

**“EFFECTIVENESS OF PRESENCE OF SUPPORT PERSON ON LABOUR
OUTCOME AMONG PRIMI-PARTURIENT MOTHERS AT SELECTED
HOSPITALS OF NADIAD.”**

ABSTRACT

BACKGROUND: All pregnant women seek a comforting, encouraging companion during labour to assist them in managing the various difficulties of childbirth, such as pain, anxiety, exhaustion and ambiguity. The concept of “companion of choice at birth” entails having a supportive individual present continuously during labour and delivery. A birthing companion is essential for providing expectant mothers with vital information, procedural techniques and emotional support during labor. They facilitate communication between the medical staff and the mother, help keep her calm, mobile, hydrated and promote a positive environment. Additionally, they assist with Lamaze breathing techniques, guiding the mother through contractions and pushing with less physical tension, ultimately making the labor process smoother and more manageable.

OBJECTIVE:

1. To evaluate the effectiveness of presence of support person on labour outcome among primi-parturient women in experimental and control group.
2. To find out the association between labour outcome among primi-parturient women in experimental group and their selected demographic variable.
3. To find out the association between labour outcome among primi-parturient women in control group and their selected demographic variables.

METHODOLOGY: The quantitative research approach with post-test only control group design was used in this study with the sample size 30 in both experimental and control group in the selected Maternal hospital of Nadiad. Convenient sampling technique used for control and experimental group. Self-structured labour progress record to assess the labour progress, Visual analog scale to measure the level of pain and Modified HAM-A to assess the level of anxiety. The inferential and descriptive statistics was used.

RESULT: Effectiveness of presence of support person among primi-parturient mother measures the variables (level of pain, level of anxiety, labour progress). For the level of pain, the experimental group (mean = 6.56, SD = 1.47) reported lower pain compared to the control group (mean = 8.73, SD = 1.52), with a t-value of 2.0017. Regarding level of anxiety, the experimental group (mean = 12.07, SD = 8.93) experienced significantly lower anxiety than the control group (mean = 28.07, SD = 7.62), with a t-value of 2.0025. Finally, labour progress was more advanced in the experimental group (mean = 1.16, SD = 1.36) compared to the control group (mean = 2.2, SD = 1.14), with a t-value of 2.0167. All t-values indicate significant differences between the groups in each of the measured variables.

CONCLUSION: The study concluded that the presence of birth companion shows positive impact on labour progress. Thus, the birth companion policy must be adapted by every hospital in the nation.

KEY WORDS: Support person, Labour outcome, Primi parturient mother, Birth companion.

INTRODUCTION

In every nation and society across the globe, pregnancy and childbirth mark significant milestones in the lives of women and families, embodying a period of profound vulnerability.¹

Labor can be an intimidating experience for women, particularly during their first childbirth, as they may encounter a wide range of physical sensations, from mild discomfort to intense pain. However, ensuring that the woman feels as relaxed and informed as possible can help alleviate both the physical and emotional challenges of labor and delivery. This can be achieved through providing adequate care, timely updates, comfort, support and reassurance throughout the process.²

In traditional labour practices, women are typically supported by another woman. The concept of “**safe motherhood**” has traditionally focused solely on physical well-being. However, it is imperative to broaden the scope of safe motherhood beyond merely preventing illness or death to include upholding women’s fundamental human rights. This encompasses respecting women’s autonomy, dignity, emotions, choices and preferences including the provision of companionship during maternity care.³

All pregnant women seek a comforting, encouraging companion during labour to assist them in managing the various difficulties of childbirth, such as pain, anxiety, exhaustion and ambiguity. The concept of “**companion of choice at birth**” entails having a supportive individual present continuously during labour and delivery. A “**Doula**”, derived from the Greek term for a female caregiver, can fulfil these requirements and the continuous support provided by a doula labour can enhance childbirth experiences and outcomes.⁴

Labour companionship involves providing support to a woman during labour and childbirth, which can come from various sources like partners, family members, friends, doulas or health care professionals. It has been a traditional practice for women to have companions during childbirth however some healthcare initiatives have overlooked this tradition, leaving women to give birth alone in health facilities.⁵

OBJECTIVES OF THE STUDY

1. To evaluate the effectiveness of presence of support person on labour outcome among primiparient women in experimental and control group.

2. To find out the association between labour outcome among primi-parturient women in experimental group and their selected demographic variable.
3. To find out the association between labour outcome among primi-parturient women in control group and their selected demographic variables.

REVIEW OF LITERATURE

1) Jeyalakshmi (2011), conducted a study to evaluate the effectiveness of presence of support person on labour outcome among primi-parturient women at select hospital, Salem. Utilizing nonprobability convenience sampling, 60 prime parturient women divided into experimental (n=30) and control (n=30) groups. The tools use for this study were numerical pain intensity scale, modified Hamilton anxiety rating scale and observations record. The calculated was 't' value of 11.3 for level of labour pain, the calculated 't' values was 7.32 for level of anxiety and the calculated 't' value was 0.06 at $p < 0.05$ level shows the effectiveness of presence of support person.⁶

2) Parthasarathy S (2016, March 01), Performed qualitative study to assess Pain During Labour on Influencing Factors among Parturient During Confinement in Private or Government Hospital. The reported pain during labour was noted 6-7 hours after delivery by interacting with the patient. Continuous uneventful normal deliveries each in a government (group G) and a private hospital (group P) The incidence of severe pain was more in group G (43.5%) than group P (12%). There was no analgesic intervention in 68.5% in group G while it was 13.5% (27/200) in group.⁷

3) Romina Fakhraei and Jenepher Lennox Terrion (2017) conducted a qualitative study at The Ottawa Hospital, analyzing 300 self-report questionnaires from first-time mothers. Their findings highlighted the crucial role of supportive communication, especially emotional and informational support, in shaping the labor and birth experiences of primiparous women. The study underscored the distinct needs of first-time mothers compared to multiparous women, emphasizing the importance of tailored support in maternity care.⁸

MATERIAL AND METHOD:

Research approach: Quantitative research approach

Research Design: Post test only control group

Research Variable:

Independent Variable: Presence of support person

Dependent Variable: Labour outcome

Demographic Variables: Age, Religion, Residential status, Family type, Regular exercise, Education, Occupation, Monthly family income, Support person present during labour

Target Population: Consists of all the primi-parous mothers between the age group of 20-30 years living in Nadiad.

Research Setting: Maternal hospitals of Nadiad

Sampling Technique: Convenient sampling technique

Sample Size: Sample size for this study is 60 primi-parous mothers, 30 samples for experimental group and 30 samples for control group.

SAMPLING CRITERIA

➤ **Inclusion criteria:**

1. Primi-Parturient mothers who have completed 37 weeks of gestational age.
2. 20-30 years of age group
3. True labour pain and admitted to labour ward.
4. Vaginal delivery

➤ **Exclusion criteria:**

1. High risk mothers
2. Critical labour
3. 19 years of age
4. 31 years of age
5. Preterm and post-term deliveries
6. Lower Segment Cesarean Section (planned)

TOOL FOR DATA COLLECTION

Section- A: Demographic data

Section-B: Labour progress record

Section-C: Visual analog pain scale

Section-D: Modified Hamilton Anxiety Assessment Scale (HAM-A)

RESULT & DISCUSSION:**SECTION I: Description of the demographic variables of primi-parous mothers.**

The frequency and percentage distribution of the samples by their personal data in experimental and control group. The data shows that in **experimental group**, the largest age group consists of participants aged 23-25 years 10(33.33%). The majority identify as Hindu 16(53.34%). A significant portion of participants reside in rural areas 17(56.67%) and come from joint families 21(70%). Most participants do not engage in regular exercise 19(63.33%). Regarding education, the majority have completed primary school 16(53.33%). In terms of occupation, most participants are housewives 21(70%). The largest group of participants has a monthly family income of less than ₹20,000 13(43.33%). Lastly, most participants receive support from relatives 18(60%).

In the **control group**, the majority of participants are aged 20-22 years 15(50%). Most identify as Hindu 26(86.7%) and live in rural areas 27(90%). A large portion come from joint families 25(83.33%). Most participants do not engage in regular exercise 25(83.33%). The majority have completed primary school education 23(76.66%). Most are housewives 24(80%), and a significant portion has a monthly family income of less than ₹20,000 20(66.67%). All participants in this group reported having no support person present 30(100%).

SECTION II: DESCRIPTION OF THE LABOUR PROGRESSING VARIABLES OF PRIMI-PAROUS MOTHERS.

Table-1: Frequency and Percentage distribution of labour progress

[N=30]

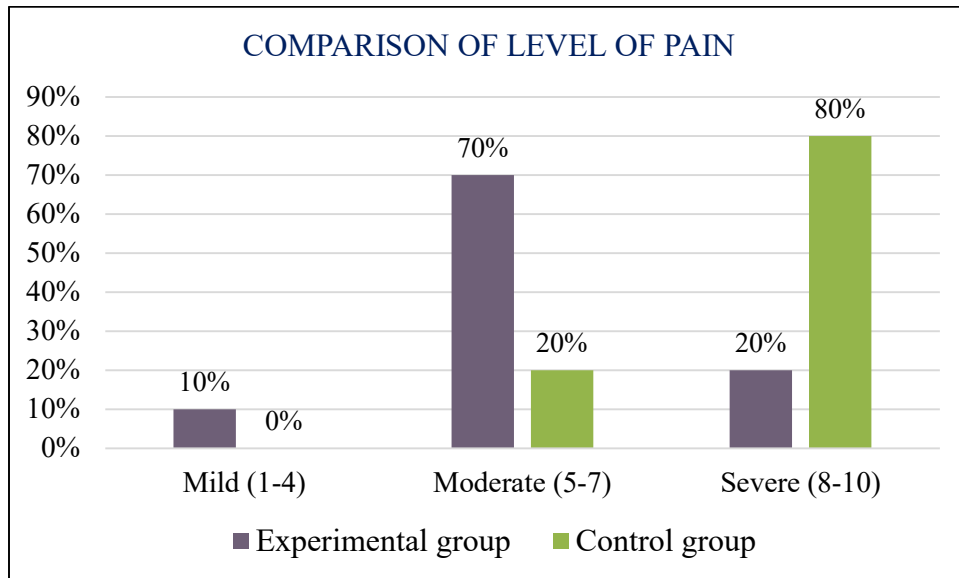
Sr. No.	Criteria for Labour Observation	Experimental Group		Control Group	
		Frequency	Percentage	Frequency	Percentage
1.	Mode of Delivery				
	a) Vaginal Delivery with or without episiotomy	25	83.33	29	96.67
	b) Assisted delivery (Forceps, Vacuum)	05	16.67	01	3.33
2.	Duration of 1st stage of labour.				
	a) \leq 12 hours	23	76.67	17	56.67
	b) $>$ 12 hours	07	23.33	13	43.33
3.	Duration of 2nd stage of labour.				
	a) \leq 2 hours	27	90	27	90
	b) $>$ 2 hours	03	10	03	10
4.	Duration of 3rd stage of labour.				
	a) \leq 30 minutes	26	86.67	25	83.33
	b) $>$ 30 minutes	04	13.33	05	16.67
5.	Total duration of labour.				
	a) \leq 18 hours	29	96.67	26	86.67
	b) $>$ 18 hours	01	3.33	04	13.33
6.	APGAR score at 1 minute.				
	a) \geq 7	19	63.33	09	30
	b) \leq 6	11	36.67	21	70
7.	APGAR score at 5 minutes.				
	a) \geq 7	26	86.67	11	36.67
	b) \leq 6	04	13.33	19	63.33

SECTION III: EFFECTIVENESS OF PRESENCE OF SUPPORT PERSON ON LABOUR OUTCOME AMONG PRIMI-PARTURIENT WOMEN IN EXPERIMENTAL AND CONTROL GROUP.

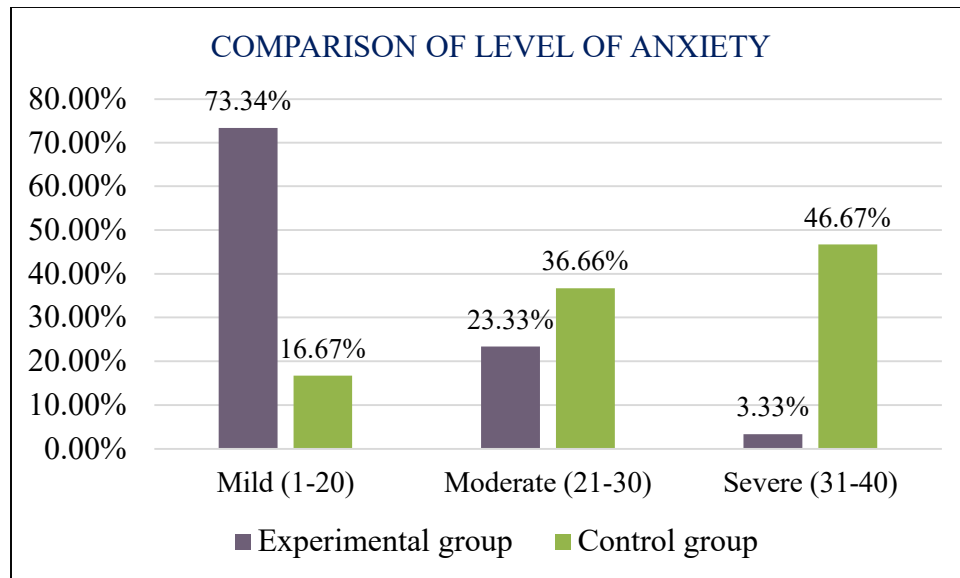
Table-2: Comparison between experimental and control group among the variables of level of pain, level of anxiety and labour progress.

[N=30]

Sr. No.	Variables	Maximum Score	Experimental Group		Control Group		t-value
			Mean	SD	Mean	SD	
1.	Level of Pain	10	6.56	1.47	8.73	1.52	2.0017
2.	Level of Anxiety	40	12.07	8.93	28.07	7.62	2.0025
3.	Labour Progress	07	1.16	1.36	2.2	1.14	2.0167



[Figure:1 Percentage distribution of pain levels among primi-parous mothers in the experimental and control groups.]



[Figure:2 Percentage distribution of anxiety levels among primi-parous mothers in the experimental and control groups.]

SECTION IV: ASSOCIATION BETWEEN LABOUR OUTCOME AMONG PRIMI-PARTURIENT WOMEN IN EXPERIMENTAL GROUP AND THEIR SELECTED DEMOGRAPHIC VARIABLE.

1: Association of selected demographic variables to the level of pain regarding presence of support person among primi-parous mothers in experimental group.

Association of selected demographic variables to the level of pain (classified as mild, moderate, or severe) regarding presence of support person among primi-parous mothers in experimental group. For each demographic variable, the number of individuals in each pain category is provided, along with the chi-square (χ^2) value and its corresponding degrees of freedom (df) and p-value. The chi-square tests assess the association between demographic factors and pain levels. Notably, significant associations are indicated by higher chi-square values and corresponding p-values (e.g., age, religion, and occupation), suggesting that certain demographic factors may influence the severity of pain experienced by individuals.

2: Association of selected demographic variables to the level of anxiety regarding presence of support person among primi-parous mothers in experimental group.

Association of selected demographic variables to the level of anxiety (classified as mild, moderate, or severe) regarding presence of support person among primi-parous mothers in experimental group. For each variable, the distribution of individuals in each anxiety category is provided, along with the chi-square (χ^2) value, degrees of freedom (df), and p-value, which assess the association between demographic factors and anxiety levels. Significant associations are indicated by higher chi-square values and p-values (e.g., age, religion, family type, occupation), suggesting that these demographic factors have an impact on the level of anxiety experienced by individuals. Notably, variables such as occupation, family income, and support person present show strong associations with anxiety levels.

SECTION V: ASSOCIATION BETWEEN LABOUR OUTCOME AMONG PRIMI-PARTURIENT WOMEN IN CONTROL GROUP WITH THEIR SELECTED DEMOGRAPHIC VARIABLE.

1: Association of selected demographic variables to the level of pain regarding presence of support person among primi-parous mothers in control group.

Association of selected demographic variables to the level of pain (classified as mild, moderate, or severe) regarding presence of support person among primi-parous mothers in control group. For each demographic category, the number of individuals in each pain level is shown, alongside the chi-square (χ^2) value, degrees of freedom (df), and p-value. These statistics help assess whether there is a significant association between demographic factors and pain severity. The table indicates that certain factors, such as age, education, family income, and occupation, show significant associations with pain levels, particularly higher pain severity among individuals from certain age groups, education levels, and income brackets. However, variables like support person presence and religion exhibit no significant relationship with pain severity, as indicated by low or zero chi-square values.

2: Association of selected demographic variables to the level of anxiety regarding presence of support person among primi-parous mothers in control group.

Association of selected demographic variables to the level of anxiety (classified as mild, moderate, or severe) regarding presence of support person among primi-parous mothers in control group. The chi-square (χ^2) values, along with degrees of freedom (df) and p-values, are provided to assess the significance of these associations. Notable findings include significant associations between age, family type, education, and occupation with anxiety levels, particularly showing higher anxiety in certain age groups, family structures, and education levels. For instance, individuals in the "Joint" family type experienced higher anxiety levels. However, variables like support person presence, religion, and residential status show weak or no significant associations, as indicated by low or zero chi-square values. The results suggest that demographic factors such as age and family type may have a considerable impact on the severity of anxiety experienced by individuals.

RECOMMENDATION

1. The similar study can be conducted with larger samples and different demographic variables.
2. A similar study can be do at different settings to strengthen findings.
3. A study can be conducted by retrospective research design.
4. The similar study can be conducted on birth companion.
5. The study can be conducted with aim to provide guideline.

CONSENT AND ETHICAL APPROVAL

The study was approved by the institutional ethical committee (IEC) of Dinsha Patel College of Nursing, Nadiad. There is a total 15 members in committee from various departments. The Ethical Approval Reference number is MAM Uni/IECHR/2024/51 And a formal written consent was gathered from the samples prior to data collection.

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