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Effectiveness of Mindfulness Moist Mouth Technique on Level of Pain During Intravenous Cannulation among Patients Admitted at Selected Hospitals.

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Abstract

"The goal of life is to make your heartbeat match the beat of the universe, to match your nature with nature." Crucial for effective pain management, enabling healthcare providers to understand a patient's experience, track progress, and tailor treatment plans. effective for improving many bio psychosocial conditions, including depression, anxiety, stress, insomnia, addiction, psychosis, pain, hypertension, weight control, cancer-related symptoms and prosaically behaviours. About 36.7% of the patients were in age group of 18-28 and 33.3% of them were age 29-38. This study aimed to assess the effectiveness of mindfulness moist mouth technique on level of pain during intravenous cannulation among patients admitted at selected hospitals.

The study used a quantitative research strategy as its research methodology. Post-test only control group design were Quasi experimental, and non-randomized, according to the researcher. Goal attainment transaction model developed by king's. The study's accessible population was made up of patients admitted at selected hospitals. There were 60 people in the sample (experimental group 30, control group 30) who were chosen using a non-probability convenient sampling technique by the inclusion criteria. The tool includes standardized scale Wong-backer faces pain rating scale and demographic data.

Descriptive and inferential statistics were used in the data analysis. The paired t-test and two-sample t-test are used to find the effectiveness of mindfulness moist mouth technique on level of pain during intravenous cannulation among patients admitted at selected hospitals. Fisher's exact test is used to find the association between among patients admitted at sleeted hospitals regarding level of pain during intravenous cannulation and selected demographic variables.

Result: Average pain score in experimental group was 1.5 which was 4.5 in control group. T-value for this test was 6.2 with 58 degrees of freedom. P-value corresponding to this test XVII was small (less than 0.05), the null hypothesis is rejected. It is evident that the mindfulness moist mouth technique is significantly effective in reducing the pain based on VAS among admitted patients.

KEYWORDS: mindfulness moist mouth technique, level of pain, intravenous cannulation.

INTRODUCTION

Mindfulness moist mouth (MMM) technique (intravenous cannula) when stressed, it is common for individual to have dry mouth, health professionals can guide a patient to move the tongue around the gums and gently squeeze the tip of the tongue, stimulating the buccal response a physiological response to pressure that stimulates flow of saliva (Ono et al, 2007). Sipping and holding water or saliva on the tongue can interrupt escalating anxiety (Mackereth and Maycock, 2010). Doing this in a mindfulness way introduces a means of self-soothing, slows rapid over-breathing and contrasts with the discomfort of the anxious dry mouth. By performing the mindfulness moist mouth technique (MMM) with the patient the nurse or therapist can facilitate a teachable moment and a joint calming experience.[1]

Blood is pumped through the circulatory system, a network of blood vessels, when the heart beats. The flexible tubes that convey blood to every area of the body are called blood vessels. The radial vein, basilic vein, cephalic vein, medial vein, and dorsal vein are the body's most prevalent peripheral veins. Patients in the ward, in the emergency room, and those undergoing preoperative surgery frequently undergo intravenous cannulation. The operation hurts a lot. Patients worry and fear using needles. It might be challenging to perform intravenous

cannulation procedures when the patient's veins are not always visible or palpable. Using the moist mouth technique while practising mindfulness is a very effective way to enhance intravenous cannulation.[2]

During intravenous cannulation (IV) procedures, patients frequently feel severe pain. By minimising procedure-induced pain, service quality is improved and patient suffering is reduced. (Ihor Balanyuk, Giuseppina Ledone) aimed to evaluate the efficacy of a non-pharmacological technique (distraction) and an anaesthetic cream for the reduction of procedural discomfort during intravenous cannulation. The study found that the local anaesthetic considerably reduced pain perception compared to the distraction technique 2 (U=347, p.001, r=.42). It demonstrates how important the nurse-patient relationship is to nursing care since it fosters the growth of trust with the patient and increases compliance throughout the course of care.[3]

NEED OF THE STUDY

The most frequent invasive medical operation is undoubtedly the insertion of an intravenous cannula. Although technically simple and rarely painful for patients, insertion can occasionally be difficult and time-consuming. The insertion of cannulas in intravenous medication is notoriously challenging. In addition, the treatment is challenging for patients who are obese, dark in colour or infants and children. Long-term hospital patients require long-term intravenous cannulas for IV therapy, and per hospital protocol, cannulas need to be changed every 48–72 hours to avoid cannula site infections.[13]

Intravenous cannulation (IV) is a painful procedure that patient were to undergo as soon as he/she is admitted to hospital. Hence it may be procedure of rejection since it is painful. As being a nurse we must have to convey 5 patient that even though it is painful it is necessary to gain intravenous access for medication administration. As a part of nursing management such kind of study may play an important role in increasing easy acceptance of this painful procedure by the patients.[14]

METHODOLOGY

The current research study was designed to assess the **effectiveness of mindfulness moist mouth technique on level of pain during intravenous cannulation among patients admitted at selected hospitals.**

The study used a quantitative research strategy as its research methodology. Post-test only control group design were Quasi experimental, and non-randomized, there were 60 people in the sample (experimental group 30, control group 30) who were chosen using a non-probability convenient sampling technique The tool includes standardized scale Wong-backer faces pain rating scale and demographic data. In the data analysis, both descriptive and inferential statistics have been used. Mindfulness moist mouth technique compared level of pain during intravenous cannulation is measured using the paired t-test and the two-sample t-test. The score among level of pain during intravenous cannulation and particular demographic factors is investigated using Fisher's exact test.

RESULTS

SECTION I- Distribution of samples (admitted patients) based on personal characteristics

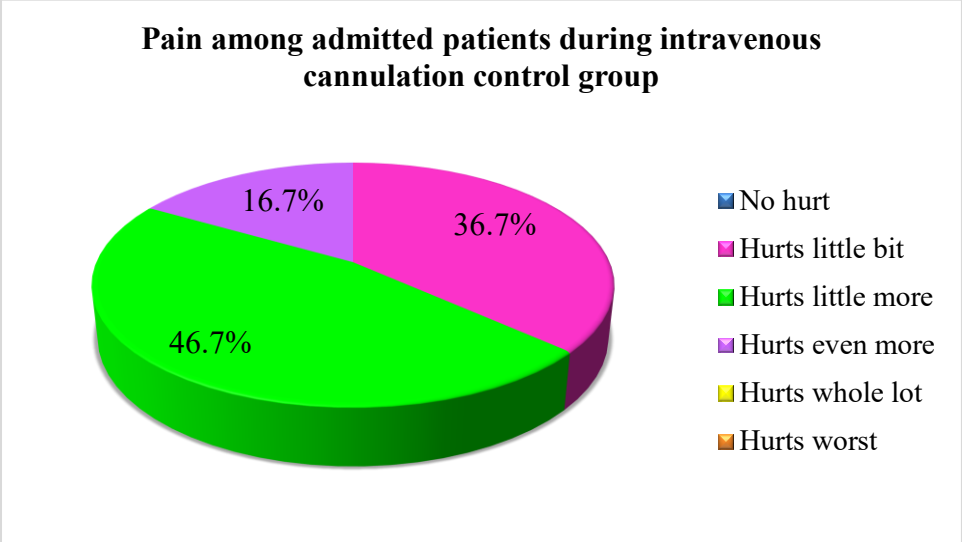
In experimental group, 36.7% of the admitted patients were in age group 18-28 years, 33.3% of them were in age 29-38 years and 30% of them were in age 39-58 years. In control group, 36.7% of the admitted patients were in age 18 28 years, 36.7% of them were in age 29-38 years and 26.7% of them were in age 39-58 years. In experimental group, 56.7% of them were previous history of cannulation insertion. In control group, 60% of them were previous history of cannulation insertion. In experimental group, for 40% of them radial vein was selected for intravenous cannulation, 16.7% of them were basilic vein, 10% of them were cephalic vein and 33.3% of them were medial vein for intravenous cannulation. In control group, for 43.3% of them radial vein was selected for intravenous cannulation, 23.3% of them were basilic vein, 10% of them were cephalic vein and 23.3% of them were medial vein for intravenous cannulation.

SECTION II- Analysis of data related to pain on during intravenous cannulation in control group.

Table 2: Pain on during intravenous cannulation in control group

N=30

Pain	Freq	%
No hurt	0	0.0%
Hurts little bit	11	36.7%
Hurts little more	14	46.7%
Hurts even more	5	16.7%
Hurts whole lot	0	0.0%
Hurts worst	0	0.0%



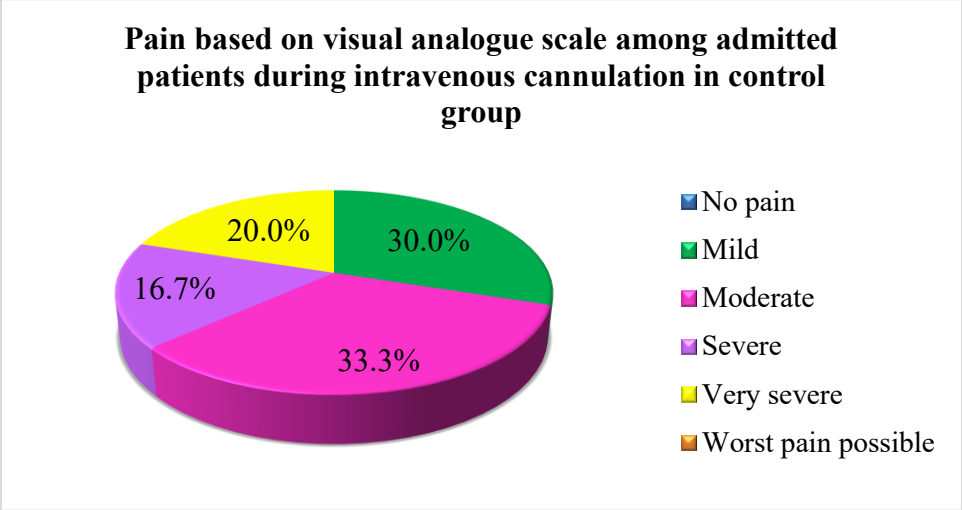
Graph 4.H Graph showing percentage wise distribution of according to pain among admitted patients during intravenous cannulation control group

In control group, for 36.7% of the admitted patients, it was hurting little bit, for 46.7% of them it was hurting little more and for 16.7% of them it was hurting even more.

Table 3: Pain based on visual analogue scale during intravenous cannulation in control group

N=30

VAS	Freq	%
No pain	0	0.0%
Mild	9	30.0%
Moderate	10	33.3%
Severe	5	16.7%
Very severe	6	20.0%
Worst pain possible	0	0.0%



Graph 4.I Graph showing percentage wise distribution of samples according to pain based on visual analogue scale among admitted patients during intravenous cannulation in control group.

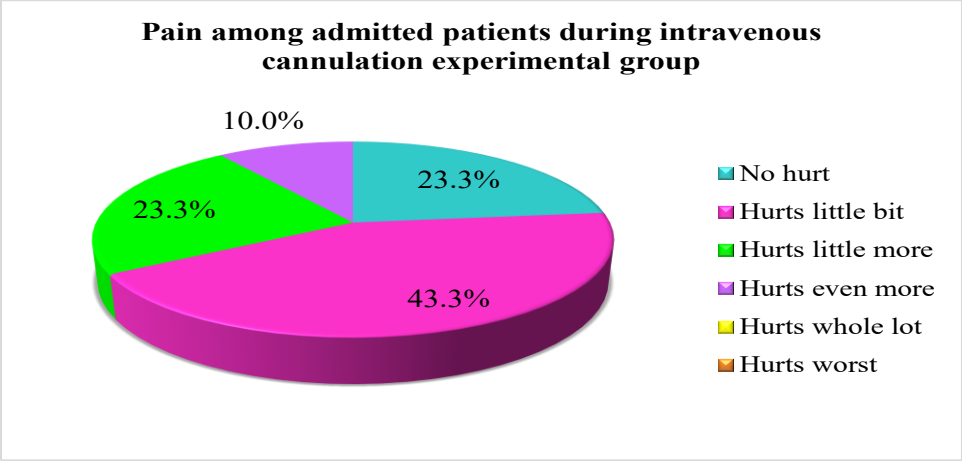
30% of the admitted patients in control group had mild pain based on visual analogue scale, 33.3% of them had moderate pain based on visual analogue scale, 16.7% of them had severe pain and 20% of them had very severe pain based on visual analogue scale.

SECTION III - Analysis of data related to pain on during intravenous cannulation in experimental group

Table 4: Pain on during intravenous cannulation in experimental group

N=30

Pain	Freq	%
No hurt	7	23.3%
Hurts little bit	13	43.3%
Hurts little more	7	23.3%
Hurts even more	3	10.0%
Hurts whole lot	0	0.0%
Hurts worst	0	0.0%



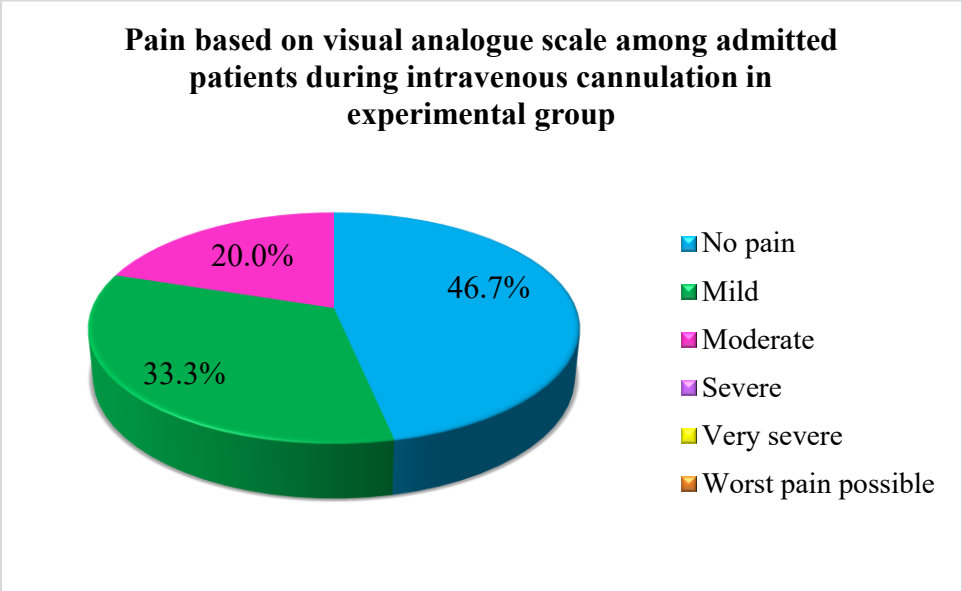
Graph 4.J Graph showing percentage wise distribution of samples according to pain among admitted patients during intravenous cannulation experimental group.

In experimental group, for 23.3% of the admitted patients, it was not hurting, for 43.3% of them it was hurting little bit, for 23.3% of them it was hurting little more and for 10% of them it was hurting even more.

Table 5: Pain based on visual analogue scale during intravenous cannulation in experimental group

N=30

VAS	Freq	%
No pain	14	46.7%
Mild	10	33.3%
Moderate	6	20.0%
Severe	0	0.0%
Very severe	0	0.0%
Worst pain possible	0	0.0%



Graph 4.K Graph showing percentage wise distribution of samples according to pain based on visual analogue scale among admitted patients during intravenous cannulation in experimental group.

46.7% of the admitted patients in experimental group had no pain based on visual analogue scale, 33.3% of them had mild pain based on visual analogue scale and 20% of them had moderate pain based on visual analogue scale.

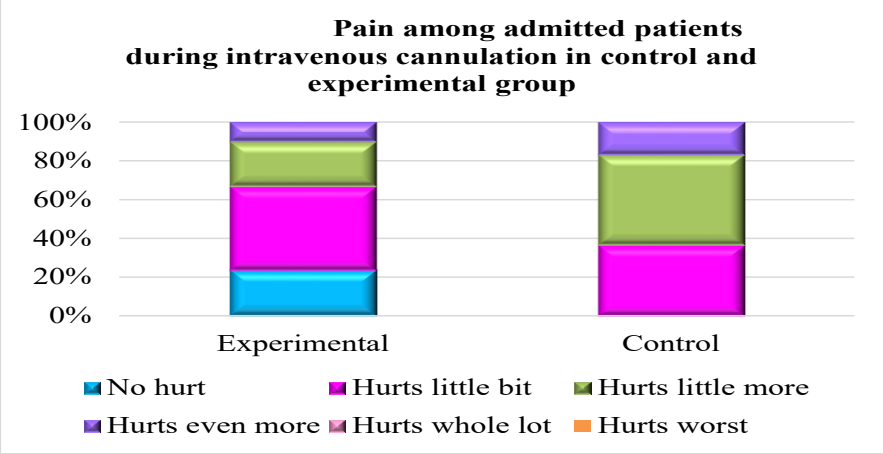
SECTION IV- Analysis of data related to the comparison of pain during intravenous cannulation among experimental and control group

Table 4.12: Comparison of pain during intravenous cannulation among experimental and control group.

N=30, 30

Pain	Experimental		Control	
	Freq	%	Freq	%
No hurt	7	23.3%	0	0.0%

Hurts little bit	13	43.3%	11	36.7%
Hurts little more	7	23.3%	14	46.7%
Hurts even more	3	10.0%	5	16.7%
Hurts whole lot	0	0.0%	0	0.0%
Hurts worst	0	0.0%	0	0.0%



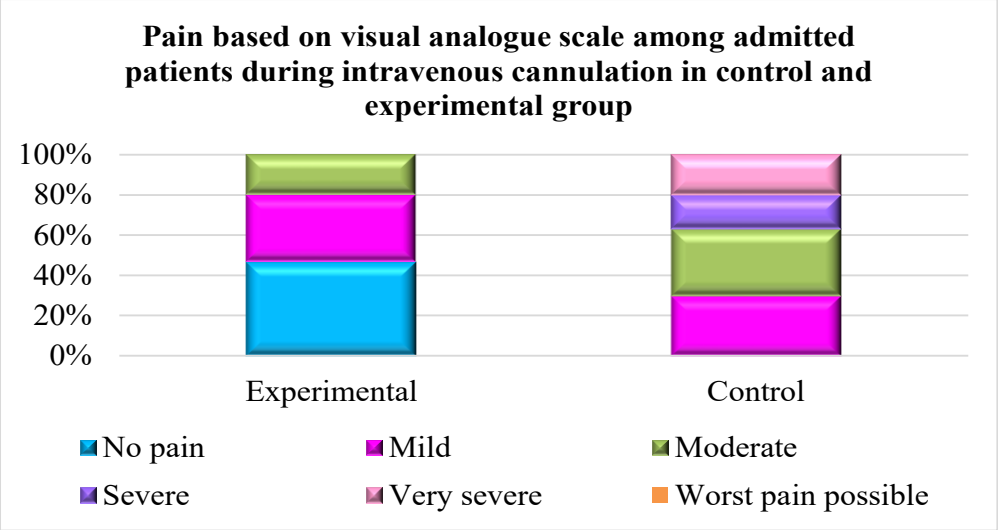
Graph 4.L Graph diagram showing percentage wise distribution of samples according to their pain among admitted patients during intravenous cannulation in control group and experimental group.

In experimental group, in pretest, for 23.3% of the admitted patients, it was not hurting, for 43.3% of them it was hurting little bit, for 23.3% of them it was hurting little more and for 10% of them it was hurting even more. In control group, for 36.7% of them it was hurting little bit, for 46.7% of them it was hurting little more and for 16.7% of them it was hurting even more. This indicates that mindfulness moist mouth technique improved pain remarkably among admitted patients.

Table 7: Comparison of pain based on visual analogue scale during intravenous cannulation among experimental and control group

N=30, 30

Pain based on VAS	**Experimental**		**Control**	
	Freq	**%**	**Freq**	**%**
No pain	14	46.7%	0	0.0%
Mild	10	33.3%	9	30.0%
Moderate	6	20.0%	10	33.3%
Severe	0	0.0%	5	16.7%
Very severe	0	0.0%	6	20.0%
Worst pain possible	0	0.0%	0	0.0%



Graph 4.M Graph diagram showing percentage wise distribution of samples according to their pain based on visual analogue scale among admitted patients during intravenous cannualtion in control group and experimental group.

In experimental group, 46.7% of them had no pain, 33.3% of the admitted patients had mild pain based on visual analogue scale and 20% of them had moderate pain based on visual analogue scale. In control group, 30% of the admitted

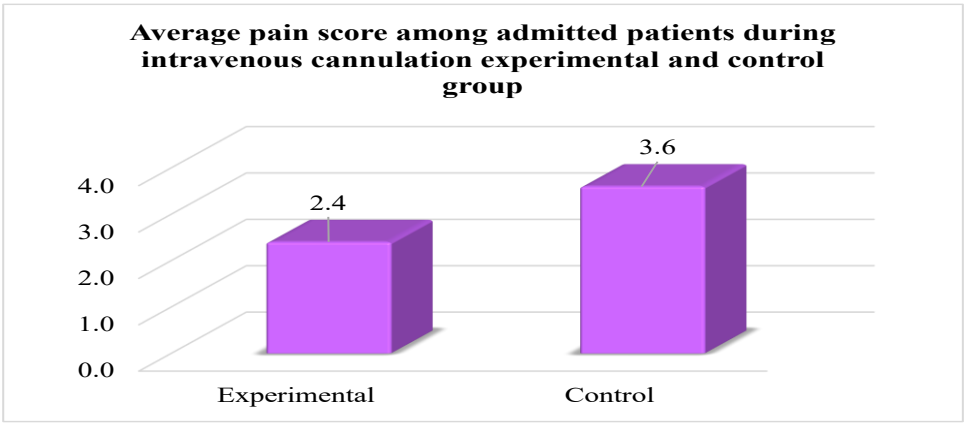
patients had mild pain based on visual analogue scale, 33.3% of them had moderate pain based on visual analogue scale, 16.7% of them had severe pain and 20% of them had very severe pain based on visual analogue scale. This indicates that the pain based on VAS among admitted patients reduced remarkably after mindfulness moist mouth technique.

SECTION V- Analysis of data related to the effectiveness of intravenous cannulation on level of pain during intravenous cannulation

Table 4.14: two sample t-tests for the comparison of change in pain during intravenous cannulation among experimental and control group.

N=30, 30

Group	Mean	SD	T	df	p-value
Experimental	2.4	1.9	2.8	58	0.004
Control	3.6	1.4			



Graph 4.N graph diagram showing percentage wise distribution of samples according to average pain score among admitted patients during intravenous cannulation experimental and control group.

Researcher applied two sample t-test for the comparison of change in pain during intravenous cannulation among experimental and control group. Average pain score in experimental group was 2.4 which was 3.6 in control group. T-value for this test was 2.8 with 58 degrees of freedom. Corresponding to this test was small (less than 0.05), the null hypothesis is rejected. It is evident that the mindfulness moist mouth technique is significantly effective in reducing the pain among admitted patients.

SECTION VI- It deals with the Analysis of data related to the association between among admitted patients during intravenous cannulation and selected demographic variables.

Fisher's exact test was used for the association between among admitted patients during intravenous cannulation and selected demographic variables.

Regarding admitted patients during intravenous cannulation found to have significant association with the selected demographic variables.

DISCUSSION

Any research study can be considered complete till the research findings have been propagated among concerned fraternity and other significant people. This chapter deals with a brief summary of findings, discussion, conclusion, implications and recommendations of the study.

The study we conducted with the purpose effectiveness of mindfulness moist mouth technique on level of pain during intravenous cannulation among patients admitted at selected hospitals.

Average pain score in experimental group was 2.4 which were 3.6 in control group. T-value for this test was 2.8 with 58 degrees of freedom. The comparison of change in pain based on VAS during intravenous cannulation among experimental and control group. Average pain score in experimental group was 1.5 which was 4.5 in control group. T-value for this test was 6.2 with 58 degrees of freedom.

The study used a quantitative research strategy as its research methodology. Post-test only control group design were Quasi experimental, and non-randomized, the tool includes standardized scale Wong-backer faces pain rating scale and demographic data.

CONCLUSION

The researcher felt a deep sense of satisfaction and fulfilment at having undertaken the study. The study provided deeper insight and empathy towards the need for expert guidance from the guide and cooperation of teachers has made this study a fruitful and pleasant experience.

This study aimed to assess the Purpose effectiveness of mindfulness moist mouth technique on level of pain during intravenous cannulation among patients admitted at selected hospitals.

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Conflict of interest: There are no conflicts of interest.

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