



“An Experimental Study To Assess The Effectiveness Of Rhythmic Breathing Technique Upon Pain Perception Among Patients During Venipuncture At Vidya Hospital Raipur, Chhattisgarh.”

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Pain is a subjective experience which can be understood by others only by the verbal expression of the person experiencing the pain. Pain is also manifested by behavioral and physiological responses.

Breathing is an effective source of pain control because it releases muscle tension, relaxes the mind and allows the brain to focus away from pain.

Modulation of pain

The modulation of pain involves changing or inhibiting transmission of pain impulses in the spinal cord. A relaxation technique (also known as relaxation training) is any method, process, procedure, or activity that helps a person to relax; to attain a state of increased calmness; or otherwise reduce levels of anxiety, stress or anger. Relaxation techniques are often employed as one element of a wider stress management program and can decrease muscle tension, lower the blood pressure and slow heart and breathe rates, among other health benefits.

Pain receptors are present everywhere in the body, especially the skin, surfaces of the joints, periosteum, walls of the arteries, and certain structures in the skull. Other organs, such as the gut and muscles, have fewer pain receptors. It is interesting to note that the brain itself does not have any pain receptors at all, and is therefore insensitive to pain. The process of nociception describes the normal processing of pain and the responses to noxious stimuli that are damaging or potentially damaging to normal tissue. There are four basic processes involved in nociception.

The investigator felt to identify, The Effectiveness of Rhythmic Breathing Technique on Pain Perception among Patients Undergoing Venipuncture at Vidya Hospital, Raipur Chhattisgarh.

OBJECTIVES

- To assess the intensity of pain perceived by control and experimental group patient during venipuncture at Vidya Hospital, Raipur Chhattisgarh.
- To assess the Effectiveness of rhythmic breathing technique on Pain Perception among Patients Undergoing Venipuncture at Vidya Hoapital, Raipur Chhattisgarh.
- To find out the association between selected demographic variables and pain perception of patient during venipuncture among experimental group at Vidya Hospital, Raipur, Chhattisgarh.
- To find out the association between selected demographic variables and pain perception of patient during venipuncture among control group at Vidya Hospital, Raipur, Chhattisgarh.

This experimental study was conducted in Vidya Hospital, Raipur, Chhattisgarh. A true experimental research approach is adopted and the design used is pretest- posttest only research design.

Random sampling is used to select the sample. The conceptual framework of this study is based on combination of Gate Control theory and General System theory. The tool used for study is an interview schedule to collect demographic data, standard numeric pain rating scale for assessment of pain perception and rhythmic breathing technique.

The main study was conducted on sample of 60 patients, in which 30 patients were taken as experimental and 30 patients as control group in Vidya Hospital, Raipur (C.G.).the tool for data collection was a Rhythmic Breathing Technique and Numeric pain rating scale to assess the effectiveness of Rhythmic Breathing Technique on pain perception among patients undergoing venipuncture. According to the extent of pain in experimental group 27 (90%) have mild pain, 3 (10%) have moderate pain. Whereas in control group 16(53.33%) have severe pain, 13(43.33%) have moderate pain, 1 (3.33%) have mild pain.

Mean value is 2.3 and 6.1 for experimental group and control group respectively. Value of standard deviation is 1.6 and 1.23 for experimental group and control group respectively. “t” value for the experimental group and control group are 13.5 which is significant at 0.05 level, this shows the Null hypothesis is rejected and the intervention of Rhythmic Breathing Technique is effective in reduction of pain perception during venipuncture.

Conclusion: - The study concludes that the Rhythmic Breathing Technique is effective as diversional therapy in reducing pain perception during venipuncture.

Rhythmic Breathing Technique- in this study rhythmic breathing technique refers to a process of rhythmic inhalation and exhalation with concentration on breath during the venipuncture.

Pain perception- in this study pain perception refers to an unpleasant sensory and emotional experience, experienced by patient undergoing venipuncture.

Venipuncture- in this study venipuncture refers to the technique in which a vein is punctured by a sharp rigid needle or a cannula for diagnostic and therapeutic purposes.

