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Effectiveness of VATP on Use of Lamaze Breathing Exercise during First Stage of Labour Process among Staff Nurses

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ABSTRACT
Background: Lamaze breathing is a breathing technique based on the idea that controlled breathing can enhance relaxation and decrease the perception of pain. Some of the important techniques for controlled breathing include slow, deep breathing. Pregnancy and childbirth are one of the greatest events in the life of a woman which she aspires and longs for with great expectation.
Methods: The data were collected by using the structured close-ended knowledge questionnaire. From using the disproportional stratified random technique of 50 staff nurses. Attending HSK and Daddenavara hospital, Bagalkot in a pre-experimental survey. The data was analyzed by using descriptive and inferential statistics in terms of mean, frequency distribution, percentage, paired t-test and chi-square test.
Results: In post-test reveals that out of 50 staff nurses, the highest post-test (40%) of staff nurses had good knowledge, (30%) had excellent knowledge followed percentage (30%) of staff nurses with average knowledge. The overall findings reveal that the post-test knowledge score (30.54±5.66), which was (72.88%) of the total score was more when compared to the pre-test knowledge score (13±4.61), which was (36.05%) total score. The effectiveness of VATP in this area was a mean knowledge score of 17 with SD±1.04, which was (36.83%) of the total score. The calculated 't' value (17.77) was much higher than the table valve (1.96) for the degree of freedom 49 and 0.05% level of significance.
Conclusion: The study provides that a video-assisted teaching programme on knowledge regarding the use of Lamaze breathing exercises among staff nurses was a scientific, logical, and cost-effective strategy.

Key-words: Effectiveness, Knowledge, Staff nurses, Lamaze breathing exercise, VATP

INTRODUCTION
Lamaze Method was introduced to France by Dr Fernand Lamaze. In 1960, Karmel and Elisabeth Bing founded the American Society for Psychoprophylaxis (ASPO), now known as Lamaze International. Lamaze's clinic in Paris:

conscious relaxation and controlled breathing to manage the pain of contractions, avoiding the need for drugs.[1] Expecting mother wants to see a little bundle of the job by giving birth to a child. The fear and anxiety about childbirth often prevent most women from enjoying the experience, however, adequate knowledge about signs of labour and delivery, in general, can create feelings of confidence and a sense of well-being, which is very crucial in ensuring a successful labour and child birth.[2] Normal labour occurs between 37-42 weeks of gestation. Accompanying the physical changes, the women may have feelings of great intensity varying from exited anticipation to fearful expectancy.[3] Increase in

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confidence Improved knowledge about how they can cope and work during labour will help the woman to have a positive childbirth. [4]

Lamaze is a method of childbirth in which the expectant mother is prepared psychologically and physically to give birth without the use of pain-relieving drugs**.** Lamaze is a breathing technique used to help the pregnant mother to relax during labour. Lamaze breathing is a coping mechanism that allows for decreasing the perception of pain associated with delivery. In this Lamaze method women for safe, healthy birth by providing current and evidence-based information given to the mothers.[5]

When the cervix is <5 cm dilated, contractions occur at 2-4 mts and last for 40-60 sec. The rate of respiration is 10 or fewer breaths in a minute, increasing to 12/min as labour intensifies. During the active part of the first stage of labour from the active part of the first stage of labour, up to the second stage, the cervix is 5cm to nearly fully dilated as fast as once a second at the peak and slowly to every 6 sec as the uterus relaxes. She is relaxing her perineal and vaginal muscles, and to take a cleansing breath at the beginning and end of each contraction.[6]

Lowe, (1996) stated that confidence may be increased with the Lamaze method which provides detailed information about childbirth, vicarious experiences, and techniques to increase coping ability during labour.[7]

Women in labour should be encouraged to trust their instincts, and listen to their bodies. An increase in confidence has associated with a lower level of pain experienced during labour. The Lamaze method of childbirth includes a set of breathing exercises and we teach these exercises to staff nurses. Teaching the knowledge about how they can cope and work during labour will help the woman to have a positive childbirth experience.[8]

MATERIALS AND METHODS

A pre-experimental design with one group pre-test, post-test without control group design was used to assess the effectiveness of the video-assisted teaching (VAT) programme on staff nurses' knowledge regarding the use of Lamaze breathing exercise to ease the labour process during the first stage of labour in selected hospitals of Bagalkot district. A Knowledge structured questionnaire was administered and the data obtained was organized and analysed by use of Descriptive and Inferential statistics.

Study design- The research design adopted for this study was a pre-experimental one-group pre-test –post –test without control group design. Here one experimental group of clients were selected with simple randomization and no control group is used. A pre-test was conducted among staff nurses using a structured questionnaire on Labour and Lamaze breathing exercises. The intervention was given in the form of video-assisted teaching (VAT) programme on knowledge regarding the use of Lamaze breathing exercises to ease the labour process during the first stage of labour among staff nurses.

The setting of the study Setting is the Physical location and conditions in which data collection will occur. The present study was conducted in a selected hospital Bagalkot. The study setting was selected according to the availability of staff nurses working in the labour ward Bagalkot. Participants: A sample consists of the subject of units that comprise the population for the present study. In this study sample size is (n=50) staff nurses working in labour ward in selected hospital Bagalkot.

Instruments- A structured closed-ended knowledge questionnaire. Data was collected using Self Administration Questionnaire with the use of a structured closed ended knowledge questionnaire. It consists of 40 knowledge items related to labour and knowledge questionnaires related to the lamaze breathing exercise. These items were closed-ended, multiple-choice questions. A seeking system is developed for the item each correct answer is assigned a score of one wrong answer or a score of zero. The total score is 40.

Data Collection Procedure- The main study was conducted for 4 weeks between 21/6/2022 to 14/7/2022 at Hanagal Shri kumareshwar hospital and Research Centre, Navanagar, Bagalkot, Daddenavar hospital Bagalkot and Shirur multispeciality hospital Bagalkot, India.

Variables of the study- Dependent variable: In this study, it refers to the knowledge regarding the use of Lamaze breathing exercises among staff nurses. Independent variable: video-assisted teaching programme on knowledge regarding the use of Lamaze breathing exercises among staff nurses.

Statistical Analysis- The data was analysed using SPSS 18 statistical package. Numerical data obtained from the sample was organized and summarized with the help of descriptive statistics like percentage mean, and standard deviation. Association between post-test knowledge score of staff nurses. Working in labour wards in selected hospitals Bagalkot and Chi-square tests were used to analyze the association of knowledge with socio-demographic variables.

Ethical Approval- Ethical clearance certificate was obtained from B.V.V.S Sajjalashree Institute of Nursing Sciences, the institutional ethical committee. Written consent was obtained from each participant.

RESULTS

Socio-demographic characteristics of staff nurses- Percentage-wise distribution of staff nurses according to their age groups reveals that out of 50 subjects, a higher percentage (62%) of staff nurse are in the age group of 21-25 years, (24%) of the staff nurses are in the age of 26-30years only (14%) of the staff nurses age in the age group of 31-35years, The highest percentage (62%) of staff nurses in the age group of 21-25 years. Percentage-wise distribution of staff nurses according to their educational status shows that the highest percentage (80%) of staff nurses have studied Diploma in nursing, (10%) of staff nurses have studied BSc nursing, (10%) of staff nurses have studied Post basic BSc nursing. It shows that the majority of staff nurses have studied Diploma in nursing. Percentage-wise distribution of staff nurses according to their no of habitual residents reveals that out of 50 staff nurses, the highest percentage (82%) of staff nurses are living in an urban area, and only (18%) of staff nurses are living in a rural area. The highest

percentage (82%) of staff nurses are living in an urban area. Percentage-wise distribution of staff nurses according to their professional experience reveals that out of 50 staff nurses, the highest percentage (70%) of staff nurses in the experience group of 1-3 years, (18%) of staff nurses in the experience group of 4-6years, (12%) in the experience group of 7-9 years. The highest percentage (70%) of staff nurses in the experience group of 1-3 years. Percentage-wise distribution of staff nurses according to their professional experience reveals that out of 50 staff nurses, the highest percentage (88%) of staff nurses in the experience was gained private hospital, only (10%) of staff nurses in the experience gained in Govt hospital, (2%) staff nurses in the experience was gained in community primary health centres. The highest percentage (90%) of staff nurses in the experience was gained in a private hospital. Percentage-wise distribution of staff nurses according to their experience in the labour word reveals that out of 50 staff nurses, the highest percentage (86%) of staff nurses had experience in a labour ward of 1-3year, (14%) a percentage of staff nurses had experience in labour ward of 4-6years, and (10%) of staff nurses had experience in labour ward of 7-9 years, only (4%) had the experience in the labour ward. It reveals that the highest percentage (86%) of staff nurses the experience in the labour ward. Percentage-wise distribution of staff nurses according to their in-service education program reveals that out of 50 staff nurses, the highest percentage (92%) of staff nurses is not attending in-service education program. Only (8%) of staff nurses have attended in-service education programmes (Table 1).

Table 1: Distribution of cases and controls according to their socio-demographic characteristics

S.No	Socio-demo graphic factors	Character	Frequency (f)	Percentage (%)
1	Age	21-25Y	31	62
		26-30Y	12	24
		31-35Y	7	14
2	Religion	Hindu	40	80
		Muslim	6	12
		Christian	4	8
		Other	0	0
3	Type of family	Nuclear family	45	90
		Joint family	**5**	10
		Extended family	0	0
		Single parent	0	0

4	Educational Qualification	Diploma in Nursing	40	80
		BSc Nursing	5	10
		Post-basic BSc nursing	5	10
		Any other	0	0
5	Habitual residence	Rural	9	18
		Urban	41	82
6	Professional experience	1-3Y	35	70
		4-6Y	9	18
		7-9Y	6	12
7	Institution, where experience was gained	Govt hospital	5	10
		Private hospital	43	86
		Community primary health centres	2	4
8	Family monthly income	Below 5000/M	0	0
		5001-10,000/M	41	82
		10,001-20,000/M	6	12
		More than 20,000/M	3	6
9	Source of information	Electronic media TV	0	0
		New media (mobile and internet)	40	80
		Peer group and social group	5	10
		Health professionals	5	10
10	Experience in the labour ward	1-3Y	43	86
		4-6Y	7	14
		7-9Y	5	10
		More than 10Y	2	4
11	In-service education programme	Yes	4	8
		No	46	92

Comparison of the knowledge level of staff nurses in pre-test and post-test - Knowledge-wise comparison of staff nurses in pre-test reveals the following results. In the pre-test, out of 50 staff nurses, the highest percentage 78% of staff nurses had poor knowledge, 16% of staff nurses had average knowledge, followed by lowest percentage 6% of a staff nurse with very poor knowledge None of the staff nurses had excellent and good knowledge labour and Lamaze breathing exercise.

Percentage-wise distribution of staff nurses working in the labour ward in the post-test reveals that out of 50 staff nurses, the highest post-test (40%) of staff noses had good knowledge, (30%) had excellent knowledge followed percentage (30%) of staff nurses with average knowledge. None of the staff nurses had excellent and good knowledge regarding labour and Lamaze breathing exercise, excellent and good knowledge regarding labour and Lamaze breathing exercise (Table 2, Fig. 1).

Table 2: Percentage-wise distribution of staff nurses to a level of knowledge in pre-test and post-test (N=50)

Level of knowledge	Pre-test		Post-test	
	No of respondents	Percentage (%)	No respondents	Percentage (%)
Excellent	0	0	15	30
Good	0	0	20	40
Average	8	16	15	30

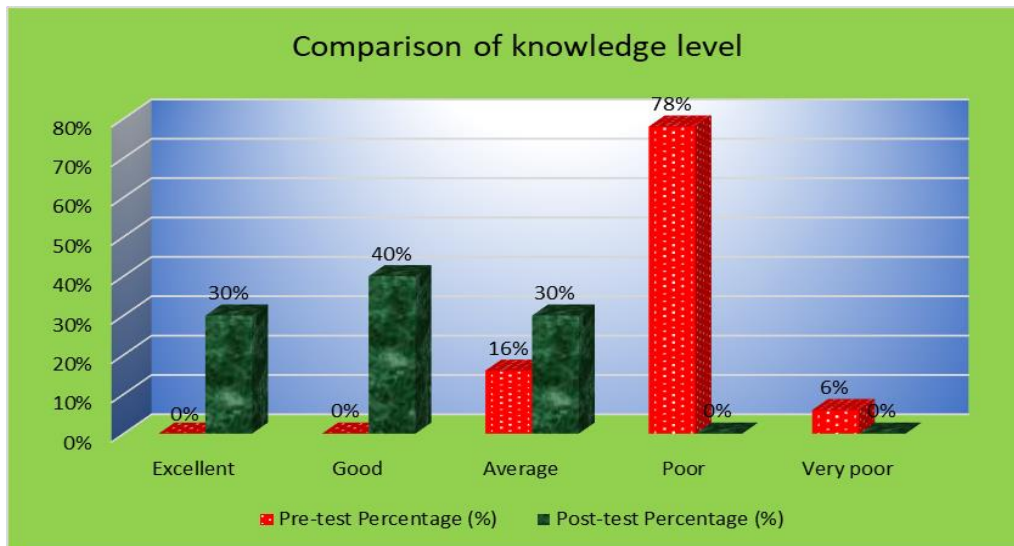|				
Poor	39	78	0	0
Very poor	3	6	0	0
Total	50	100	50	100

Fig. 1: Percentage-wise distribution of staff nurses to a level of knowledge in pre-test and post-test

Area-wise means, SD and mean percentage of the knowledge score in pre-test and post-test- Area-wise comparison of the mean and standard deviation of the knowledge score of the pre-test and post-test reveals an increase in the mean knowledge score of the staff nurses after the video-assisted teaching programme. A comparison of the mean percentage of the knowledge score in the pre-test and post-test reveals an increase of (44.5%) percentage in the mean knowledge score of the staff nurses after assisted teaching programme. Comparison of area-wise mean and SD of the knowledge score in the area of knowledge questionnaires on labour "shows that the post-test mean of knowledge score in this area was 15.1 with SD±2.80058, which was 77.2 % of the total score. Whereas the pre-test mean knowledge score was 7.16 with SD±2.5663, which was 38.5% of the total score. The effectiveness of VATP in this area was a mean knowledge score of 8.28 with SD ± 0.23428, which

was 41.4% of the total score. The area of knowledge regarding knowledge questionnaires related to the Lamaze breathing exercise shows that the post-test mean knowledge score was 15.1 with SD±2.86606, which was 75.5% of the total score. Whereas, the pre-test mean knowledge score was 6.2 with SD±2.0503, which was 31% of the total score. The effectiveness of VATP in this area was mean 8.9 knowledge score of SD±0.81576 which was (44.5%) of the total score. The overall findings reveal that the post-test knowledge score (30.54±5.66), which was (72.88%) of the total score was more when compared to the pre-test knowledge score (13±4.61), which was (36.05%) total score. The effectiveness of VATP in this area was a mean knowledge score of 17 with SD±1.04, which was (36.83%) of the total score. Hence, it indicates that the VATP was effective in enhancing the knowledge of staff nurses (Table 3).

Table 3: Area-wise mean, SD and mean percentage of the knowledge score in pre-test and post-test (N=50)

Knowledge area	Max Score	Pre-test (01)		Post-test (02)		Effectiveness (02-01)	
		Mean±SD	Mean(%)	Mean±SD	Mean(%)	Mean±SD	Mean(%)
Knowledge questionnaires on Labour	20	7.16±2.5663	38.5	15.44±2.80058	77.2	8.28±0.23428	41.4
Knowledge questionnaires related to Lamaze breathing exercise	20	6.2±2.0503	31	15.1±2.86606	75.5	8.9±0.81576	44.5
Total	40	13±4.61	36.05	30.54±5.66	72.88	17±1.04	36.83

Significant difference between the pre-test knowledge and post-test knowledge score of staff nurses working in selected hospital Bagalkot- As the calculated 't' value (17.77) was much higher than table valve (1.96) for the degree of freedom 49 and 0.05% level of significance (Table 4).

Table 4: Significant difference between the pre-test knowledge and post-test knowledge score of staff nurses working in selected hospital Bagalkot

Test	Mean	Mean Diff.	SD Diff.	Paired t-value	Table value
Pre-test	13.36	17.12	0.95	17.77	1.96
Post-test	30.48				

Association between post-test knowledge score of staff nurses working in selected hospital Bagalkot- Chi-square value is lesser than table value for socio-demographic variables Age (x^2=0.898814, *p*=0.05) Religion (x^2=0.232414, *p*=0.05) Type of family (x^2=0.272681, *p*=0.05) Educational qualification (x^2=0.507387, *p*=0.05) Residence (x^2=0.772822, *p*=0.05) Professional experience (x^2=0.84873, *p*=0.05), Institution where the experience was gained (x^2=0.428237, *p*=0.05), Monthly family income (x^2=0.333906, *p*=0.05) Source of information (x^2= 0.507387, *p*=0.05), Experience in labour ward (x^2=0.351732, *p*=0.05), Have attended in-service education programme (x^2=0.313659, *p*=0.05) (Table 5).

Table 5: Association between post-test knowledge score of staff nurses working in selected hospital Bagalkot (N=50)

S.No	Socio-demographic variables	DF	Chi-square-valve	Table value	P-value	Association
1	Age	1	0.898814	1.96	0.05	NS
2	Religion	1	0.232414	1.96	0.05	NS
3	Type of family	1	0.272681	1.96	0.05	NS
4	Educational Qualification	1	0.507387	1.96	0.05	NS
5	Residence	1	0.772822	1.96	0.05	NS
6	Professional experience	1	0.84873	1.96	0.05	NS
7	Institution, where experience was gained	1	0.428237	1.96	0.05	NS
8	Monthly family income	1	0.333906	1.96	0.05	NS

9	Source of information	1	0.507387	1.96	0.05	NS
10	Experience in labour ward	1	0.351732	1.96	0.05	NS
11	Have attended in-service education programme	1	0.313659	1.96	0.05	NS

NS= Not significant; DF- Degree of freedom

DISCUSSION

The present study was conducted to find out the video-assisted teaching programme on Lamaze breathing exercises among staff nurses. Attending the selected hospital Bagalkot. To achieve the objectives of the study, the pre-experimental research design was adopted. A sample of 50 staff nurses was selected using a disproportional stratified random technique.

The present study shows that most staff nurses according to their age groups reveals that out of 50 subjects, a higher percentage (62%) of staff nurses are in the age group of 21-25 years, (24%) of the staff nurses are in the age of 26-30years only (14%) of the staff nurses age in the age group of 31-35years. The highest percentage (62%) of staff nurses in the age group of 21-25 years.

An experimental study was conducted on the effectiveness of Video-assisted Teaching on the Knowledge of Staff Nurses regarding Lamaze Breathing Exercises during the First Stage of labour among Primi Parturient Mothers in Bhopal, Madhya Pradesh, India. They have selected 60 staff nurses. The tools used for conducting the study included demographic data and a self-structured questionnaire to assess the knowledge of both groups. The study results show that It is observed, that in the experimental group, a majority of staff nurses (13 (43.33%) belonged between 21-25 years of age, 12 (40%) were between 26-30 years of age, and 5 (16.66%) staff nurses belonged to 31-35 years of age group a majority of staff nurses (18 (60%) belonged to 21-25 years of age, 10 (33.33%) were between 26-30 years of age and 2 (6.66%) staff nurses belonged to 31-35 years of age group the experimental group, a majority of the staff nurses (19 (63.33%) had 1-3 years of professional experience, 8 (26.66%) staff nurses had 4-6 years of experience, and 3 (10%) staff nurses had 7-9 years of professional experience. In the control group, most of the staff nurses (21 (70%)) had 1-3 years of professional experience, 5 (16.66%) staff nurses had 4 to 6 years of

professional experience, and 4 (13.33%) staff nurses had 7-9 years of professional experience. Hence, we should include video-assisted teaching to promote knowledge on the subject among staff nurses. [9]

Most staff nurses according to their Type of family reveals that out of 50 staff nurses, the highest percentage (90%) of staff nurses have nuclear, (10%), staff nurses have joint, (0%) staff nurses have extended family, and only (0%) staff nurses have a single parent. The highest percentage90% of staff nurses belong to the nuclear family.

The present study's majority of their educational status shows that the highest percentage (80%) of staff nurses have studied Diploma in nursing, (10%) of staff nurses have studied BSc nursing, (10%) staff nurses have studied Post basic BSc nursing. It shows that the majority of staff nurses have studied Diploma in nursing.

A semi-prospective case-control study was conducted to assess the evidence-based research studies supporting the use of Lamaze breathing exercises for childbirth preparation at Aberdare District Maternity Unit, Mid Glamorgan, and Wales in 2011, among One hundred twenty-six primigravida women. The results show that the mean lengths of the first stage of labour in the primigravida women were 6.4 h after hypnosis and 9.3 h in the control group ($p<0.0001$); the mean lengths of the second stage were 37 min and 50 min, respectively ($p<0.001$). In the multi-parous women, the corresponding values were 5.3 h and 6.2 h ($p<0.01$); and 24 and 22 min (ns). The use of analgesic agents was significantly reduced ($p<0.001$) in both hypnotized groups compared with their controls. The study concluded that in addition to demonstrating the benefits of hypnotherapy, the study gives some insight into the relative proportions of mechanical and psychological components involved in the longer duration of labour in primigravida women. The hypnotized groups had a reduction in the duration of both the first and second stages of labour.[10]

Many staff nurses work in labour wards in selected hospitals in Bagalkot. their knowledge of habitual

residence reveals that out of 50 staff nurses, the highest percentage (82%) of staff nurses are living in an urban area, only (18%) of staff nurses are living in the rural area. The highest percentage (82%) of staff nurses are living in an urban area. A quasi-experimental study was conducted in India to evaluate the effectiveness of slow-paced breathing on pain perception during the first stage of labour among primipara mothers. Slow-paced breathing was taught to the experimental group before the labour pain started which they practised during labour. Pain perception level was measured using a pain intensity scale and facial pain scale. The investigator concluded that mothers who practised slow-paced breathing reported a significant reduction in pain perception. The mean value of 4.28 in the experimental group and 6.22 in the control group using the pain intensity scale. The computed t" value of 6.35 reveals that slow-paced breathing is effective at 5% level of significance.[11]

A study on the efficiency of massage therapy and breathing techniques on pain intensity and physiological responses to labour pain. The researcher took 40 primi gravida mothers, satisfying the inclusion criteria were selected and randomly divided for massage and breathing techniques. The pain intensity is measured by a numerical pain intensity scale. The study concluded that both techniques are effective in labour pain relief and decrease the caesarean section rate. [12]

The present study shows that according to their professional experience reveals that out of 50 staff nurses, the highest percentage (70%) of staff nurses in the experience group of 1-3 years, (18%) of staff nurses in the experience group of 4-6years, (12%) in the experience group of 7-9years. The highest percentage (70%) of staff nurses in the experience group of 1-3 years.

A true experimental study has conducted the Effectiveness of a Planned Teaching Programme on Lamaze Technique in terms of Knowledge and Skill of Staff Nurses Working in the Antenatal Ward and Labour Room in a Maternity Hospital in Kashmir they have selected 50 staff nurses working in the labor room selected by simple random technique. The researcher has collected the data - The structured knowledge questionnaire of the Planned teaching programme. Majority of the subjects (20) 66.6% had an experience of more than 10 years, (5) 16.6% had the experience of 7-9

years, (4) 13.3% had an experience of 4-6 years and only (1) 3.30% had an experience of 1-3 years. (9)30% of sample subjects had an experience of 7-9 years, (9) 30% had an experience of 4-6 years, (9) 30 % had an experience of 1-3 years and only (3) 10% had more than 10 years of experience in the antenatal ward and labour room. Nurse educators need to organize short-term training programmes or workshops on the Lamaze technique for the staff nurses working in the antenatal ward and labour room.[13]

Jhala [14] conducted a descriptive study to evaluate the intensity of the labour pain at the two stages of cervical dilatation, (cervical dilation of 2-5cm and 6-10 cm) at East Cardinal University, school of nursing, Greenville, 78 women in labour were selected through convenient sampling technique. Using 3 self-reported measures such as VAS, present pain intensity scale and MC Gill pain questionnaire carried out the pain assessment. These were the one observational measure to rate the behavioral index of pain. The data were analysed by descriptive and inferential statistics. The result of the study shows that when cervical dilation increased, there was a significant increase in self-report pain and observed pain on all the cited measures (t=15.72, *p*=0.01). The pain was characterized as discomforting during early dilation and distressing horrible and excruciating as dilatation progressed.[14]

In the present study majority of staff nurses according to their professional experience reveals that out of 50 staff nurses, the highest percentage (88%) of staff nurses in the experience was gained private hospital, only (10%) of staff nurses in the experience was gained in Govt hospital, (2%) staff nurses in the experience was gained in community primary health centres. The highest percentage (90%) of staff nurses in the experience was gained in a private hospital.

Kaur and Rana [15] conducted a quasi-experimental study to assess the effect of video on breathing exercises among staff nurses. 40 samples were purposely selected, were randomly allocated 20 each into experimental and control groups. A self-constricted structure questionary was used to collect the data. The study concluded that breathing exercises were found to be an effective effectiveness of video among staff nurses. [15]

Percentage-wise distribution of staff nurses according to their family monthly income reveals that out of 50 staff nurses, the highest percentage (82%) of staff nurses are

getting 5001-10,000 monthly income, only (12%) of staff nurses are getting 10,001-20,000 monthly incomes, (6%) of staff nurses are getting more than 20,000 monthly incomes, (0%) staff nurses getting below 5000 monthly income. It reveals that the majority (82%) of staff nurses are working in the labour ward in selected hospitals in Bagalkot their family income is 5001-10,000 monthly income. In most staff nurses according to their source of information reveal that out of 50 staff nurses, the highest percentage (80%) of staff nurses had a source of information through media mobile and the internet, (10%) a percentage of staff nurses had information through friends and social group, and (10%) of staff nurses had information through a health professional, 0% had the information through TV. It reveals that the majority (80%) of staff nurses under the study had higher sources of information through new media, mobile and the internet.

Percentage-wise distribution of staff nurses according to their experience in the labour word reveals that out of 50 staff nurses, the highest percentage (86 %) of staff nurses had experience in labour ward for 1-3year, (14%) a percentage of staff nurses had experience in labour ward of 4-6years, and (10%) of staff nurses had experience in labour ward of 7-9years, only (4%) had the experience in the labour ward. It reveals that the highest percentage (86%) of staff nurses the experience in the labour ward. In the present study majority of staff nurses according to their in-service education program reveal that out of 50 staff nurses, the highest percentage (92%) of staff nurses is not attending in-service education programs. Only (8%) of staff nurses have attended in-service education programmes.

A study to evaluate the effectiveness of guided training in Lamaze breathing exercises among staff nurses. The investigator used a non-probability purposive sampling technique for the selection of samples 60 in the experimental group. The tool used self-structured questionnaires. The study revealed that there was a high significant difference between the pre-test and post-test at *p*<0.001. Hence, the study concluded that more effective guidance and training to improve knowledge regarding Lamaze breathing exercises in staff nurses.[16]

Experimental research was conducted to assess the effectiveness of Lamaze breathing techniques on labour pain and anxiety The study was conducted at the Community Health centre, kolar road, Bhopal (M.P.) have

selected 60 primigravida mothers. for the present study by following simple random techniques, the researcher has collected the data in the interview method. by use of a pain perception scale, and an observational rating scale for performing Lamaze breathing. The results of the study mean of the control group are 7.55 and of the experimental group are 4.55, mean percent is 75.5% and 45.5% of the control and experimental group respectively and, SD of the control group is 0.945 and for the experimental group, it is 1.234. The 't' value is 3.96 and the P-value is *p*<0.001, which is highly significant. The study has concluded that Continuous ongoing assessment helped to evaluate the performance of breathing exercises during pregnancy and labour. The practice of breathing exercises shortens the duration of labour and prevents complications during labour. [17]

The present study shows that knowledge regarding knowledge questionnaires related to the Lamaze breathing exercise shows that the post-test mean knowledge score was 15.1 with SD±2.86606, which was 75.5% of the total score. Whereas the pre-test means knowledge score was 6.2 with SD±2.0503, which was 31% of the total score. The effectiveness of VATP in this area was mean 8.9 knowledge score of SD±0.81576, which was (44.5%) of the total score. A quasi-experimental study was conducted in Thailand to determine the effect of childbirth preparation on fear, labour pain, coping behaviour and childbirth satisfaction among 60 primi Para women. In the control group, 30 subjects received only routine care from staff nurses and 30 subjects in the experimental group received routine care plus childbirth preparation classes. Results revealed that the primiparas in the experimental group had better labour pain coping behaviour (16.37) than those in the control group (15.18). The study also showed that childbirth satisfaction was (82.77) in the experimental group and was higher than those in the control group (76.03).[18]

In many post-test knowledge scores (30.54±5.66), which was (72.88%) of the total score was more when compared to the pre-test knowledge score (13±4.61), which was (36.05%) total score. The effectiveness of VATP in this area was a mean knowledge score of 17 with SD±1.04 which was (36.83%) of the total score. Hence it indicates that the VATP was effective in enhancing the knowledge of staff nurses.

Thomas and Dhiwar [19] conducted a study on the effectiveness of patterned breathing exercises in pain reduction during first stage of labour in Pune city. The study design used was a non-equivalent pre-test post-test control group design. A numeric pain intensity scale was used to assess the pain. In the active phase of labour patients is selected and instructed to practice patterned breathing for the experimental group. A pre-test was assessed on admission and a post-test was assessed every hour 5 times. The study concluded that the mean post-test score of the experimental groups was lower than the control group. Hence, it is effective in the reduction of labour pain perception.[19]

Varalakshmi *et al.* [20] shows that the Chi-square value is lesser than the table value for socio-demographic variables, age (x^2=0.688702, *p*=0.05), religion (x^2=0.831871, *p*=0.05), type of family (x^2=0.705857, *p*=0.05), educational qualification (x^2=0.390008, *p*=0.05) Residence(x^2=0.1712795, *p*=0.05), professional experience (x^2=0.851205, *p*=0.05), an institution where the experience was gained (x^2=0.7773, *p*=0.05), monthly family income (x^2= 0.4624, *p*=0.05), source of information (x^2= 0.288844, *p*=0.05), experience in labour ward (x^2=0.8231, *p*=0.05), have attended in-service education programme (x^2=0.863771, *p*=0.05).

The quasi-experimental design was used selected to assess the effectiveness of the Lamaze breathing exercise on labour pain and anxiety. The study was conducted among 120 samples of primi mothers, 60 each in experimental and control groups. The purposive sample technique was used for selecting the sample. Data were collected from the subject using a numerical rating scale. The experimental group was given Lamaze breathing exercises for 10 days. The results reveal that the calculated t-value for the experimental group is t=27.4746, which is found to be significant at *p*>0.05 level and the t value for the control group is t=5; 7930, which is found to be significant at *p*>0.05, so, Lamaze breathing on labour pain among primiparous mothers. The results reveal that the calculated t value for the experimental group is t=16.7042, which is found to be significant at *p*>0.05 level and the t value for the control group is t=9.5537, which is found to be significant at *p*>0.05, so, the effectiveness of Lamaze breathing on labour anxiety. [20]

CONCLUSIONS

It is conducted that the Lamaze breathing exercise could be used in reducing pain and anxiety. The study is helpful to find the effectiveness of the video-assisted teaching (VAT) programme on staff nurses' knowledge regarding the use of the Lamaze breathing exercise to ease the labour process during the first stage of labour, attending the selected hospital Bagalkot.

Future research can investigate the effect of various methods to reduce labour pain to improve the confidence level of mothers.

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