A study to evaluate the effect of paced breathing on labour pain perception among primi mothers during labour in selected hospitals of Vadodara

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Abstract: Background: *Child birth is never the same and it may differ between women and between labours. A localized pain in labour may be in the back, on the thigh, the front of the pubic bone or at based of uterus. Pain relief is the way in which women feel that they have coped with pain during labour. Breathing calmly may increase the amount of oxygen that is supplied to your muscles, and so make the pain less intense.* ***Objective:*** *To assess the level of pain perception after paced breathing among primi mothers in labour in experimental group.* ***Material and Method:*** *Evaluator approach was used. The research design was Quasi Experimental Post Test Control Group Design. The sampling technique was Non-probability convenience sampling. The subjects were primi mothers admitted to labour room of selected hospitals of Vadodara in their first stage. A totally 60 participants equally distributed to experimental (n=30) and control group (n=30). After paced breathing intervention in experimental group; subjective pain was measured by VAS.* ***Results:*** *Overall Mean scores among experimental and control group was, 50% obtain in experimental group with mean and SD of 15±7.26 and mean percentage of 71.7% was obtained in the control group with mean and SD of 21.5±5.12 the't' Test value was 4.14* (significant at 5% level). In this study H1 hypothesis is accepted and in experimental group association between VAS-1 level, VAS-2 level and residence, VAS-3 level and education level and in control group between VAS-1 levels, residence, VAS-2 level and education level. Hence, H2 hypothesis is partially accepted.* ***Conclusion:*** *It concluded that paced breathing is an effective non-pharmacological method to bring comfort to the women in times of labour agony. Hence paced breathing could be used in clinical practice in order to improve the quality of care in labour.*

Key Words: *effectiveness, level of pain, primi mother, first stage labour.*

1. INTRODUCTION:

"It is true that it always feels like pain, but that proves nothing –ice against a naked back always passes for life"

- **Mark Twain**

While women are pregnant, she may feel your tightening from time to time. These are called Braxton Hicks contraction. When she goes in to labour, tightening feeling become more regular and much stronger. The tightening may cause pain that feel like period pain, and usually become more painful the further she gets in to labour. Different women experience labour pains indifferent ways.[1]

Child birth is never the same and it may differ between women and between labours. Child birth is one of the most marvelous and memorable segment in woman's life. It does not really matter if the child is the first, second and third. Each experience is unique and calls for a celebration. Labour is a natural process by which a variable fetus, at the end of 28 weeks or more is expelled from the uterus. The fear and anxiety about child birth often prevents most women enjoying this experience.[2]

Pain relief is the way in which women feel that they have coped with pain during labour. This involves the use of pharmacological and non pharmacological or alternative methods of pain relief[3]

Paced breathing is approximately half of the normal breathing rate, which can be used during contraction, slow paced breathing provides the best oxygenation, is calming and the least fatiguing of the breathing technique. The method begins with a very simple technique that is used as long as possible when it is no longer effective breathing that required more conservation is added. In first stage of labour, such as breathing technique can promote relaxation of abdominal muscles. And there by increase the size by abdominal cavity. This approach lessens discomfort generated by frequentation between the uterus and abdominal wall during contraction.[4]

2. STATEMENT OF PROBLEM:

"A study to evaluate the effect of paced breathing on labour pain perception among primi mothers during labour in selected hospitals of Vadodara.**"**

2. OBJECTIVES:

- To assess the level of pain perception after paced breathing among primi mothers in labour in experimental group.
- To assess the level of pain perception among primi mothers in labour in control group.
- To find out the different between both experimental and control group in terms of reduction of pain perception.
- To find out association between the levels of pain perception with selected demographic variables among primi mothers in labour.

3. Hypothesis:

H_1: There will be a significant difference in level of pain in experimental group and control group
H_2: There will be significant association between levels of pain with selected demographic variables

4. Assumptions:

- Perception of labour pain differs from mother to mother.
- Relaxation is a learned skill of deep breathing.
- Paced breathing has no adverse effect on mothers with labour pain.

5. MATERIALS AND METHODS:

Research design: In present study, quasi experimental, non equivalent control group post test research design

Experimental	**X**	**O_1**
Control	**-**	**O_2**

Fig.: 2 Non equivalent control group research design

Key words: **O1=** post test of labour pain perception in experimental
X= intervention paced breathing
O2= post test of labour pain perception in control group

Target population is primi mother who all are in first stage of labour. The **accessible population** of present study comprise of primi mother in selected hospitals of Vadodara. The **sampling technique** used for the study is non convenience sampling technique according to inclusive criteria as well as availability of samples from selected hospitals at Vadodara. The **sample** of the study comprised of 60 primi mothers, in which 30 mothers in experimental group and 30 in control group. **Setting** refers to the area where the study is conducted; the study was carried out in Dhiraj Hospital and Kailash cancer research hospital of Vadodara**.** In this study **demographics variables** are age of mother, religion, types of family, residence, level of education of mother, duration of marriage.

Inclusion criteria

1. Primi mothers in labour who was above 37 weeks of gestation with true labour pain.
2. Who was in the active phase of first stage labour (5 to 7cm of cervical dilatation)
3. Who was in the age group of 20-30 years
4. Who was willing to participate in the study
5. Who can understanding and speak Hindi, Gujarati and English.

Exclusion criteria

1. Primi mother are having any Obstetric and medical complication.

Development of tools

Section: A: - demographic data collection tool
Section: B: - standardized pain scale to assess the level of pain

Description of the tool

Section A – socio demographic data

This section is concern with the questions related to socio demographic background of study participant age of mother, religion, types of family, residence, level of education of mother, duration of marriage.

Section B – standardized pain scale

In this study Wong Baker Faces pain scale used to assess the level of pain among primi mother at first stage of labour.VAS has most commonly anchored by "mild pain" (score of 0-3) , "moderate pain" (score of 4-6), "pain as bad as it could be" (score of 7-9) and :worst pain" (score of 10). To determine the level of pain by used of VAS during uterine contraction.

Scoring and interpretation - A higher score indicate greater pain intensity. Base on distribution of pain VAS scores in labour pain who described their labour pain intensity as mild, moderate, or severe, the following cut points on pain VAS have been recommended:

Mild labour pain	0-3
Moderate labour pain	4-6
Severe labour pain	7-10

6. RESULTS AND DISCUSSION:

Assessment the level of pain during labour in experimental and control group

Experimental study was conducted on effect of paced breathing exercise in reduction of pain during first stage of labour among primi mothers. The study was done by evaluate approach on 60 samples (30 from experimental and 30 from control group) were allotted. The experimental group received breathing exercise during contraction at a rate of 30 minutes interval 3 times during the first stage of labour whereas routine care was provided to the control group. Pain level was assessed after each contraction with standardized pain scale and observation check list. The result reveals that there was a significant different between the mean pain score of the experimental and control group. Hence the research hypothesis is accepted at 5% level of significance. So paced breathing is effective in decreasing the intensity of labour pain during the first stage of labour.

In this study VAS-1 reveals that pain was felt less in experimental group as they have received paced breathing, in comparison with control group's participants. 20 (66.7%) and 10 (33.3%) participants demonstrate moderate and severe pain respectively. In contrast control group, few participants had moderate pain 14 (46.7%). While 16 (53.3%) have severe pain. In that groups have no mild pain.VAS-2 reveals that pain was felt less in experimental group as they have received paced breathing, in comparison with control group's participants.1 (3.3%), 28 (93.4%) and 1(3.3%) participants demonstrate mild, moderate and sever pain respectively. In contrast control group none have a mild pain and few participants had moderate pain 3 (10%). While 27 (90%) have severe pain. According to table-2.12 data reveals that pain was felt less in experimental group as they have received paced breathing, in comparison with control group's participants.11 (36.7%) and 19(63.3%) participants demonstrate mild and moderate respectively. In contrast control group none have a mild pain and few participants had moderate pain 3 (10%). While 27 (90%) have severe pain.

In this study mother in the control group perceived pain more than the experimental group during first stage of labour and experimental group have a more "t" value (VAS-1,VAS-2 and VAS-3) than the tabulated "t" value, so that that shows that difference between the groups was highly significant in term of perceived pain perception.

TABLES AND FIGURS

SECTION I: Description of demographic characteristics of participants.
SECTION II: Overall and aspect wise VAS level among experimental and control group.
SECTION III: Association between variables and VAS level among experimental and control group.

SECTION-1

SECTION I: DESCRIPTION OF DEMOGRAPHIC CHARACTERISTICS OF RESPONDENT

Table 1- demographic profile of participants of both experimental and control group

Demographic variables	Category	Experimental		Control	
		N	%	N	%
Age group	20-25	20	66.7	26	86.7
	25-30	10	33.3	4	13.3
Religion	Hindu	24	80	27	90
	Muslim	3	10	2	6.7
	Christian	0	0	0	0
	Other	3	10	1	3.3
Types of family	Joint	13	43.3	14	46.7
	Nuclear	17	76.7	16	53.3
Residence	Urban	16	53.3	12	40
	Rural	14	46.7	18	60
Education level	Illiterate	6	20	9	30
	Primary education	9	30	12	40
	Secondary education	12	40	7	23.3

	Graduate	3	10	2	6.7
Duration of marriage	1 yr	19	63.4	22	73.4
	2 yr	7	23.3	6	20
	3 yr	4	13.3	1	3.3
	>4 yr	0	0	1	3.3

The data given in Table: 1 revels the frequency and percentage distribution of primi mother on labour pain by personal characteristics in which include age of mother, religion, residence, types of family, education level and duration of marriage.

SECTION -2

Overall and Aspect wise VAS Level among experimental and control group

The first VAS evaluation (VAS-1) was done after 10 contractions when Cervical dilatation was 5cm.the second VAS-2 was performed after 10 contractions when Cx dilatation was 6cm. last third VAS-3 was performed after 10 contraction when Cx dilatation 7cm.

Table 2.1: Classification of participants VAS-1 level among Experimental and Control groups

VAS level	Scores	Participants				χ^2 value
		Experimental		Control		
		N	%	N	%	
Mild	0-3	0	0	0	0	31.2*
moderate	4-6	20	66.7	14	46.7	
Severe	7-10	10	33.3	16	53.3	
Total		30	100	30	100	

*Significant at 5% level, $\chi^2(0.05, 1df) = 3.841$

As Table-2.1 data reveals that 20 (66.7%) and 10 (33.3%) participants demonstrate moderate and sever pain respectively. In contrast control group, few participants had moderate pain 14 (46.7%). While 16 (53.3%) have severe pain. In that groups have no mild pain. The $\chi 2$ calculated value (31.2) is greater than the table value (3.814) at 0.05 level of significant. It suggests that paced breathing is effective at visual Analogue scale assessment.

Table- 2.2 Classification of participants by VAS-2 level among Experimental and Control group

VAS level	Scores	Participants				χ^2 Value
		Experimental		Control		
		N	%	N	%	
Mild	0-3	1	3.3	0	0	52.6*
Moderate	4-6	28	93.4	3	10	
severe	7-10	1	3.3	27	90	
Total		30	100	30	100	

*Significant at 5% level, $\chi^2(0.05, 2df) = 5.991$

As Table-2.2 data reveals that 1 (3.3%), 28 (93.4%) and 1(3.3%) participants demonstrate mild, moderate and sever pain respectively. In contrast control group none have a mild pain and few participants had moderate pain 3 (10%). While 27 (90%) have severe pain. The $\chi 2$ calculated value (52.6%) is greater than the table value (5.991) at 0.05 level of significant. It suggests that paced breathing is effective at visual Analogue scale assessment.

Table-2.3: Classification of participants VAS-3 level among experimental and control group

VAS level	Scores	Participants				χ^2
		Experimental		Control		
		N	%	N	%	
Mild	0-3	11	36.7	0	0	42.87
Moderate	4-6	19	63.3	3	10	
Severe	7-10	0	0	27	90	
Total		30	100	30		

*Significant at 5% level, $\chi^2(0.05, 2df) = 5.991$

As Table-2.3 data reveals that 11 (36.7%) and 19(63.3%) participants demonstrate mild and moderate respectively. In contrast control group none have a mild pain and few participants had moderate pain 3 (10%). While 27 (90%) have severe pain. The $\chi 2$ calculated value (42.87) is greater than the table value (5.991) at 0.05 level of significant. It suggests that paced breathing is effective at latent phase at visual Analogue scale assessment.

Table-2.4 Aspect wise mean pain score (VAS) among Experimental group

N = 30

No.	Aspect	Max. Score	Scores			
			mean	SD	Mean %	SD %
I	VAS-1	10	6	1.02	20.3	10.2
II	VAS-2	10	5	1	16.6	10
III	VSA-3	10	3.9	1.03	13	10.3

Table- 2.4 Aspect wise mean VAS scores among experimental group reveals that the highest mean percentage (20.3%) was obtain in the VAS-1 with mean and SD of 6±1.02 The mean percentage (16.6%) was obtain in the VAS-2 with mean and SD of 5±1. The mean percentage (13%) was obtain in the VAS-3 with mean and SD of 3.9±1.03.

Table- 2.5: Aspect wise mean VAS scores among control group

N = 30

No.	Aspect	Max.	Scores			
			Mean	SD	Mean %	SD %
I	VAS-1	10	6.6	1.08	21.1	10.8
II	VAS-2	10	7.4	0.42	24.4	4.2
III	VAS-3	10	7.8	0.85	26.2	8.5

Table- 2.5 Aspect wise mean VAS scores among experimental group reveals that the highest mean percentage (21.1%) was obtain in the VAS-1 with mean and SD of 6.6±1.08. The mean percentage (24.4%) was obtain in the VAS-2 with mean and SD of 7.4±0.42. The mean percentage (26.2%) was obtain in the VAS-3 with mean and SD of 7.8±0.85.

Table: 2.6 Overall Mean VAS -1 scores among Experimental and Control group

Group	**Sample (n)**	**Max. score**	**Scores**			**'t' test**
			Mean	**Mean (%)**	**SD**	
Experimental	30	10	6.1	20.3	1.02	2.21
Control	30	10	6.3	21.1	1.08	

*significant at 5% level, t (0.05, 58df) =1.93)

Table-2.6 consists of overall Mean scores among experimental and control group. The Mean percentage of 20.3% was obtain in experimental group with mean and SD of 6.1±1.02 and mean percentage of 21.1% was obtained in the control group with mean and SD of 6.3±21.1. The't' Test value was 2.21* (significant at 5% level)

Table -2.7 overall mean VAS-2 scores among experimental and control group

Group	**Sample (n)**	**Max. score**	**Scores**				**'t' Test**
			Mean	**SD**	**Mean%**	**SD%**	
Experimental group	30	10	5	1	16.6	10	12.2*
Control group	30	10	7.4	0.42	24.6	4.2	

*Significant at 5% level, 't' (0.05, 58df) = 1.96

Table-2.7 consists of overall Mean scores among experimental and control group. The Mean percentage of 16.6% was obtain in experimental group with mean and SD of 5±1and mean percentage of 24.6% was obtained in the control group with mean and SD of 7.4±0.42. The't' Test value was 12.2* (significant at 5% level)

Table-2.8 overall mean VAS-3scores among experimental and control group

Group	Sample (n)	Max. score	Scores				't' Test
			Mean	SD	Mean%	SD%	
experimental	30	10	3.9	1.03	13	10.3	15.9*
Control	30	10	7.8	0.85	26.22	0.85	

*Significant at 5 % level, t (0.05,58df)=1.96

Table-2.8 consists of overall Mean scores among experimental and control group. The Mean percentage of 13% was obtain in experimental group with mean and SD of 3.9±1.03and mean percentage of 24.6% was obtained in the control group with mean and SD of 7.8±0.85. The't' Test value was 15.9* (significant at 5% level)

The above tables 2.7 and 2.8 suggest that VAS-2 and VAS-3 is effective in reduction of labour pain. Hence the hypothesis H_1 "there will be significant in level of pain perception in experimental group and control group"

Table-2.9 overall mean scores among experimental and control group regarding duration of labour pain

Group	Sample (n)	Max. score	Scores				't' Test
			Mean	SD	Mean%	SD%	
experimental	30	10	15	7.26	50	24.2	4.14*
Control	30	10	21.5	5.12	71.7	17.06	

*significant at 5% level t (0.05, 58df) =1.93

Table consist of overall Mean scores among experimental and control group. The Mean percentage of 50% was obtain in experimental group with mean and SD of 15±7.26and mean percentage of 71.7% was obtained in the control group with mean and SD of 21.5±5.12. The't' Test value was 4.14* (significant at 5% level)

SECTION -3

Association between demographic variables and VAS -1level among experimental and control group

Tables -3.1 Associations between demographic variables and VSA-1 level among experimental group.

n=30

Demographic variables	**category**	**sample**	**VAS 1 pain level**				χ^2 **Value**	**P Value**
			Mild		**Moderate**			
			N	**%**	**N**	**%**		
Age group	20-25	20	10	33.3	10	33.3	9.918* 1df= 3.841	p>0.05
	25-30	10	10	33.3	0	0		
Religion	Hindu	24	13	43.3	11	40	3.5 NS 3df= 7.815	p>0.05
	Muslim	3	0	0	3	10		
	Christian	0	0	0	0	0		
	Other	3	2	6.7	1	3.3		
Types of family	Joint	13	6	20	7	23.3	0.17NS 1df= 3.814	p>0.05
	Nuclear	17	8	26.6	9	30		
Residence	Urban	16	10	33.3	6	20	4.5* 1df= 3.841	p>0.05
	Rural	14	12	40	2	6.7		
Education level	Illiterate	6	2	6.7	4	13.3	12* 3df= 7.815	p>0.05
	Primary education	9	5	16.6	4	13.3		
	Secondary education	12	5	16.6	7	23.3		
	Graduate	3	3	10	0	0		
Duration of marriage	1	19	6	20	13		3.86NS 3df= 7.815	p>0.05
	2	7	6	20	1	3.3		
	3	4	3	10	1	3.3		
	>4	0	0	0	0	0		

*significant at 5%level, NS: Non significant

The above table shows association between demographic and VAS-1 level among experimental group by use of chi square teat. In that only residence are significant at 0.05 level

Table 3.2 association between demographic variables and VAS-1 level among control group

n=30

Demographic variables	**category**	**sample**	**Mild**		**Moderate**		χ^2 **Value**	**P Value**
			N	**%**	**N**	**%**		
Age group (years)	20-25	26	10	33.3	16	53.3	0.69NS 1df= 3.841	p>0.05
	25-30	4	3	10	1	3.3		
Religion	Hindu	27	10	33.3	17	46.7	36.6*	P<0.05

	Muslim	2	0	0	2	6.7	3df= 7.814	
	Christian	0	0	0	0	0		
	Other	1	1	3.3	0	0		
Types of family	Joint	14	6	20	8	26.6	0.077NS 1df= 3.841	p>0.05
	Nuclear	16	5	16.6	11	40		
Residence	Urban	12	3	10	9	30	0.20NS 1df= 3.841	p>0.05
	Rural	18	9	3.	9	30		
Education level	Illiterate	9	2	6.7	7	23.3	9.53* 3df= 7.814	P<0.05
	Primary education	12	3	10	9	30		
	Secondary education	7	6	20	1	3.3		
	graduate	2	2	6.7	0	0		
Duration of marriage	1	22	5	16.6	17	56.6	18.8* 3df= 7.814	P<0.05
	2	6	5	16.6	1	3.3		
	3	1	1	3.3	0	0		
	>4	1	1	3.3	0	0		

*significant at 5%level, NS: Non significant

The above table shows association between demographic and VAS-2 level among control group by use of chi square test. In that only religion, level of education and duration of marriage were significant at 0.05 levels.

Table-3.3: Association between demographic variables and VAS-2 level among experimental group

n=30

Demographic variables	**Category**	**Sample**	**VAS -2 pain level**				χ^2 **Value**	**Value**
			moderate		**Severe**			
Age group	20-25	20	10	33.3	10	33.3	0.42NS 1df= 3.841	p>0.05
	26-30	10	3	10	7	23.3		
Religion	Hindu	24	14	46.7	11	36.6	2.009 NS 3df= 7.815	p>0.05
	Muslim	3	3	10	0	0		
	Christian	0	0	0	0	0		
	Other	3	2	6.7	1	3.3		
Types of family	Joint	13	8	26.6	5	16.6	0.0097 NS;1df= 3.814	p>0.05
	Nuclear	17	9	30	8	26.6		
Residence	Urban	16	8	26.6	9	30	1.04* 1df= 3.841	P<0.05
	Rural	14	10	33.3	4	13.3		
Education level	Illiterate	6	4	13.3	2	6.7	6* 3df= 7.815	P<0.05
	Primary education	9	5	16.6	4	13.3		
	Secondary education	12	2	6.7	10	33.3		
	Graduate	3	2	6.7	1	3.3		
Duration of marriage (years)	1	19	7	23.3	12	40	0.94NS 3df= 7.815	p>0.05
	2	7	4	13.3	3	10		
	3	4	2	6.7	2	6.7		
	>4	0	0	0	0	0		

The above table shows association between demographic and VAS-2 level among experimental group by use of chi square teat. In that only residence are significant at 0.05 level

Table-3.4: Association between demographic variables and VAS-2 level among control group

Demographic variables	Category	Sample	VAS-2 pain level				χ^2 Value	P Value
			Moderate		Severe			
			N	%	N	%		
Age	20-25	26	3	10	23	76.6	1.44NS 3df= 7.815	p>0.05
	25-30	4	2	6.7	2	6.7		
Religion	Hindu	27	7	23.3	0	0	30* 1df= 3.814	p>0.05
	Muslim	2	0	0	2	6.7		
	Christian	0	0	0	0	0		
	Other	1	0	0	1	3.3		
Types of family	Joint	14	11	36.6	3	10	0.02NS 1df= 3.841	p>0.05
	Nuclear	16	14	46.7	2	6.7		
Residence	Urban	12	10	33.3	3	10	0.25NS 3df= 7.815	p>0.05
	Rural	18	15	50	1	3.3		
Education level	Illiterate	9	8	26.6	1	3.3	17.5* 3df= 7.815	p>0.05
	Primary education	12	11	36.6	5	16.6		
	Secondary education	7	2	6.7	1	3.3		
	Graduate	2	1	3.3	3	10		
Duration of marriage	1	22	19	63.3	1	3.3	5.34NS 3df= 7.815	p>0.05
	2	6	5	16.6	1	3.3		
	3	1	0	0	0	0		
	>4	1	1	3.3	0	0		

The above table shows association between demographic and VAS-2 level among control group by use of chi square test. In that only level of education were significant at 0.05 levels.

Table-3.5: Association between demographic variables and VAS-3level among experimental group

Demographic variables	Category	Sample	VAS-3 pain level				χ^2 Value	P Value
			Mild		Moderate			
			N	%	N	%		
Age (years)	20-25	20	1	3.3	19	63.3	0.42NS 1df= 3.841	p>0.05
	25-30	10	10	33.3	0	0		
Religion	Hindu	24	11	36.6	13	43.3	9.49 NS 3df= 7.815	p>0.05
	Muslim	3	2	6.7	1	3.3		
	Christian	0	0	0	0	0		
	Other	3	2	6.7	1	3.3		
Types of family	Joint	13	9	3.	4	13.3	0.83NS 1df= 3.814	p>0.05
	Nuclear	17	7	23.3	10	33.3		
Residence	Urban	16	9	30	7	23.3	0.1NS 1df= 3.841	p>0.05
	Rural	14	8	26.6	6	20		
Education level	Illiterate	6	1	3.3	5	16.6	8* 3df= 7.815	P<0.05
	Primary education	9	6	20	3	10		
	Secondary education	12	4	13.3	8	26.6		

	Graduate	3	3	10	0	0		
Duration of marriage (years)	1	19	7	23.3	12	40	2.47NS 3df= 7.815	p>0.05
	2	7	5	16.6	2	6.7		
	3	4	2	6.7	2	6.7		
	>4	0	0	0	0	0		

The above table shows association between demographic and VAS-3 level among experimental group by use of chi square teat. In that only education level are significant at 0.05 level

Tables-3.6: Association between demographic variables and VAS-3 level among control group

Demographic variables	**Category**	**Sample**	**VAS-3 pain level**				χ^2 **Value**	**P Value**
			Moderate		**Sever**			
			N	**%**	**N**	**%**		
Age (year)	20-25	26	14	46.6	12	40	0.06NS 1df= 3.841	p>0.05
	25-30	4	3	10	1	3.3		
Religion	Hindu	27	14	46.6	13	43.3	2.54 NS 3df= 7.815	p>0.05
	Muslim	2	2	6.7	0	0		
	Christian	0	0	0	0	0		
	Other	1	1	3.3	0	0		
Types of family	Joint	14	11	36.7	3	10	3.59NS 1df= 3.814	p>0.05
	Nuclear	16	6	20	10	33.3		
Residence	Urban	12	5	16.6	7	23.3	0.95NS 1df= 3.841	p>0.05
	Rural	18	12	40	6	20		
Education level	Illiterate	9	6	20	3	10	2.79NS 3df= 7.815	p>0.05
	Primary education	12	6	20	6	20		
	Secondary education	7	4	13.3	3	10		
	Graduate	2	1	3.3	1	3.3		
Duration of marriage	1	22	11	40	11	40	3.54NS 3df= 7.815	p>0.05
	2	6	5	16.6	1	3.3		
	3	1	0	0	1	3.3		
	>4	1	0	0	0	0		

The above table shows association between demographic and VAS-2 level among control group by use of chi square test. In that no any significant with demographic variables

7. RECOMMENDATIONS:

Based on finding of the present study recommendation offered for the future study are:

- The similar study can be conducted on a large group.
- A study can be carried out to assess the knowledge and attitude of nurse midwives on alternative therapies for labour pain management.
- A study can be carried out to assess the effectiveness of other nursing measures such as acupressure, music therapy, and warm water bath and labour support for effective pain management during labour.
- A comparative study to assess the effectiveness of music therapy v/s paced breathing exercise on first stage of labour pain among primi mother in selected hospitals n Vadodara.

8. CONCLUSION:

Conclusion deals with implication, and recommendation of the study to **"**A study to evaluate the effect of paced breathing on labour pain perception among primi mothers during labour in selected hospitals of Vadodara.**"** In this present study 60 primi mother (30 from each group) selected using Nom-probability convenience sampling technique. The research approach in the present study is evaluator approach with a view to measure effectiveness of paced

breathing on first stage of labour among primi mother. Quasi experimental with post test control group design is used in this study. Effectiveness was assessed by analysis of degree of pain at various levels of VAS score in both groups. The data was interrelated by suitable and appropriate statistical method.

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REFERANCES:

1. Dutta D.C (2007), "Textbook of Obstetrics". 7th edition, Calcutta: New Delhi: New Central Book Agency,
2. Cunningham F. G. Leveno J.K. Williams Obstetrics, labour and delivery. Twenty second ed. Mc-Graw hills companies.2007; 17:4.
3. Sr. Barthalomea Joseph. A study to assess the effectiveness of acupressure on labor in full term gravid women in selected hospitals, Mangalore. Unpublished thesis submitted to RGUHS.
4. Saldanha H. Effectiveness of breathing exercises on duration, outcome of labour, and behavior responses of gravid women during the first state of labour in a selected hospital Mangalore. Accessed Jul 10, 2013.
5. Joanne E Lally, Richard G Thomson. Pain relief in labour: a qualitative study to determine how to support women to make decisions about pain relief in labour.DOI: 10.1186/1471-2393-14-6. Licensee Bio Med Central Ltd. Published 8 January 2014.
6. Jenny .Bogossian .et al .International journal of child. Volume No.:6.Number:3.Year: 2016.
7. Mrs. S. Shenbagavalli. "Effectiveness of selected nursing intervention on maternal and newborn outcome among primi gravida mothers at selected hospitals." Volume No.:6.Issue No.:3.Year: 2016.
8. Mrs. P. Parameswari .Assistant Professor, Department of OBG nursing, ass Academy College of nursing, Sivaganga. International journal of scientific research. Volume: 4. November 2015.
9. Angel Rajakumari G. et al. Evaluate the effectiveness of selected nursing measures on labour outcome among primi gravid mothers. Journal of Science. Vol 5. Issue 8 .2015. 716-719.(43)
10. Fawziya Mohammed Nattah. European Journal of Scientific Research. Volume 135 No 2.October, 2015.