being with mother for babies.[9]

Non pharmacological pain relief techniques include breast feeding, oral, sucrose and glucose. Non-nutritive sucking, kangaroo care, facilitated tuck [holding the arms and legs in a flexed position], waddling and developmental care which include limiting environmental stimuli, lateral positioning, the use of supportive bedding and attention to behavioral clues. Sucrose was found to be effective in alleviating procedural paining among neonates. However concern regarding hyper osmolality, effect on neurologic development and feeding remains same.[7]

"Dunbar et al" say's that it is important that nurses do their best to reduce pain for neonates experiencing heel lancing. Since the studies related to non-pharmacologic pain relief during heel lancing has been varied. Nurses need to not only review the literature on the topic but also conduct scholarly studies at their institutions. Evaluating alternative methods of non-pharmacologic neonatal pain control supports the identification of practical and accessible techniques that nurses can incorporate in to their practice.[10]

NEED FOR THE STUDY

"Through learning we re-create ourselves. Through learning we become able to do something we were never able to do"[11]

Peter M. Senge

Pain is of particular importance in the neonate because of the evidence of improved clinical outcomes; including decreased mortality when adequate pain control is achieved. Pain is a perception that is often overlooked in the infant population especially with regard to immunizations. Evidence has shown that infants do perceive and remember pain, demonstrating heightened pain responses to other painful procedures later in life.[12]

Breast milk contain wonderful hormone called cholecystokinin [CCK] which includes sleepiness both in the mother and baby. Breast milk contains a high concentration of a chemical which could ultimately trigger the production of natural pain killers called endorphins.[11] Breast feeding is an intervention that it corporate those qualities and it is an ability to decrease infants' pain perception has been recently studied.[8]

The pain management requires competent pain assessment which can be especially difficult to performing neonates. The pain assessment tool used should be multidimensional, including measurement for both physiological and behavioral indicators of pain include changes in heart rate, respiratory rate, blood pressure, oxygen saturation, vagal tone, palmer sweating and plasma cortisol or catecholamine concentration. Behavioral indicators include change in facial expression, body movement and crying.[8]

Inadequate pain management of painful procedures could lead to an increase in discomfort, stress, and decreased coping abilities. So the nursing action must aim to establish the child to the pre stress state, conserve the child energy. Maximize existing coping behavior and mobilize resource for dealing with stressful experience. The clinical management of

children pain is complex and challenging responsibility that rests pre primarily on nurse. Because they are the first line care takers of infants and often make the assessment that ultimately lead to pain relieving interventions.[13]

A randomized clinical trial study consisted of 60 full term newborns [31 in experimental and 29 in control group]. The experimental group was breast fed for 5minutes after the blood collection procedure; neonates in the control group were held in mother's arm but not fed or given a soother. The result shows that breast feeding was effective in reducing pain caused by blood collection for newborn screening.[14]

The prevention of pain in neonates is an expectation of parents. However there are major gaps in our knowledge regarding the most effective way to accomplish this. Although it may not be possible to completely eliminate pain in neonates, much can be done to reduce the amount and intensity of the pain. The prevention of the pain is important not only because it is an ethical expectation but also because repeated painful exposure can have the deleterious consequences. These consequences include all the pain sensitivity and permanent neuro anatomic and behavioral abnormalities.[2]

III. STATEMENT OF THE PROBLEM

A study to assess the Effectiveness of Breast feeding During Heel Prick on Pain Reduction among Term Neonates in a Selected Hospital, Kolar.

IV. OBJECTIVES

1. To assess the level of pain perceived by the neonates during heel prick procedure after giving breast feeding.

2. To assess the level of pain perceived by neonates during heel prick procedure without giving breast feeding.

3. To determine the effectiveness of breast feeding in reducing pain among term neonates due to needle prick.

V. HYPOTHESIS

There will be significant difference between the level of pain among neonates in experimental and control group.

VI. OPERATIONAL DEFINITION:

1. **BREAST FEEDING:** In the study it refers to direct feeding of breast milk by baby or newborn through mother's breast.

2. **HEEL PRICK:** In the study it refers to a blood collection procedure done on Newborns, it consists of making a pain prick puncture in one heel of the newborn to collect their blood.

3. **PAIN**: In the study it refers to a distressing feeling caused by intense or damaging stimuli which is assessed by DAN scale.

CHAPTER-II

REVIEW OF LITERATURE

"The more you know about your topic, the more effectively you can tackle your own research problem"

CHAPTER -2

REVIEW OF LITERATURE

"The power of a book lies in its power to turn a solitary act into a shared vision"

"Knowledge speaks but wisdom listens"[15]

Laura Bush

INTRODUCTION

The process of reading, analyzing, evaluating and summarizing scholarly materials about a specific problem, the purpose of the review of literature is to obtain comprehensive knowledge and in depth information about the effectiveness of breast feeding in relieving pain during heel prick for selected procedure.

Studies related to effectiveness of breast feeding on pain reduction.

A study was conducted in Kanchi Kamakoti Childs Trust Hospital [KKCTH], Chennai; the objective of the study was to evaluate the effectiveness of breast feeding in procedural pain perception among term neonates. The sampling techniques used for the study was non probability purposive sampling technique. The instrument used was modified neonatal infant pain assessment scale [NIPS] to assess the level of pain. The sample size was 60 term neonates. The parameters evaluated were facial expression, breathing pattern, arms, legs and type of cry. The Comparison of post assessment level of pain perception between Experimental group and Control group reveals that the mean difference of 2.1 and the unpaired 't' value of 10.5 which is highly significant at $P < 0.001$ level. There was an association of parameters and the demographic variables. The neonates weight pattern is associated with the facial expression ($P=0.018$) and weight is associated with breathing pattern ($P=0.016$) and gestational age is associated with the breathing pattern ($P=0.007$).

Weight is associated with the extension of arms (P=0.012). The result of the study revealed that the health promotion was achieved by administering breast feeding before procedural pain among term neonates and their level of pain perception was reduced.[8]

A prospective study was conducted on 180 term newborn infants who were undergoing routine heel prick testing for neonatal screening for phenylketonuria and hyperthyroidism. The objective of the study was to evaluate several simple, commonly used methods for pain control in newborns and to evaluate the concordance between behavioral and autonomic cardiac reactivity to pain in term neonates during heel lancing. Newborns were assigned to 6 groups: [1] control (no pain relief intervention), [2] non-nutritive sucking, [3] holding by mother, [4] oral glucose solution, [5] oral formula feeding, [6] breast feeding. Outcome measures included the neonatal facial coding system code; cry duration and autonomic variables obtained from spectral analysis of heart rate variability before, during and after heel lancing. Infants who were breast fed or received an oral formula showed the lowest increase in heart rate (21 and 23 beats per minute, respectively vs. 36; p<.010), lowest neonatal facial score (2.3 and 2.9, respectively, vs. 7.1; p<.001). Lowest cry duration (5 and 13sec, respectively, vs. 49; p<.001), and lowest decrease in parasympathetic tone (-2 and -2.4, respectively, vs. 1.2; p<.02) compared with the other groups. Infants with no pain control showed the highest pain manifestation compared with newborns to whom pain control was provided. The study concluded that any method of pain control is better than none. Feeding and in particularly breast feeding during heel prick testing were found to be the most effective methods of pain relief.[16]

A prospective randomized controlled trial study conducted with an objective to determine whether breast feeding is analgesics in newborn infants undergoing heel lance, a routine painful hospital procedure. The sample consisted of 30 full term breast fed infants were randomly assigned to either breast feeding or control group. The setting was Hospital

maternity services at Boston Medical Center, Boston, Massachusetts and Beverly Hospital, Beverly, Massachusetts. The infants in the intervention group were held and breastfed by their mothers during heel lance and blood collection procedures for screening program blood test. Infants in the control group experienced the same blood test while receiving the standard hospital care of being swaddled in their bassinets. The outcome measures include Crying, Grimacing and Heart rate differences were analyzed between the breastfeeding and the control infants before, during, and after blood collection. The results showed that crying and grimacing were reduced by 91% and 84%, respectively, from control infant levels during the blood collection. Heart rate was also substantially reduced by breastfeeding. The findings shows that infants assigned to the breast feeding of experiment group were significantly decreased crying and grimacing and 11 out of 15 breast fed infants did not cry at all during the procedure. They concluded that Breastfeeding is a potent analgesic intervention in newborns during a standard blood collection.[17]

A study conducted on comparison of 3 neonatal pain scales during minor painful procedures. This study shows that all three scales present comparable results, with the slight difference favoring neonatal infant pain score. This objective of the study was to compare 3 different neonatal pain scales in the pain response to minor painful stimuli in healthy term neonates. A Sample of 30 neonates was included and the study was evaluated by two observers according to the neonatal infant pain scale [NIPS], the neonatal facial coding system [NFCS], and DAN. Crying times of infants were recorded, and the correlation between the pain scales and crying time was calculated. The pain scores and inter-observer variability were analyzed. The results shows that the highest correlation between the crying time and each different neonatal pain scale was found for NIPS at level ($r=0.74$, $p<0.001$) while were found for the DAN scale at the level of ($r=0.07$, $p<0.001$) and the NFCS at a level of ($r=0.67$, $p<0.001$). Inter observer variability was similar for the three scales (NFCS $r=0.95$;

DAN r=0.97; NIPS r=0.96). NFCS had a coefficient of variation (CV) of 59.8±32.2%. The DAN scale and NIPS had similar CV values (41.5±26.1% and 43.2±31.6%, respectively), but these values were significantly lower than that of NFCS. They concluded that all 3 scales provided comparable results with a slight difference favoring NIPS. Therefore, NIPS can be used to evaluate pain during minor painful procedures in neonates.[18]

The study was carried out to compare the effects of breast milk to sterile water and 12.5% sucrose solution. A Rct that included 142 healthy newborns. The infants were randomized to one of the 6 following groups. Group 1: - Single dose of breast milk (n=18) Group 2: - Received 2ml of sterile water Group 4: - 2 doses of breast milk (n= 23) Group 5: - 2 doses of sterile water (n=26) Group 6: - 2 doses of 12.5% sucrose solution (n=23). Infants underwent routine neonatal screening through heel lance. In all the groups babies received 2ml of the test solutions through syringe on to the anterior part of the tongue and they were not allowed to suck the syringe tip. In the single dose groups the test solution was given 2min before the heel prick and in the repeated dose groups the dose was repeated just prior to heel prick. The outcomes measured were total crying time and NFCS at one, two, three, minutes for the purpose of this review, we analyzed the NFCS values at 2 min(18).[19]

CHAPTER-III

RESEARCH METHODOLOGY

"Methodology should not be a fixed track to a fixed destination but a conversation about everything that could be made of happen"

CHAPTER-3

RESEARCH METHODOLOGY

"Words have no power to impress the mind without the exquisite horror of their reality…."[20]

Edgar Allan Poe

INTRODUCTION

This chapter deals with the methodology adopted for the conducting study and the different steps undertaken. It includes research approach, research design, setting, population, sample and sample size, sampling technique, sampling criteria for sample selection, development of tool and procedure of data collection.

Methodology of the research indicates the general pattern of organizing the procedure for empirical study together with the method of obtaining valid and reliable data for problem under investigation.[21]

RESEARCH APPROACH

Research approach is the whole design including assumptions, the process of inquiry, the type of data collected and the measuring of findings.[22]

The research approach adopted for the study was Evaluative research approach.

RESEARCH DESIGN

The research design is the master plan specifying the methods and procedures for collecting and analyzing the needed information in a research study.[23]

The research design was quasi experimental two groups post-test only design.

VARIABLES

Variables are qualities, properties, or characteristics of person, things, or situations that change or vary. [21]

Variables in the study were;

Dependent variable was pain.

Independent variable was breast feeding.

SETTING

Setting refers to the area where the study is conducted.[21]

The setting of the study was RLJH & RC, Kolar. (The study was conducted at RLJH & RC, Kolar)

POPULATION

It is the entire set of individuals or objects having some common characteristics selected for a research study.[23]

The population of the study includes all term neonates undergoing heel prick .

SAMPLE

A part or subset of population selected to participate in research study.[23]

The Sample for the study consisted of term neonates admitted in labour ward of RLJH & RC, Kolar.

SAMPLE SIZE

The sample consisted of 60 term neonates (30 experimental and 30 control groups.)

SAMPLE TECHNIQUE

Sampling involves selecting a group of people, events, behavior or other elements which helps in conducting a study.[21]

The sample technique adopted for the study was the nonprobability purposive sampling technique.

SAMPLING CRITERIA

INCLUSION CRITERIA

1. Mothers of term neonates who are willing to participate.
2. Term neonates with birth weight of 1.5-5kg.

EXCLUSION CRITERIA

1. Mothers of term neonates who are willing to participate
2. Neonates admitted in NICU.
3. Neonates with congenital anomalies or complications.

DATA COLLECTION TOOL

Data collection tools are procedures/ instruments used by the research to observe or measure the key variables in the research problems.[21]

The data collection tool consisted of two sections:

Section –A

Socio demographic variables such as gestational age, gender, weight, mode of delivery, Apgar score.

Section-B

Pain assessment scale –DAN Scale

It consists of DAN scale.

METHOD OF DATA COLLECTION

The various steps or strategies used for gathering and analyzing data in a research investigation are known as the method of data collection.[24]

The data was collected by observational method and the instrument or tool was DAN pain scale.

PLAN FOR DATA ANALYSIS:

Data was analyzed by using descriptive and inferential statistics.

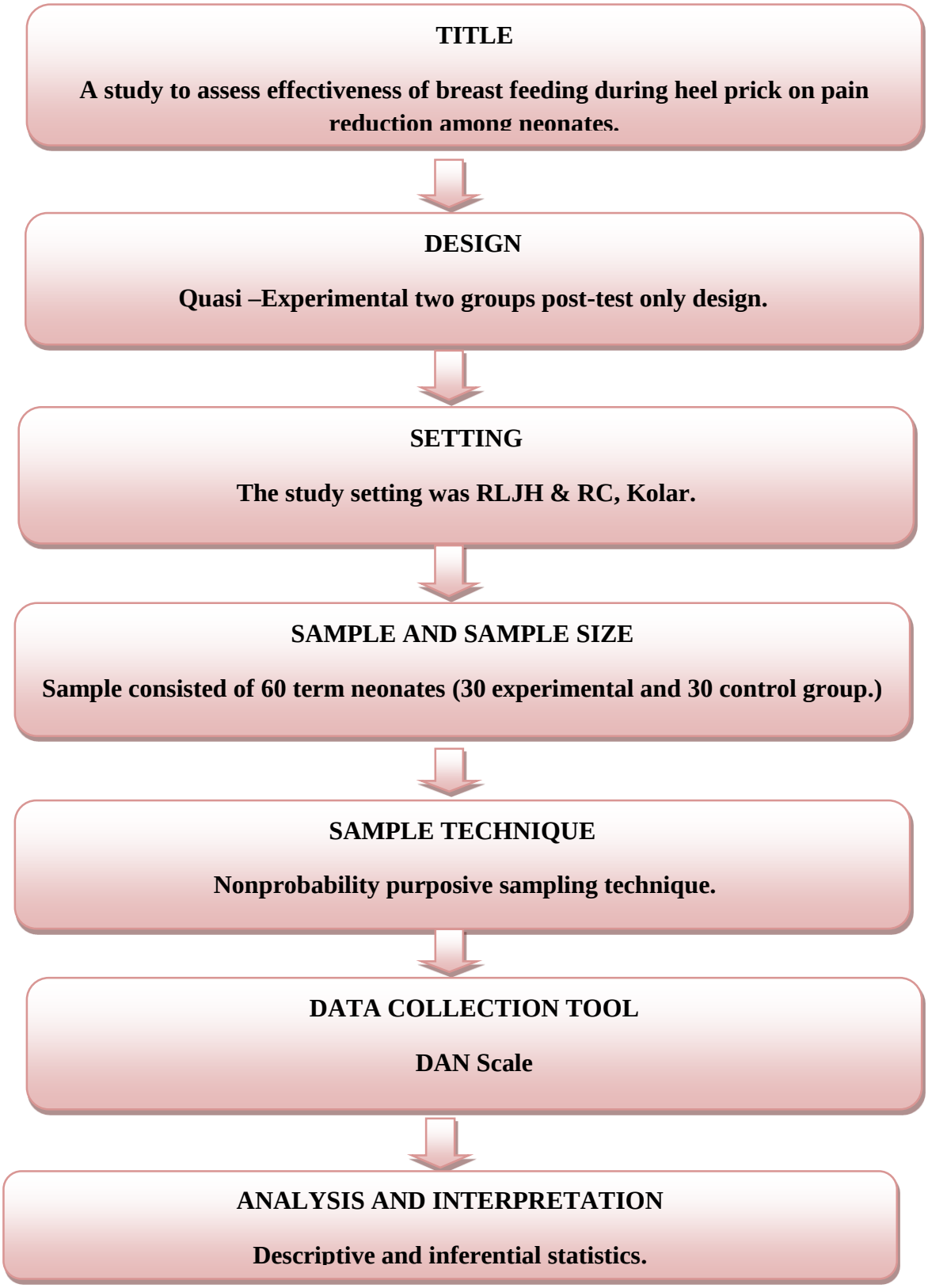
ETHICAL CLEARANCE

Ethical clearance was obtained from the institution ethical committee of Sri Devaraj Urs College of Nursing and to conduct the study, permission was obtained from Medical Superintendent, RLJH & RC, Kolar. Informed written consent was obtained from the mothers of term neonates before collecting the data.

SUMMARY

This chapter of methodology has dealt on research approach, research design, setting, population, sample and sampling technique, development and description of the tool, data collection, plan for data analysis and ethical aspects related to conducting research.

SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY



CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

"It is important to get results from experiment but the most important is the process in getting that result"

CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

INTRODUCTION

This chapter deals with the data analysis and interpretation of study findings.

Data analysis is a process of inspecting, cleansing, transforming and modeling data with the goal of discovering useful information, suggestion, conclusion and support decision making.[25]

Based on the objectives of the study the study findings are organized as follows:

SECTION-1

This section deals with data presenting regarding to socio-demographic variables.

SECTION-2

This section deals with the level of pain perceived by the term neonates during heel prick procedure.

1. Overall level of pain scores among term neonate in Experimental and Control group.
2. Area wise distribution of pain scores among term neonates in Experimental and Control group.
3. Comparison of pain scores among term neonates in experimental and control group.

Section:-1

This section deals with the data pertaining to the socio-demographic variable.

Table No: 1 Distribution of term neonates according to their demographic variables.

N=60

SI NO	VARIABLES	EXPERIMENTAL GROUP n_1=30		CONTROL GROUP n_2=30	
		Frequency	Percentage	Frequency	Percentage
1.	**Gestational age**				
	1. 38 – 39 wks.	18	60	25	83
	2. 40– 41 wks.	11	37	5	17
	3. 42 wks.	1	3	0	0
2.	**Gender**				
	1. Male	17	57	19	63
	2. Female	13	43	11	37
3.	**Weight in kg**				
	1. 3.5 – 5 kg	3	10	5	16
	2. 2.5 – 3.4kg	23	77	14	47
	3. 1.5 – 2.4kg	4	13	11	37
4.	**Mode of delivery**				
	1. Vaginal delivery	6	20	4	13
	2. Caesarean delivery	24	80	26	87
	3. Forceps delivery	0	0	0	0
	4. Vacuum delivery	0	0	0	0
5.	**APGAR Score 5th minute**				
	1. 7 – 10	30	100	30	100
	2. 6 – 4	0	0	0	0
	3. 3 – 5	0	0	0	0

Table No:1& Fig-1,2,3,4,5 reveals the frequency and percentage of demographic variables among term neonates

Gestational age

In experimental group 60% (18) of the term neonates were in the gestational age of 38-39 weeks, 37% (11) of them belonged to the gestational age of 40-41 weeks and 3% (1) were in the gestational age of 42 weeks. Whereas in the control group 83% (25) were in the age of 38-39 weeks, 17% (5) were in the gestational age of 40-41 weeks. And none of them were in gestation age of 42 weeks.

Gender

In experimental group 57% (17) were male babies and 43% (13) were female babies. Whereas in control group 63% (19) were male babies and 37% (11) were female babies.

Weight

In terms of weight, in experimental group 10% (3) of term neonates had a weight of 3.5-5 kg, 77% (23) had a weight of 2.5-3.4 kg and 13% (4) had a weight of 1.5-2.4 kg. Whereas in control group 16% (5) of term neonates had a weight of 3.5-5 kg, 47% (14) had a weight of 2.5-3.4 and 37% (11) had a weight of 1.5-2.4 kg.

Mode of delivery

Regarding mode of delivery 20% (6) of term neonates were delivered by vaginal delivery and 80% (24) of through caesarean delivery in experimental group. Whereas 13% (4) of term neonates delivered by vaginal delivery and 87% (26) of them through caesarean delivery in control group. And none of them were delivered by forceps and vacuum delivery.

Apgar score 5^{th} min

In terms of Apgar score 100% (30) of term neonates had 7-10 score in both experimental group and control group.

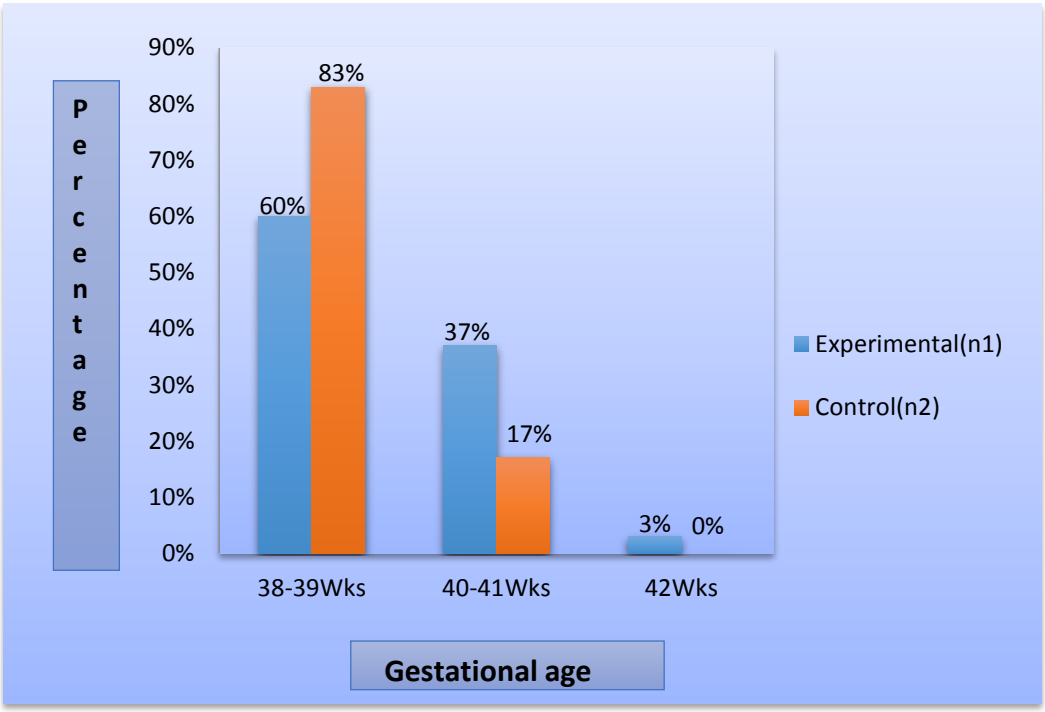


Fig-1 Frequency and percentage of term neonates according to their gestational age.

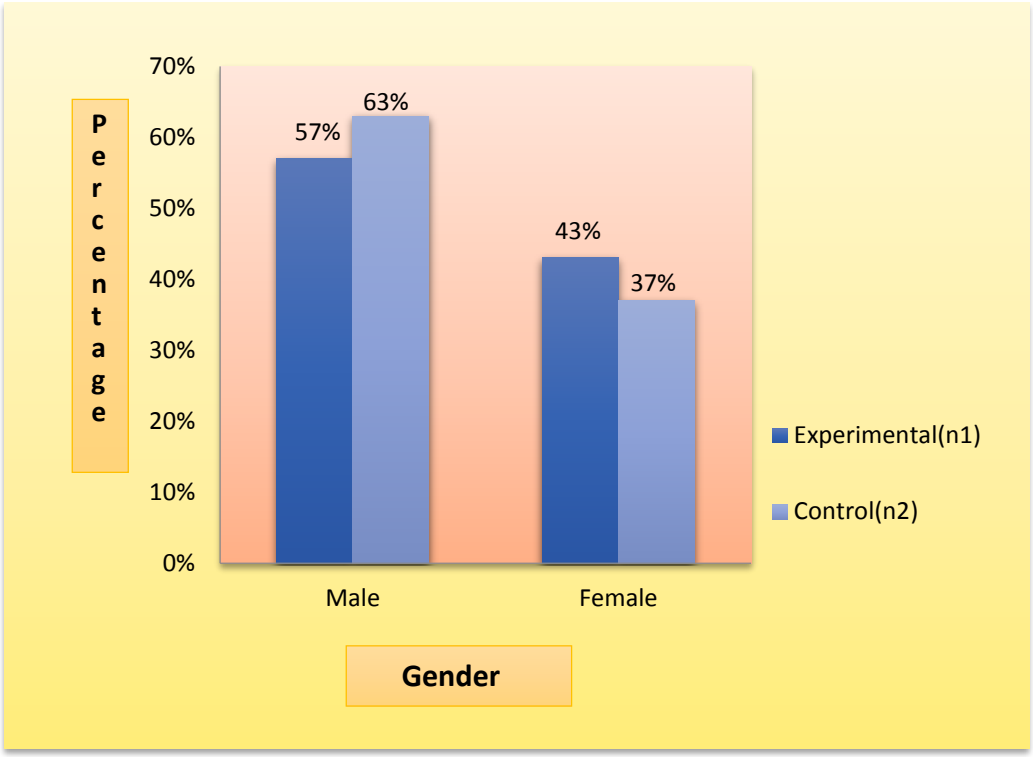


Fig-2 Frequency and percentage of term neonates according to their gender.

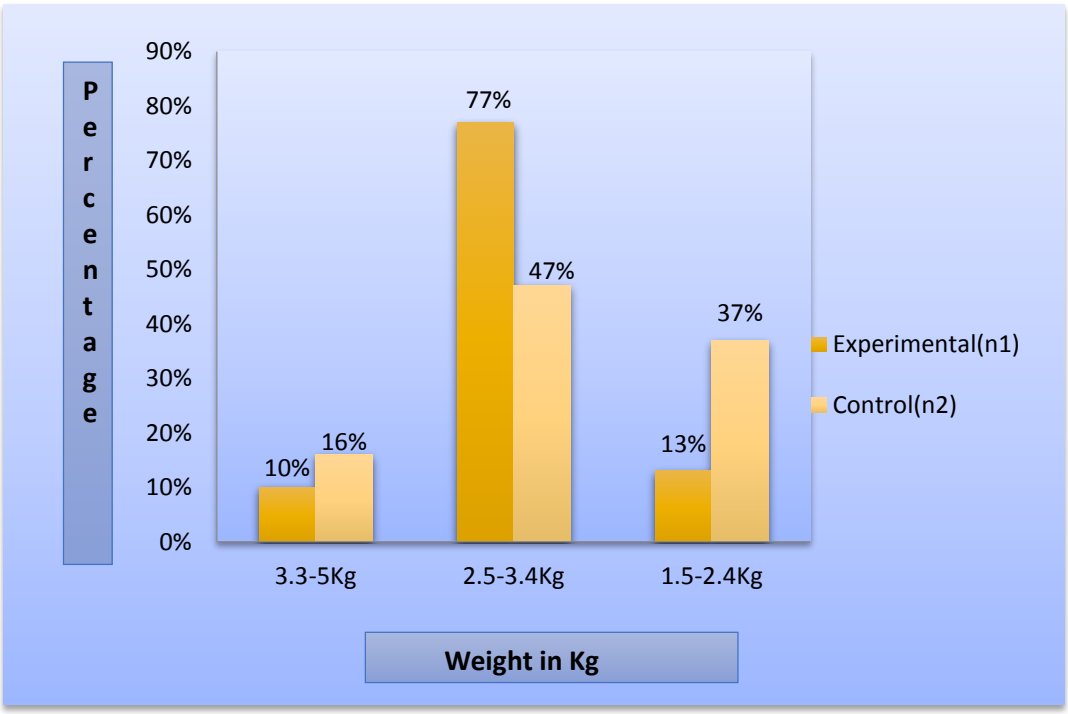


Fig-3 Frequency and percentage of term neonates according to their weight.

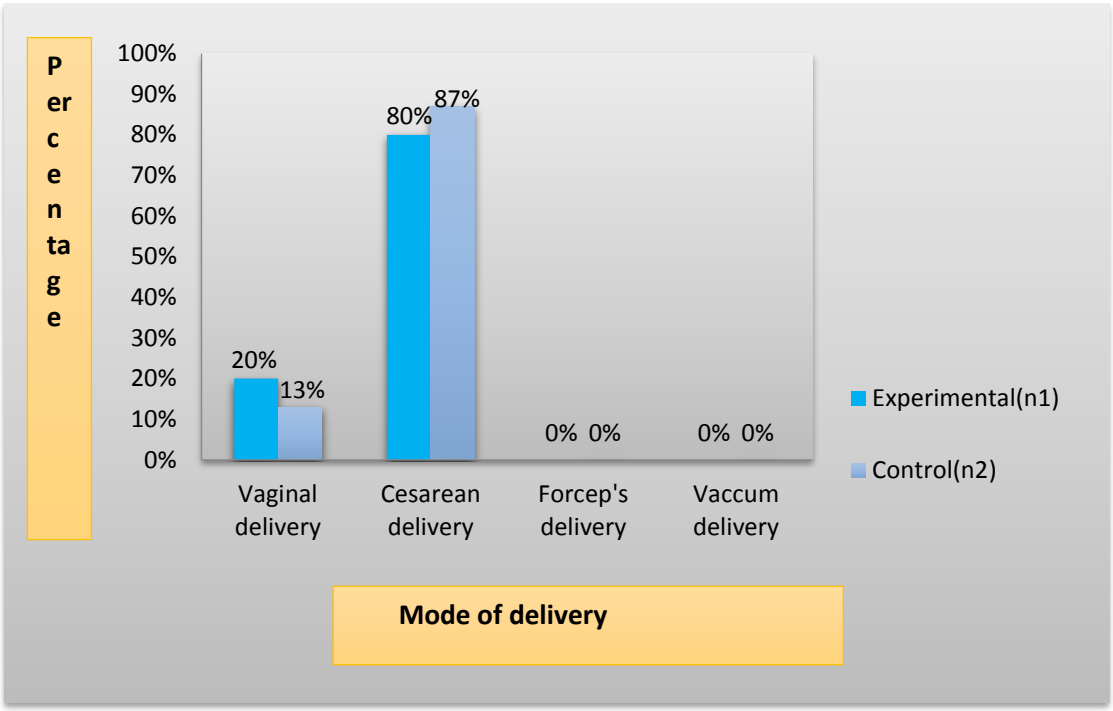


Fig-4 Frequency and percentage of term neonates according to mode of delivery.

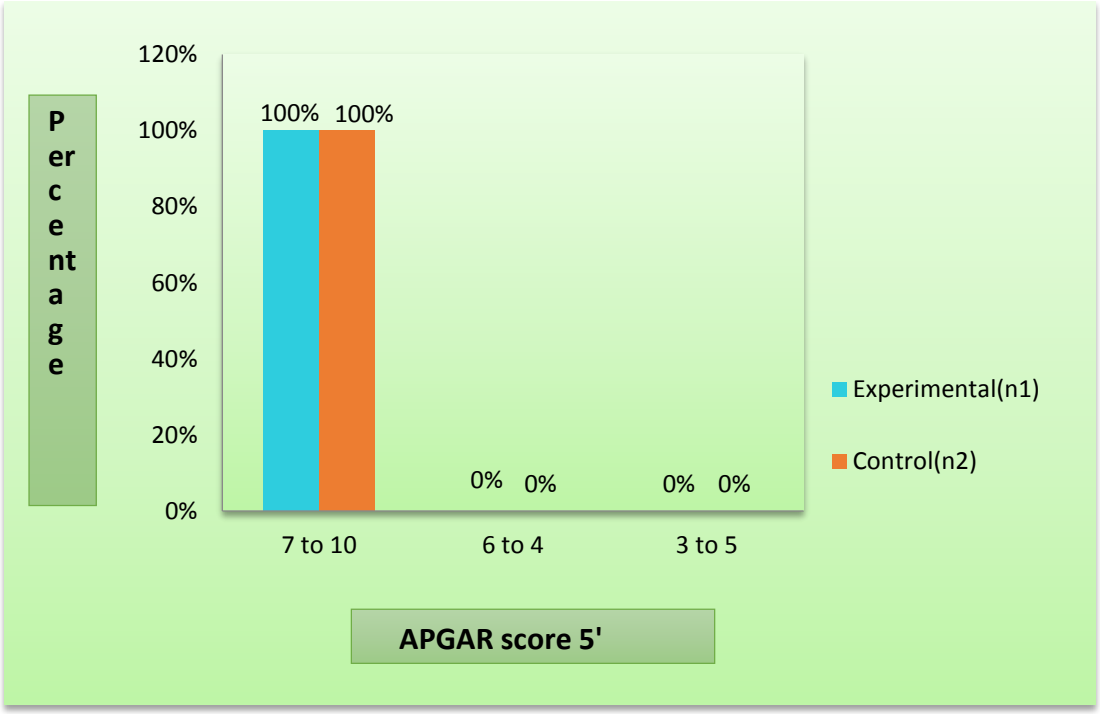


Fig-5 Frequency and percentage of term neonates according to APGAR score 5'.

SECTION-2

Table No: 2 Overall levels of pain scores among term neonate in Experimental and Control group.

N=60

SI NO	Level of pain	Experimental Group n_1=30		Control Group n_2=30	
		Frequency	Percentage	Frequency	Percentage
1.	No pain(0)	6	20	0	0
2.	Minor pain(1-3)	18	60	0	0
3.	Moderate pain(4-6)	6	20	11	37
4.	Severe pain(7-10)	0	0	19	63

Table no: 2and fig: 6 Showed frequency and percentage of pain scores. In Experimental group 20 %(60) of term neonates had no pain, 60%(18) of them had minor pain and 20%(6) of them had moderate pain. Where as in Control group 37%(11) of term neonates had moderate pain and 63%(19) of them had severe pain.

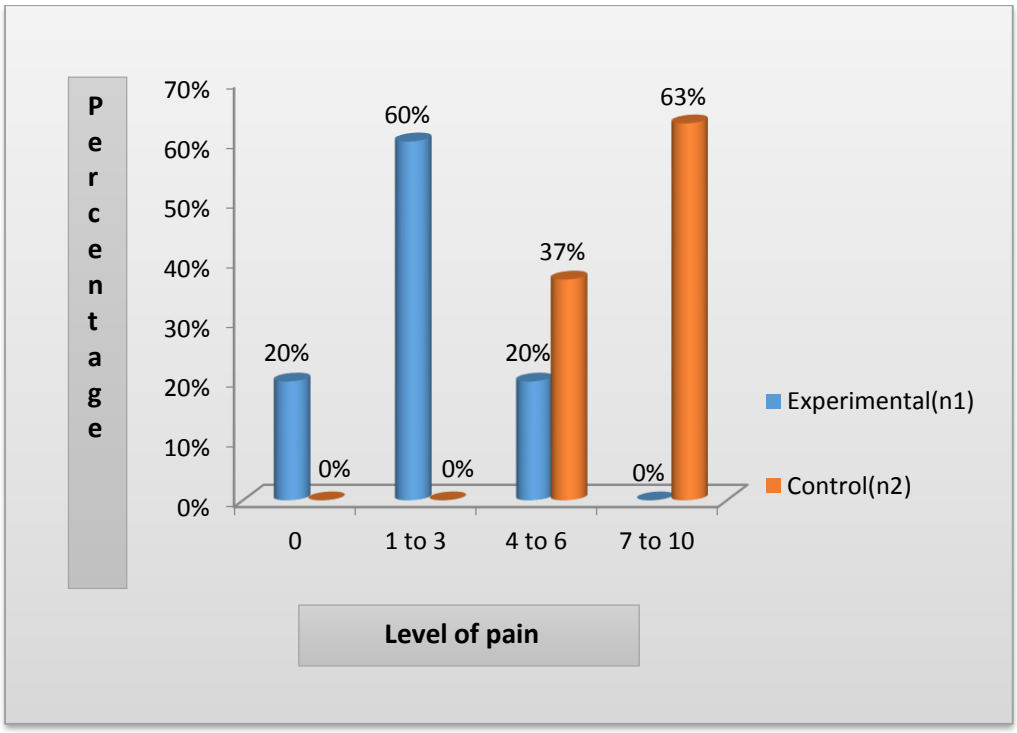


Fig-6 Frequency and percentage of pain scores among term neonates

Table No: 3 Area wise distribution of pain scores among term neonates in Experimental and Control group.

N=**60**

SI No.	AREAS	NUMBER OF ITEMS	MAXIMUM SCORE	EXPERIMENTAL GROUP n_1=30		CONTROL GROUP n_2=30	
				Mean	SD	Mean	SD
1.	Facial expressions	5	4	0.7	1.03	3.06	0.62
2.	Limb movements	4	3	0.83	0.74	1.83	0.85
3.	Vocal expressions	4	3	0.5	13.5	2.5	0.56

Table No: 3 & Fig-7, 8, 9 Indicates Area wise Mean pain score and SD. In Experimental group the Mean level of facial expression was 0.7, ±1.03 in the area of limb movements 0.83, ± 0.74 is the Mean score and with regard to vocal expression Mean score was 0.5, ±13.5. Whereas in Control group the Mean level of facial expression was 3.06, ±0.62 in the area of limb movements 1.83, ± 0.85 is the Mean score and with regard to vocal expression the Mean score was2.5, ±0.56.

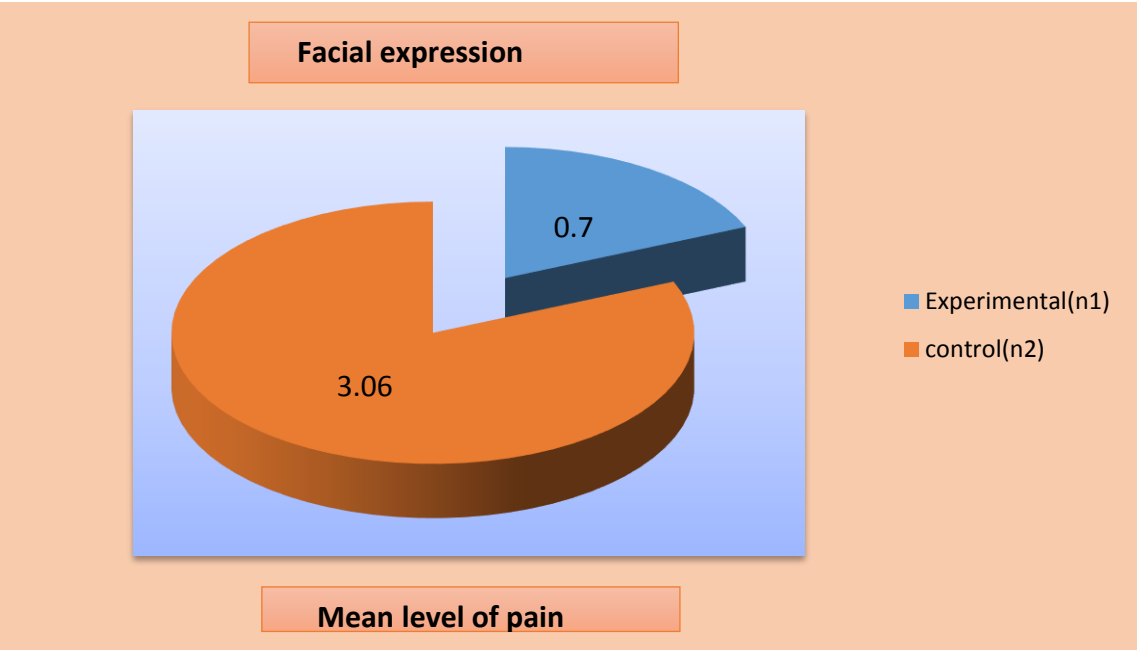


Fig-7 Mean pain score based on facial expression.

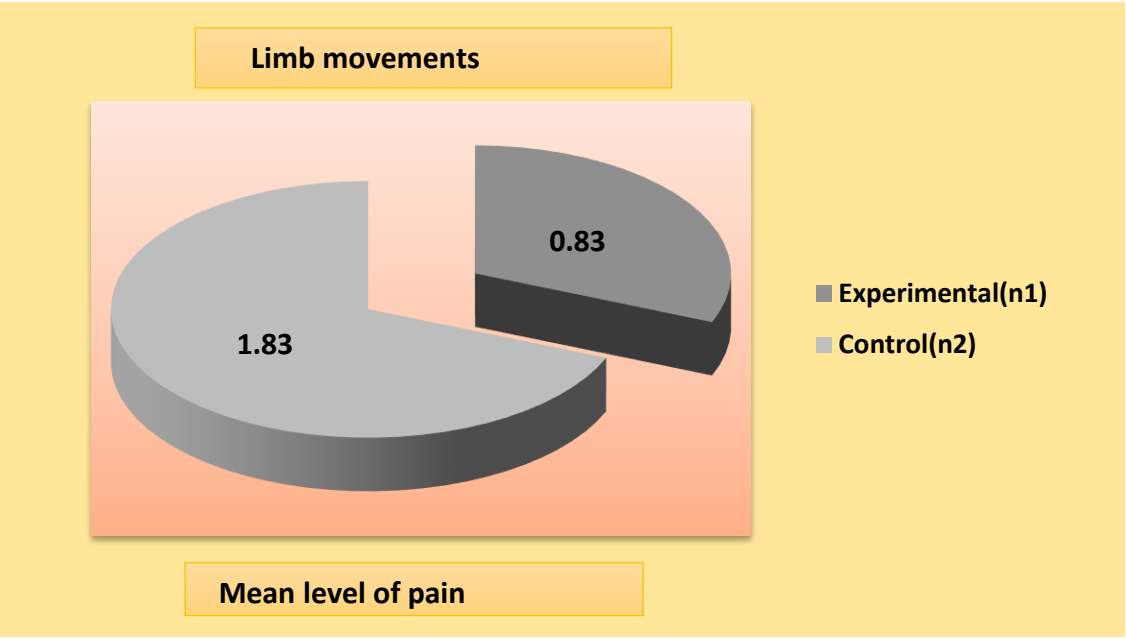


Fig-8 Mean pain score based on limb movements.

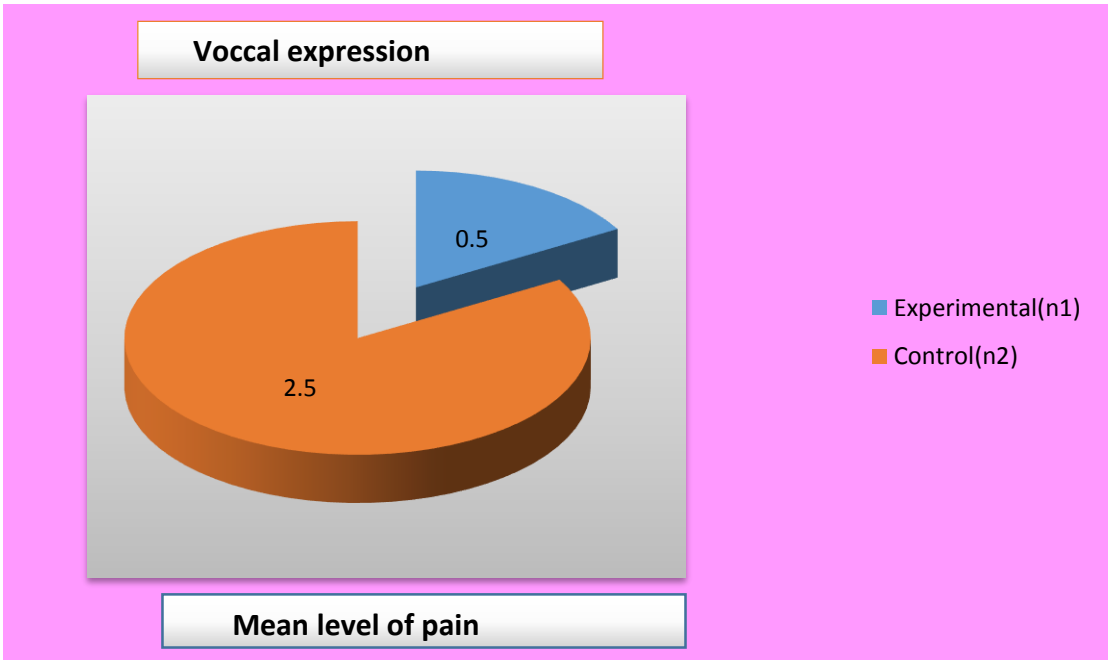


Fig-9 Mean pain score based on vocal expression.

Table No: 4 Comparison of pain scores among term neonates in experimental and control group.

N=60

SI No.	GROUPS	MEAN	SD	MEAN DIFFERENCE	UNPAIRED t VALUE	INFERENCE
1.	Control group	7.4	5.68	5.37	1.24	NS
2.	Experimental group	2.03	1.6			
Table value at df=						

Table No: 4 Indicates overall mean and SD.

In Experimental group the overall mean pain score was 2.03 and the SD was 1.6. Where as in Control group the overall mean pain score was 7.4 and SD was 5.68, the mean difference was 5.37 and the t value was 1.24. Even though there was no statistically significant difference in level of pain among term neonates in both the groups at 0.05 levels but, there was a difference in terms of mean and standard deviation between experimental and control group. Hence breast feeding was effective in reducing heel prick pain in term neonates

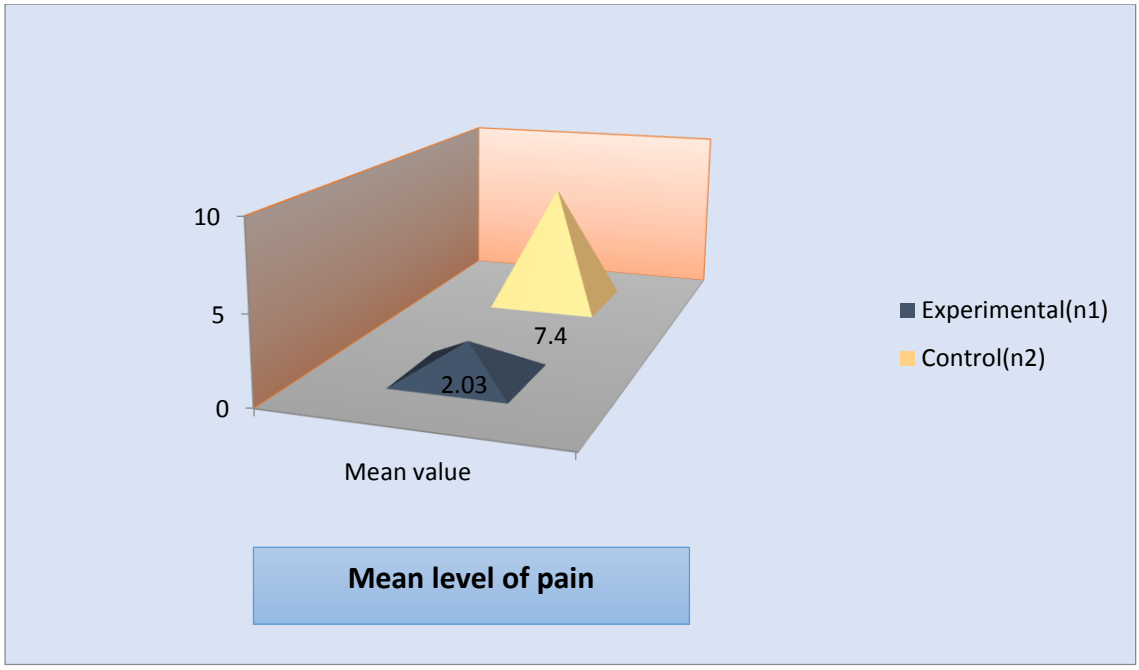


Fig-10 Over of mean pain score among term neonates.

SUMMARY:

This chapter deals with the data analysis and interpretation of the study findings. As per the objectives of the study the effectiveness of breastfeeding is assessed on pain reduction was assessed and the results revealed that, In Experimental group 20%(6) of term neonates had no pain, majority 60%(18) of them had minor pain and only 20%(6) of them had moderate pain. Where as in Control group only 37 %(11) of term neonates had moderate pain and majority 63%(19) of them had severe pain

CAPTER V

"Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning"

CHAPTER-5

CONCLUSION

INTRODUCTION

Recent studies have reported that pain can be reduced with simple and benign interventions such as sweet oral solutions (sucrose or glucose) and non-nutritive sucking or multisensory stimulation.[26,27,28] More recently, Gray et al reported that 10-15 min of skin to skin contact between mothers and infants reduced crying, grimacing and heart rate during heel lance procedures. Environmental and behavioral strategies have been considered essential to the prevention and management of neonatal pain. As Breast feeding probably constitutes the most potent pleasant stimulation a new born infant can experience they hypothesized that breast feeding could have analgesic properties in neonates."[29]

So we have taken this study to identify whether breast feeding is effective in reducing pain during heel prick among term neonates.

This chapter presents the conclusions drawn, implications, limitation, suggestions and recommendations.

This study aimed to assess the effectiveness of breast feeding during heel prick on pain reduction among neonates in selected hospital, Kolar.

A quasi-experimental two group's post -test only design was adopted for the study.

The study was conducted at RLJH and research Centre Kolar, the sample of the study consisted of 60 term neonates out of which 30 in the experimental and 30 in the control

group. The non-probability purposive sampling technique was used to select the sample for the study. The data was collected by using DAN scale from the samples

THE CONCLUSION OF THE STUDY

MAJOR FINDINGS:-

1. **Socio demographic variable**

The major findings in experimental group showed that 18(60%) of term neonates were in the gestational age of 38-39wks and only 1(3%) of term neonates were in the gestational age of 42wks. In that 17(57%) of term neonates were males and 13(43%) were females. About 23(77%) of term neonates had a weight of 2.5 to 3.4kg and only 3(10%) had a weight of 3.5 to 5kg. About 24(80%) of term neonates were delivered by cesarean delivery only 6(20%) of term neonates were delivered by vaginal delivery. Whereas in the control group 25(83%) of term neonates were in the gestational age of 38-39wks and only 5(17%) of term neonates were in the gestational age of 40 to 41wks. About 19(63%) were males and only 11(37%) were females. About 14(47%) of term neonates had a weight of 2.5-3.4kg and only 5(16%) of term neonates had a weight of 3.5-5kg. 26(87%) were delivered by cesarean delivery and only 4(13%) were delivered by vaginal delivery. Whereas both in experimental and control group 30(100%) of term neonates had an Apgar score of 7-10.

2. **Pain score**

In experimental group the maximum mean pain score was 0.83 in the area of limb movements and the minimum mean level of pain was 0.5 in the area of vocal expression. Whereas in control group the maximum mean level of pain was 3.06 in the area of facial expression and the minimum level of pain was 1.83 in the area of limb movements.

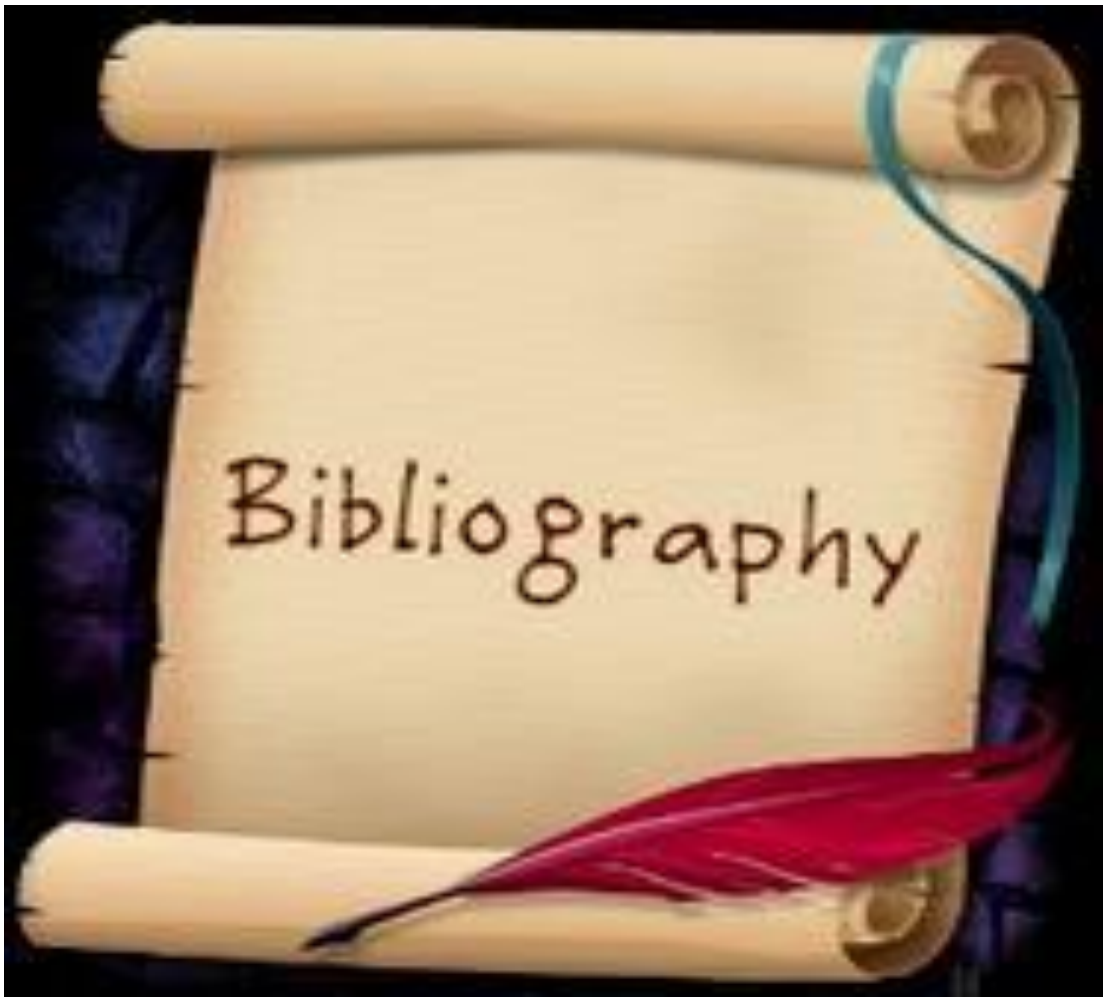
the overall pain scores among 60 term neonates showed that maximum of term neonates18(60%) had minor pain and minimum of them 6(20%) had no pain & moderate pain and Whereas in control group maximum of term neonates 19(63%) had severe pain and minimum of them 11(37%) had moderate pain.

3. Comparison

From these comparison findings the study clearly showed that the breast feeding is more effective in reducing pain during heel prick among the term neonates.

"You can't buy happiness but you can buy books and that's kind of the same thing"

"A book holds the house of gold'



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APPENDICES

"An eye for an eye makes the whole world blind"

ANNEXURE-I

ETHICAL COMMITTEE CERTIFICATE

SRI DEVARAJ URS COLLEGE OF NURSING TAMAKA, KOLAR – 563 103.	Format No.	IEC 00
	Issue No.	01
INSTITUTIONAL ETHICS COMMITTEE	Rev No.	01
	Date	01-04-08

Meeting No- 03

Ref. No: No. SDUCON/IEC/36/2017-18

This is to certify that the intuitional committee of Sri Devaraj urs college of nursing, Tamaka, Kolar has examined and unanimously the following research projects

Sl. No.	Name of the Topic	Guide	Investigator	Accepted/ Not accepted	Remarks
1	"A CORELATIONAL STUDY BETWEEN ANXIETY & SPIRITUALITY AMONG ANTENATAL MOTHERS IN A SELECTTED HOSPITAL, KOLAR."	Mrs. JAIRAKINI ARUNA, HOD OF PSYCHIATRIC DEPT. SDUCON,TAMAKA, KOLAR.	Dency david kavya.v, Mala Janani.s , Pushpa Mamatha, Esther Swapna gowthami jithu sharadha	Accepted	
2	"A STUDY TO ASSESS THE LEVEL OF SATISFACTION REGARDING IMPLEMENTATION OF NURSING CURRICULUM AMONG NURSING STUDENTS AT SELECTED COLLEGE, KOLAR".	Dr. G. Vijayalakshmi Principal, MSN Dept.. SDUCON	Nc suganya thasleema, Subi, aleena reji Geethanjali kokila, Pavithra shubha, Martha sherly nethra	Accepted	

3	EFFICACY OF PERIPHERAL IV CANNULA WITH AND WITHOUT SPLINT APPLICATION FOR FUNCTIONALDURATION AMONG INFANTS AND TODDLERS ADMITTED IN A SELECTED HOSPITAL KOLAR.	Prof. RADHA M.S Vice-Principal, HOD of Pediatric Nsg.Dept. SDUCON	Hariharan d.s, rajesh s, kochurani george, vidhya s, g. Bhuvaneshwari, sheeja.b. Chettacad, aishwariya k, anaswara soman, nithya preethi .n ,harshitha, vijayalakshmamma	Accepted	
4	" PREVALENCE OF VISION DIFFICULTIES AND RELATED RISK FACTORS AMONG CARETAKERS OF PATIENTS ADMITTED IN SELECTED HOSPITAL KOLAR, WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET."	DR. ZEANATH C.J HOD OF MEDICAL SURGICAL NURSING Tamaka, Kolar	Aiswarya raj, angitha sadanandan, aswathy g, dathima k, jeena reji, josna saji, keerthana p, merish p chacko, Nasiya p.n, sathyamoorthy k, sony thomas.	Accepted	
5	A DESCRIPTIVE STUDY ON IDENTIFICATION OF LEARNING DISABILITIES AMONG KINDERGARTEN CHILDREN IN SELECTED PRIMARY SCHOOLS AT KOLAR	Mr. R RAJESH ASSOCIATE PROFESSOR DEPT.OF PSYCHIATRIC NURSING S D U CO N TAMAKA KOLAR	Akhila haridas Anna das Ashly vincy Athira s nair Dona sebastain Honeymol dominic Jomol joy Meenu lal s Neelima k bose T raghul Reena george Selma beevi	Accepted	

6	"A STUDY TO ASSESS THE AWARENESS REGARDING ROAD TRAFFIC RULES IN PREVENTING ACCIDENTS AMONG PATIENTS ADMITTED IN ORTHO WARDS,KOLAR,WITH A VIEW TO DEVELOP AN INFORMATION PAMPHLET"	MRS.GAYATHRI. K.V HOD OF FUNDAMENTAL S OF NURSING TAMAKA KOLAR	Aneeta joy Anu benny .bencythomas Geena raju Jaisy p rajan Kavya kala Meenu raj Neziya m.n Reshma babu Sereena paul Subimol m.s .vinoth.k	Accepted	
7	A STUDY TO ASSESS THE KNOWLEDGE REGARDING THE FIRST AID MANAGEMENT AMONG THE TEACHERS IN SELECTED RURAL SCHOOL OF KOLAR TALUK WITH A VIEW TO PREPARE AN INFORMATION LEAFLET	PROF.MARY MINERVA HOD OF COMMUNITY HEALTH NURSING	Aksa , Anu Elsa , Besymol, Deepa, .Gowtham, Jayalashmi, Krishna Priya Minnumol, Nasreen Taj, .Rini, Shamna,	Accepted	
8	"A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON WARNING SIGNS IN PREGNANCY AMONG PRIMI-GRAVIDA WOMEN IN SELECTED HOSPITAL".	MRS. PUNITHA ASSO.PROF. OF OBG DEPT.	bibly babu. gowthami.s. leema rose benny. maya madhu. mintu k mathew. nawaz pasha. parvathy .reeja k a. rohini venu. soloman swarnashree. vanishree.	Accepted	

9	A STUDY TO ASSESS THE EFFECTIVENESS OF BREAST FEEDING DURING HEEL PRICK ON PAIN REDUCTION AMONG NEONATES IN SELECTED HOSPITAL KOLAR.	PROF. SILVIA SUREKHA HOD OF OBG NURSING,SDUCO N	Akhila R, Alfaz Pasha, Anumol P Joy, Blessy Ponnachan, Mansi P David, Monisha R, Rosmy Roy, Sibimol B, Sreelakshmi P S, Jemy Joy, Tejashree B S	Accepted	
10	"EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON MANAGEMENT OF SELECTED NUTRITIONAL DEFICIENCY DISORDERS AMONG THE MOTHERS OF ADOLESCENT GIRLS AT SELECTED RURAL AREAS OF KOLAR TALUK."	MRS. MALATHI. K. V , Asst. Prof. COMMUNITY HEALTH NURSING	allauddin mondal, aparna p.b, blessy simon, jiby boban, mareena thomas, r.rajeshwari, sangeetha sivankutty, salini t.c, sindhu.r, tessy tomy, tiji stephan,t.b.vanitha.	Accepted	
11	A STUDY TO EVALUATE THE EFFECTIVENESS OF DEVELOPMENTAL SUPPORTIVE CARE ON THE PHYSICAL AND PHYSIOLOGICAL PARAMETERS OF THE PRETERM AND LOW BIRTH WEIGHT BABIES IN NICU AND SNICU OF RLJH&RC	Mrs. LAVANYA SUBHASHINI ASST. PROFFESSOR CHILD HEALTH NURSING S D U C O N TAMAKA KOLAR	ancy wilson ashna azeez aswathy mohan christina k j chaithra jilu joy jincy varghese mariadas joseph rakhi s lal rintu t daniel sahil pasha m sneha treasa joseph	Accepted	

Sl. No.	Name	Signature
1	Dr.V.Lakshmaiah	
2	Dr.Bhaskaran	
3	Dr.Bhuvana K.	
4	Mr.Sridhar	Absent
5	Mr.Suresh B	
6	Acharya Chinmayananda Avadutha	
7	Mrs.Lakshmi	Absent

Member Secretary

MEMBER SECRETARY
ETHICS COMMITTEE
SRI DEVARAJ URS COLLEGE OF NURSING
563103.

Chairperson

IEC (Human studies)

CHAIR PERSON
ETHICS COMMITTEE
SRI DEVARAJ URS COLLEGE OF NURSING
TAMAKA KOLAR - 563103.

ANNEXURE-II

LETTER SEEKING PERMISSION TO CONDUCT THE STUDY

From,
3rd year B.Sc.(N) students
OBG Nursing Department
SDUCON
Tamaka, Kolar-563103

To,
The Medical Superintendent
R L Jalappa Hospital and Research Center
Tamaka, Kolar

[Through the principal and research guide]

Respected Sir,

Sub: Requesting permission to conduct research project among term neonates admitted in R L Jalappa Hospital, Tamaka, Kolar.

May we kindly inform you that, we the 3rd year B.Sc (N) students under OBG Nursing Department would like to conduct research project on **"A study to assess the effectiveness of breastfeeding during heel prick on pain reduction among neonates in selected hospital, Kolar"** for the fulfilment of syllabus requirement of 3rd year B.Sc (N) Degree programme. Hence we kindly request you to grant permission for data collection from the term neonates admitted in the private and post natal wards (9,10, 11& 13) of RL Jalappa hospital for the same. Kindly oblige by this letter and do the needful.

Thanking you.

Yours faithfully,

1. Alfaz pasha
2. Akhila R
3. Anumol
4. Blessy
5. Jemy Joy
6. Mansi
7. Monisha
8. Rosmy
9. Sibimol
10. Sreelakshmi
11. Subimol
12. Tejashree

Forwarded to principal for needful

(SILVIA SUREKHA J)
(Research guide)

Forwarded to M.S. of RLJH & RC & a request to permit students to collect data.

30/05/18

Permitted

ANNEXURE-III

Patient information sheet

Study Title :"A study to assess the effectiveness of breast feeding during heel prick on pain reduction among neonates in selected hospital Kolar."

Principal Investigator ; Prof.Silvia Sureka

Co-investigatorsStudy site: Ms.Akhila R ,Mr.Alfaz Pasha, Ms. Anumol P Joy, Ms.Blessy Ponnachan, Ms.Mansi P Devid, Ms.Monisha R, Ms.Rosmy Roy, Ms.Sibimol B, Ms. Sreelakshmi P S, Ms.Jemy Joy, Ms.Tejashree B S, Ms.Subimol M S

Study site: RLJH, KOLAR

Purpose of The study: The aim of the study to assess the effectiveness of breast feeding during heel prick on pain reduction among neonates in selected hospital Kolar."

Voluntary Participation: Your participation in this study is entirely voluntary. There is no compulsion to participate in this study. You will be no way affected if you do not wish to participate in the study. You are required to sign only if you voluntarily agree to participate in this study .Further you are at a liberty to withdraw from the study at any time.

Procedure: The ethical clearance will be obtained from the institution Ethical Committee. Permission will be obtained from the concern hospital authorities. Samples will be selected by random sampling technique. Written consent will be obtained from the participants and the study will be conducted using the DAN scale.

Confidentiality: All information collected from you will be strictly confidential and will not be disclosed to anyone except if it is required by the law. This information collected will be used only for research, presentation and publication. This information will not reveal your identity.

We would not compel you any time during this process; also we would greatly appreciate your cooperation to the study. We would like to get your consent to participate in the study

For any information you are free to contact investigator. This study has been approved by the institutional ethical committee.

ರೋಗಿಯ ಮಾಹಿತಿ ಪತ್ರ

ಅಧ್ಯಯನದ ಶೀರ್ಷಿಕೆ:

ನವಜಾತ ಶಿಶುವಿನ ಹಿಮ್ಮಡಿ ಚುಚ್ಚುವ ಸಮಯದಲ್ಲಿ ಸ್ತನಪಾನ ಮಾಡಿಸುವುದರಿಂದ ಚುಚ್ಚುವ ನೋವನ್ನು ನಿವಾರಿಸುವ ಬಗ್ಗೆ ಕೋಲಾರದ ಆಯ್ದ ಆಸ್ಪತ್ರೆಗಳಲ್ಲಿ ನಡೆಸಿದ ಅಧ್ಯಯನ.

ಪ್ರಮುಖ ಸಂಶೋಧಕರು: ಪ್ರಾಧ್ಯಾಪಕರು.ಸಿವ್ಲಿಯ ಸುರೇಖ

ಸಹ ಸಂಶೋಧಕರ ಹೆಸರು: ಅಖಿಲ, ಅಲ್ಫಾಜ್ ಪಾಷ, ಅನುಮೋಲ್, ಬ್ಲೆಸ್ಸಿ, ಮನ್ಸಿ, ಮೋನಿಷ, ರೋಸ್ಮಿ, ಸಿಬಿಮೋಲ್, ಶ್ರೀಲಕ್ಷ್ಮಿ ಜೆಮಿ, ತೇಜ ಶ್ರೀ.

ಭಾಗವಹಿಸುವರ ಹೆಸರು:

ಅಧ್ಯಯನ ಮಾಡುವ ಸ್ಥಳ: ಆರ್.ಎಲ್.ಜೆ.ಹೆಚ್ , ಟಮಕ, ಕೋಲಾರ.

ಅಧ್ಯಯನದ ಉದ್ದೇಶ:

ನವಜಾತ ಶಿಶುವಿನ ಹಿಮ್ಮಡಿ ಚುಚ್ಚುವ ಸಮಯದಲ್ಲಿ ಸ್ತನಪಾನ ಮಾಡಿಸುವುದರಿಂದ ಚುಚ್ಚುವ ನೋವಿನ ನಿವಾರಣೆಯ ಬಗ್ಗೆ ನಿರ್ಣಯಿಸಲು.

ಸ್ವ ಇಚ್ಛೆಯಿಂದ ಪಾಲ್ಗೊಳ್ಳುವಿಕೆ : ಸಂಶೋಧನೆಯಲ್ಲಿ ಪಾಲ್ಗೊಳುವುದು ಸ್ವಇಚ್ಛೆಯಿಂದ ಕೂಡಿರುವದಾಗಿರುತ್ತದೆ. ನೀವು ಈ ಸಂಶೋಧನೆಯಿಂದ ಮಧ್ಯದಲ್ಲಿಯೇ ಅಥವಾ ಭಾಗವಹಿಸದಿದ್ದರು ಕೂಡ ನಿಮಗೆ ಲಭ್ಯವಾಗುತ್ತೀರುವ ಚಿಕಿತ್ಸೆ ಮತ್ತು ಸೇವೆಗಳು ಬದಲಾಗುವುದಿಲ್ಲ. ಈ ಮೊದಲು ಸಂಶೋಧನೆಯಲ್ಲಿ ಭಾಗವಹಿಸಲು ಒಪ್ಪಿಕೊಂಡು ಮಧ್ಯದಲ್ಲಿ ನಿಧಾ ರವನ್ನು ಬದಲಿಸಲು ಅಹ ರಿರುತ್ತೀರಿ.

ಸಂಶೋಧನಾ ಪ್ರಕ್ರಿಯೆ :

ಗೌಪ್ಯತೆ : ಸಂಶೋಧನೆ ಸಂದರ್ಭದಲ್ಲಿ ದೊರೆತ ಮಾಹಿತಿಯನ್ನು ಗೌಪ್ಯವಾಗಿಡುತ್ತೇವೆ. ನಿಮ್ಮ ಹೆಸರಿನ ಬದಲಾಗಿ ಕ್ರಮ ಸಂಖ್ಯೆಗಳನ್ನು ಬಳಸುತ್ತೇವೆ. ಮೂಲ ಸಂಶೋದಧಕರಲ್ಲಿ ಮಾತ್ರ ನಿಮ್ಮ ಮಾಹಿತಿ ಇರುತ್ತದೆ. ಅದರ ಗೌಪ್ಯತೆಯನ್ನು ಕಾಪಾಡುತ್ತಾರೆಂದು ದೃಢಪಡಿಸುತ್ತೇನೆ. ಅವಶ್ಯವಿದ್ದಲ್ಲಿ ಸಂಶೋಧನೆಯಲ್ಲಿ ದೊರೆತ ಮಾಹಿತಿಯನ್ನು ಮೊದಲು ವೈದ್ಯಕೀಯ ಸಮುದಾಯ ಸಭೆಯಲ್ಲಿ ಚರ್ಚೆ ಸಲಾಗವುದು ಮತ್ತು ವೈದ್ಯಕೀಯ ಪತ್ರಿಕೆಗಳಲ್ಲಿ ಪ್ರಕಟಿಸಲಾಗುವುದು. ಯಾವುದೇ ಮಾಹಿತಿಗಾಗಿ ನೀವು ಸಂಶೋಧಕರನ್ನು ಸಂಪರ್ಕಿಸಬಹುದಾಗಿದೆ. ಈ ಮಾಹಿತಿಯನ್ನು ನಿಮಗೆ ಅಧ್ಯಯನದ ಹಿನ್ನಲೆ ನೀಡಲು ಉದ್ದೇಶಿಸಲಾಗಿದೆ. ಸಂಗ್ರಹಿಸಿದ ಮಾಹಿತಿಯನ್ನು ಗೌಪ್ಯವಾಗಿಡಲಾಗುತ್ತದೆ. ಈ ಮಾಹಿತಿಯನ್ನು ಅಧ್ಯಯನ, ಪ್ರಸ್ತುತಿ ಮತ್ತು ಪ್ರಕಟಣೆ ಉದ್ದೇಶಕ್ಕಾಗಿ ಮಾತ್ರ ಬಳಸಲಾಗುತ್ತದೆ. ಈ ವಿಶಯದಲ್ಲಿ ಯಾವುದೇ ಸ್ಪಷ್ಟೀಕರಣ ಬೇಕಾಗಿದ್ದಲ್ಲಿ ಕೇಂದ್ರ ನೈತಿಕ ಸಮಿತಿಯವರನ್ನು ಸಂಪರ್ಕಿಸಬಹುದು. ನೀವು ಸ್ವಯಂಪ್ರೇರಣೆಯಿಂದ ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಒಪ್ಪಿದಲ್ಲಿ ಮಾತ್ರ ಸಹಿ ಹಾಕಬಹುದು.

ಧನ್ಯವಾದಗಳು,

ANNEXURE-IV

INFORMED CONSENT FORM

Principal Investigator : Prof.Silvia Surekha
Co-investigators: Ms.Akhila R ,Mr.Alfaz Pasha, Ms. Anumol P Joy, Ms.Blessy Ponnachan, Ms.Mansi P Devid, Ms.Monisha R, Ms.Rosmy Roy, Ms.Sibimol B, Ms. Sreelakshmi P S, Ms.Jemy Joy, Ms.Tejashree B S, Ms.Subimol M S

Name of the Organization: Sri Devaraj Urs College of nursing, Tamaka, Kolar.

Title of the study:"A study to assess the effectiveness of breast feeding during heel prick on pain reduction among neonates in selected hospital Kolar."

If your agree to participate in the study I will collect information (as per Performa) from you or a person responsible for you or both. We will collect relevant details.

You are invited to part in this research study. You are being asked to participate in this study because you satisfy our eligibility our criteria. The information in the given document is meant to help you decide whether or not to take part. Please feel free to ask any queries. I give my consent to collect the information & also can be used for medical research, test validation, or education as long as my privacy is maintained.

I have read or it has been read and explained to me in my own language. I have understood the purpose of this study, the nature of information that will be collected and disclosed during the study. I had the opportunity to ask questions and the same has been answered to my satisfaction. I understand that I remain free to withdraw from this study at any time and this will not change my future care. I the undersigned agree to participate in this study and authorize the collection and is closure of m6y personal information for presentation and publication.

Patient's signature/ Thumb impression

Person obtaining consent and his/her signature:

Principal investigator signature:

Principal Investigator.

ಒಪ್ಪಿಗೆ ಪತ್ರ

ಅನುಕ್ರಮ ಸಂಕೆ:

ಅಧ್ಯಯನದ ಶೀರ್ಷಿಕೆ:

ನವಜಾತ ಶಿಶುವಿನ ಹಿಮ್ಮಡಿ ಚುಚ್ಚುವ ಸಮಯದಲ್ಲಿ ಸ್ತನಪಾನ ಮಾಡಿಸುವುದರಿಂದ ಚುಚ್ಚುವ ನೋವನ್ನು ನಿವಾರಿಸುವ ಬಗ್ಗೆ ಕೋಲಾರದ ಆಯ್ದ ಆಸ್ಪತ್ರೆಗಳಲ್ಲಿ ನಡೆಸಿದ ಅಧ್ಯಾಯ.

ಮುಖ್ಯಸಂಶೋಧಕರ ಹೆಸರು : ಪ್ರಾಧ್ಯಾಪಕ. ಸಿಲ್ವಿಯ ಸುರೇಖ

ಸಹ ಸಂಶೋಧಕರ ಹೆಸರು: ಆಲ್ಫಾಜ್ ಪಾಷ, ಅಖಿಲ.ಆರ್, ಅನುಮೋಲ್, ಬ್ಲೆಸ್ಸಿ, ಮನ್ಸಿ, ಮೊನಿಷ, ರೋಸ್ಮಿ, ಸಿಬಿ, ಶ್ರೀಲಕ್ಷ್ಮಿ ಜೆಮಿ, ತೇಜ ಶ್ರೀ, ಸುಬಿಮೋಲ್.

ಭಾಗವಹಿಸುವರ ಹೆಸರು:

ಈ ಅಧ್ಯಯನದ ಪ್ರತಿ ವಿವರಗಳನ್ನು ಹಾಗು ಅದರ ಉದ್ದೇಶವನ್ನು ನನಗೆ ಅರ್ಥವಾಗುವಂತೆ ತಿಳಿಸಿಕೊಟ್ಟಿರುತ್ತಾರೆ.

ಈ ಅಧ್ಯಯನದ ಬಗ್ಗೆ ಹಲವಾರು ಪ್ರಶ್ನೆ ಕೇಳಲು ಅವಕಾಶ ದೊರೆತಿದೆ ಹಾಗು ನನ್ನ ಪ್ರಶ್ನೆಗಳಿಗೆ ತೃಪ್ತಿಕರವಾದ ಉತ್ತರಗಳು ದೊರೆತಿದೆ.

ನನಿಂದ ಓದಲ್ಪಟ್ಟ ಅಥವಾ ನನಗೆ ಓದಿ ತಿಳಿಸಿದ ಅಧ್ಯಯನದ ಉದ್ದೇಶ ನನಗೆ ಅರ್ಥವಾಗಿದ್ದು , ನನ್ನಿಂದ ಸಂಗ್ರಹಿಸಲ್ಪಟ್ಟ ಮಾಹಿತಿಯನ್ನು ಗೌಪ್ಯವಾಗಿಡಲಾಗುವುದು. ನನ್ನ ಗುರುತನ್ನು ಬಹಿರಂಗ ಪಡಿಸುವುದಿಲ್ಲ ಎಂದು ತಿಳಿಸಲಾಗಿದೆ. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಅಧಿಕೃತವಾಗಿ ಮಾಹಿತಿಯನ್ನು ಗೌಪ್ಯವಾಗಿರಿಸಲು ನನ್ನ ಸ್ವಇಚ್ಛೆಯಿಂದ ಒಪ್ಪಿ ಸಹಿ ಹಾಕಿರುತ್ತೇನೆ.

ಭಾಗವಹಿಸುವವರ ಸಹಿ

ದಿನಾಂಕ

ಸಂದಶಕರ ಹೆಸರು ಮತ್ತು ಸಹಿ :

ದಿನಾಂಕ :

ಮುಕ್ಯ ಸಂಶೋದಕರ ಸಹಿ :

ಸಹ ಸಂಶೋದಕರ ಸಹಿ

ANNEXURE-V

LETTER REQUESTING OPINIONS AND SUGGESTIONS OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY OF RESEARCH TOOL

From,

The 3rd year B.Sc. Nursing students,
Sri Devaraj Urs college of Nursing,
Tamaka, Kolar- 563101.

To,
Forwarded through,
The principal

Respected Madam/Sir,

Sub: Requesting for opinions and suggestions of experts for establishing content validity of Research Tool

With reference to the above, we the 3rd Year B.Sc. Nursing students of Sri Devaraj Urs College of Nursing, Tamaka Kolar, have selected the below mentioned topic for research project to be submitted to Sri Devaraj Urs College of Nursing, Tamaka, Kolar as a fulfilment of Bachelor of Science in Nursing degree.

Title of the topic:

"A study to assess the effectiveness of breast feeding during heel prick on pain reduction among neonates in selected hospital Kolar."

With regard to the above matter we kindly request you to validate the content of structured tool pain scale (DAN Scale) for its appropriateness and relevancy. We are enclosing our tool for your reference. We remain thankful for your great help.
Thanking you.

Yours faithfully,

1. Akhila R
2. Alfaz Pasha
3. Anumol P Joy
4. Blessy Ponnachan
5. Jemy Joy
6. Mansi P David
7. Monisha R
8. Rosmy Roy
9. Sibimol B
10. Sreelakshmi P.S
11. Subimol M.S
12. Tejashree B.S

Through Research Guide:

ANNEXURE-VI

CONTENT VALIDITY CERTIFICATE

I hereby certify that I have validated the tool of 3rd year B.Sc. Nursing students of Sri Devaraj Urs College of nursing, Tamaka, Kolar, who is undertaking research project as a partial fulfillment Bachelor Science in Nursing degree**.**

"A study to assess the effectiveness of breast feeding during heel prick on pain reduction among neonates in selected hospital, Kolar."

Signature of the validator

ANNEXURE-VII
DATA COLLECTION TOOL
SECTION A :

SOCIO - DEMOGRAPHIC DATA

Code No:

Experimental /Control group

1. Gestational age:_____

a) 38- 39Wks [ ]

b) 39-41Wks [ ]

c) 42Wks [ ]

2. Gender

a) Male [ ]

b) Female [ ]

3. Weight in Kg

a) 3.5Kg - 5 Kg [ ]

b) 1.5Kg - 2.4 Kg [ ]

4. Mode of delivery

a) Vaginal Delivery [ ]

b) Cesarean Delivery [ ]

c) Forceps' Delivery [ ]

d) Vaccum Delivery [ ]

5. APGAR score 5’

a) 7- 10 [ ]

b) 6 - 4 [ ]

c) 3 – 5 [ ]

SECTION B:

DAN SCALE (Douleur Aigue Nouveau-ne)

	Score
Facial expressions:	
Calm	**0**
Snivels and alternates gentle eye opening and closing	**1**
Intensity of eye squeeze, brow buldge, nasolabial furrow:	
Mild, intermittent with return to calm (present during <1/3 of observation periods)	**2**
Moderate (present during 1/3 to 2/3 of observation periods)	**3**
Very pronounced, continuous (present during > 2/3 of observation periods)	**4**
Limbs movements:	
Calm or gentle movements	**0**
Intensity of pedaling, toes spread, legs tensed and pulled up, agitation of arms, withdrawal reaction:	
Mild, intermittent with return to calm (present during < 1/3 of observation periods)	**1**
Moderate (present during 1/3 to 2/3 of observation periods)	**2**
Very pronounced, continuous (present during >2/3 of observation periods)	**3**
Vocal expression:	
No complaints.	**0**
Mons briefly (for intubated child, looks anxious or uneasy)	**1**
Intermittent crying (for intubated child, expression of intermittent crying)	**2**
Long lasting crying, continuous howl (for intubated child, expression of continuous crying)	**3**
Total score	

RANGES:

1. (0) - No pain. 2. (1-3) - Minor pain
3. (4-6) - Moderate. 4. (7-10) - Severe pain.

ANNEXURE-VIII

CERTIFICATE FROM STATISTICIAN

I hereby certify that I have provided statistical guidance in analysis to Ms.Akhila, Mr.Alfaz pasha, Ms. Anumol P Joy, Ms.Blessy Ponnachan, Ms.Jemmy Joy, Ms.Mansi P David, Ms.Monisha R, Ms.Rosmy Roy, Ms.Sibimol B, Ms.Sreelakshmi P S, Ms. Subimol M S, Ms. Tejashree B S of 3rd year B.Sc (N) students of Si Devaraj Urs College of Nursing, Tamaka, kolar for their research study titled **" A study to assess effectiveness of breast feeding during heel prick on pain reduction among term neonates in selected hospital kolar"**

Place: kolar

Date: 25/8/2018

Signature of expert

S. RAVISHANKAR
Lect./Assit. Professor,
Dept. of Community Medicine,
Sri Devaraj Urs Medical College,
Tamaka, Kolar-563101

ANNEXURE-IX

LIST OF EXPERTS

1. **Dr. G Vijayalakshmi**
   Pricipal
   SDUCON
   Tamaka, Kolar

2. **Prof. M. S Radha**
   Vice Pricipal &
   HOD of Child Health Nursing
   SDUCON
   Tamaka, Kolar

3. **Dr. Zeanath C. J**
   HOD of Medical Surgical Nursing
   SDUCON
   Tamaka, Kolar

4. **Prof. Mary Minerva**
   HOD of Community Health Nursing
   SDUCON
   Tamaka, Kolar

5. **Prof. Jairakini Aruna**
   HOD of Mental Health Nursing
   SDUCON
   Tamaka, Kolar

6. **Asso. Prof. Lvanya Subhashini**
   Dept of Child Health Nursing
   SDUCON
   Tamaka, Kolar

7. **Asso. Prof. Malathi K.V**
   Dept. of Community Health Nursing
   SDUCON
   Tamaka, Kolar

8. **Asso. Prof. R. Rajesh**
   Dept. of Medical Surgical Nursing
   SDUCON
   Tamaka, Kolar

9. **Asso. Prof. Gayathri**
   Dept. of Mental Health Nursing
   SDUCON
   Tamaka, Kolar

10. **Mr. Shreekrishna**
    Lecturer
    Dept. of Medical Surgical Nursing
    SDUCON
    Tamaka, Kolar

11. **Miss. Chethan Priya**
    Lecturer
    Dept. of Medical Surgical Nursing
    SDUCON
    Tamaka, Kolar

ANNEXURE-X

MASTER SHEET

SOCIO DEMOGRAPHIC DATA					
EXPERIMENTAL GROUP					
	1	**2**	**3**	**4**	**5**
1	2	1	2	2	1
2	2	2	3	2	1
3	2	1	1	2	1
4	2	1	2	2	1
5	1	1	3	2	1
6	1	2	2	2	1
7	1	2	2	2	1
8	2	2	1	2	1
9	1	1	3	1	1
10	1	2	2	2	1
11	2	1	2	2	1
12	2	1	2	2	1
13	1	2	2	2	1
14	1	2	2	2	1
15	1	1	1	2	1
16	2	2	2	1	1
17	1	1	2	1	1
18	3	2	2	1	1
19	2	1	2	2	1
20	1	2	2	2	1
21	1	1	2	2	1
22	1	1	2	2	1
23	1	1	2	2	1
24	1	1	2	2	1
25	1	1	2	2	1
26	1	2	3	2	1
27	1	1	2	1	1
28	2	2	2	2	1
29	2	2	2	2	1
30	2	1	2	1	1

SOCIO DEMOGRAPHIC DATA					
CONTROL GROUP					
	1	**2**	**3**	**4**	**5**
1	2	1	2	2	1
2	1	2	2	2	1
3	1	1	2	2	1
4	1	2	2	1	1
5	2	2	3	2	1
6	2	1	1	2	1
7	1	1	2	2	1
8	1	2	2	2	1
9	1	2	2	2	1
10	1	2	1	2	1
11	1	1	2	2	1
12	1	2	2	2	1
13	1	1	3	2	1
14	1	2	3	1	1
15	1	1	1	2	1
16	1	1	2	2	1
17	1	2	3	2	1
18	1	1	3	2	1
19	1	1	3	2	1
20	1	1	3	2	1
21	1	1	2	1	1
22	1	1	3	1	1
23	1	2	3	2	1
24	2	1	3	2	1
25	2	2	1	2	1
26	1	1	2	2	1
27	1	1	2	2	1
28	1	1	3	2	1
29	1	1	2	2	1
30	1	1	1	2	1

EXPERIMENTAL GROUP														
	FACIAL EXPRESION					LIMB MOVEMENTS				VOCALEXPRESSION				TOTAL
	0	**1**	**2**	**3**	4	**0**	**1**	**2**	**3**	**0**	**1**	**2**	**3**	
1	0	0	2	0	0	0	1	0	0	0	1	0	0	4
2	0	1	2	0	0	0	0	0	0	0	0	0	0	3
3	0	1	0	0	0	0	1	0	0	0	0	2	0	4
4	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5	0	1	0	0	0	0	0	2	0	0	0	0	0	3
6	0	1	0	0	0	0	1	0	0	0	0	2	0	4
7	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8	0	0	0	0	0	0	1	0	0	0	1	0	0	2
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	1	2	0	0	0	0	2	0	0	1	0	0	6
11	0	0	0	0	0	0	0	2	0	0	1	0	0	3
12	0	0	2	0	0	0	1	0	0	0	1	0	0	4
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	1	2	0	0	0	1	0	0	0	0	0	0	4
15	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16	0	0	2	0	0	0	1	0	0	0	0	0	0	3
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	1	0	0	0	0	1	0	0	0	1	0	0	3
19	0	0	2	0	0	0	1	0	0	0	1	0	0	4
20	0	0	0	0	0	0	0	2	0	0	0	0	0	2
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	1	0	0	1
23	0	0	0	0	0	0	0	0	0	0	0	2	0	2
24	0	0	0	0	0	0	0	0	0	0	1	0	0	1
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	1	0	0	0	0	0	0	1

27	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	1	0	0	0	0	0	0	1
29	0	0	0	0	0	0	1	0	0	0	0	0	0	1
30	0	0	0	0	0	0	0	2	0	0	0	0	0	2

						CONTROL GROUP								
	FACIAL EXPRESSION					LIMB MOVEMENTS				VOCAL EXPRESSION				TOTAL
	0	**1**	**2**	**3**	**4**	**0**	**1**	**2**	**3**	**0**	**1**	**2**	**3**	
1	0	1	2	0	0	0	0	0	3	0	0	0	3	9
2	0	0	0	3	0	0	0	2	0	0	0	0	3	8
3	0	1	2	0	0	0	1	0	0	0	0	2	0	6
4	0	1	2	0	0	0	1	0	0	0	0	0	3	7
5	0	1	2	0	0	0	1	0	0	0	0	2	0	6
6	0	1	0	3	0	0	0	0	3	0	0	0	3	10
7	0	1	0	3	0	0	0	0	3	0	0	0	3	10
8	0	1	2	0	0	0	1	0	0	0	1	2	0	7
9	0	1	2	0	0	0	0	2	0	0	0	2	0	7
10	0	0	2	0	0	0	0	0	3	0	0	0	3	8
11	0	1	0	3	0	0	1	0	0	0	0	0	0	5
12	0	0	0	3	0	0	0	2	0	0	0	0	3	8
13	0	1	0	3	0	0	0	0	3	0	0	0	3	10
14	0	0	2	0	0	0	1	0	0	0	1	0	0	4
15	0	1	2	0	0	0	0	2	0	0	0	0	3	8
16	0	0	2	0	0	0	0	2	0	0	0	2	0	6
17	0	1	2	0	0	0	1	0	0	0	0	2	0	6
18	0	0	2	0	0	0	0	2	0	0	0	2	0	6
19	0	1	0	3	0	0	1	0	0	0	0	2	0	7
20	0	1	2	0	0	0	1	0	0	0	0	0	3	7
21	0	0	2	0	0	0	1	0	0	0	0	2	0	5
22	0	1	2	0	0	0	0	0	3	0	0	0	3	9
23	0	1	2	0	0	0	1	0	0	0	0	0	3	7
24	0	1	0	3	0	0	0	2	0	0	0	0	3	9
25	0	1	2	0	0	0	1	0	0	0	0	2	0	6
26	0	1	0	3	0	0	0	0	3	0	0	0	3	10

27	0	1	2	0	0	0	0	0	3	0	0	0	3	9
28	0	1	2	0	0	0	1	0	0	0	0	0	3	7
29	0	1	2	0	0	0	1	0	0	0	0	2	0	6
30	0	1	2	0	0	0	0	0	3	0	0	0	3	9