**INTRODUCE PEYTON’S METHOD OF TEACHING SKILLS FOR PARAMEDIC STUDENTS IN A TERTIARY CARE TEACHING INSTITUTE**



This Dissertation is submitted to

SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION AND RESEARCH (DEEMED TO BE A UNIVERSITY)

**In partial fulfilment of the requirement for the award of the degree**

**M.Sc. Trauma Care Management**

**Examination in August 2023**

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**CERTIFICATE**

This is to certify that the dissertation entitled “**INTRODUCE PEYTON’S METHOD OF TEACHING SKILL FOR PARAMEDIC STUDENTS IN A TERTIARY CARE TEACHING INSTITUTE”.**

Submitted to the DEPARTMENT OF EMERGENCY MEDICINE,

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(Deemed to be University)

By

**Ms. Mohana Sundari. P**

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It is a Bonafide work done by her under our supervision & guidance, and the conclusions are her own. It is further certified that this dissertation or any part thereof has not formed the basis for an award of any degree, diploma, or other similar titles.

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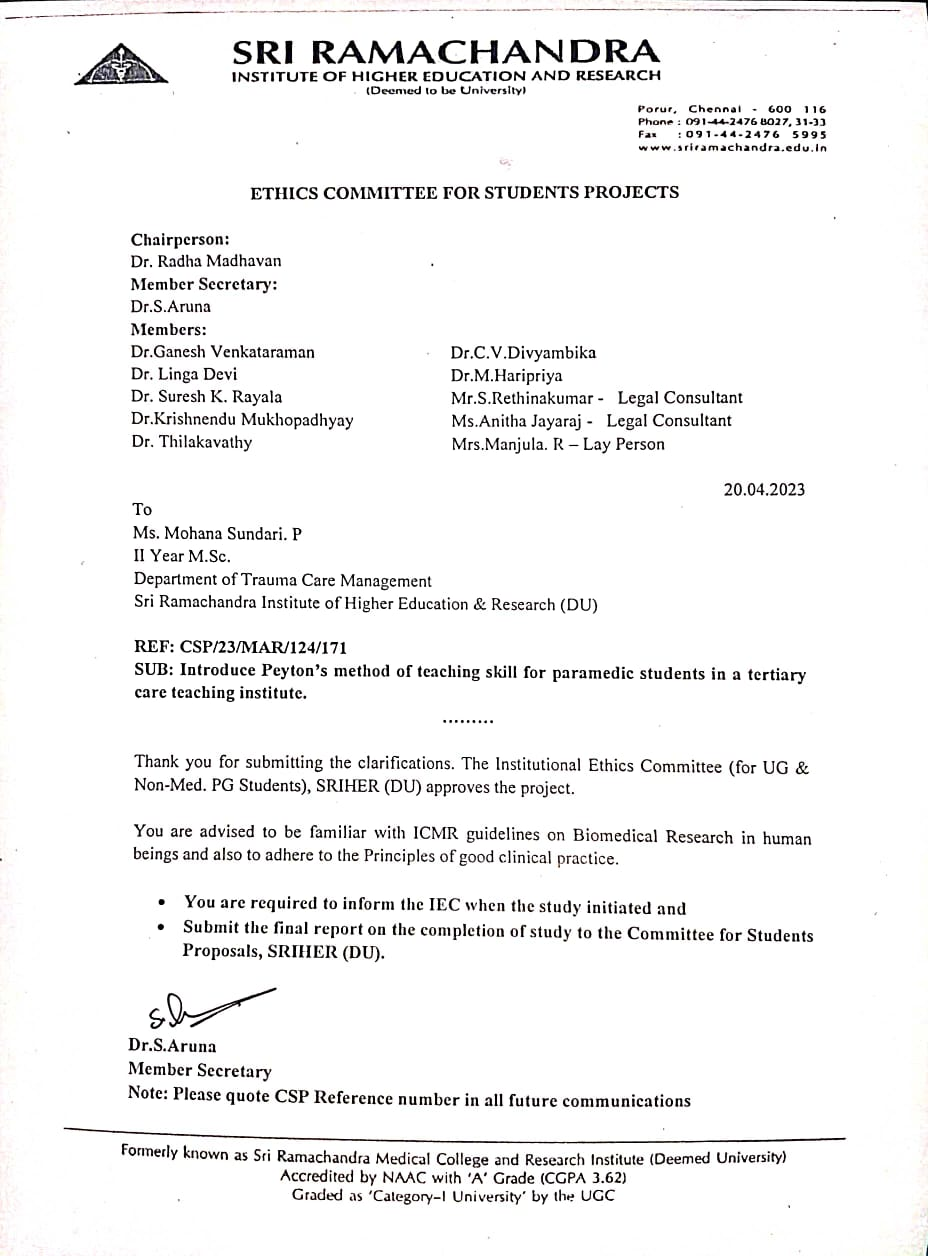
With Sincere regards,

**MOHANA SUNDARI. P**

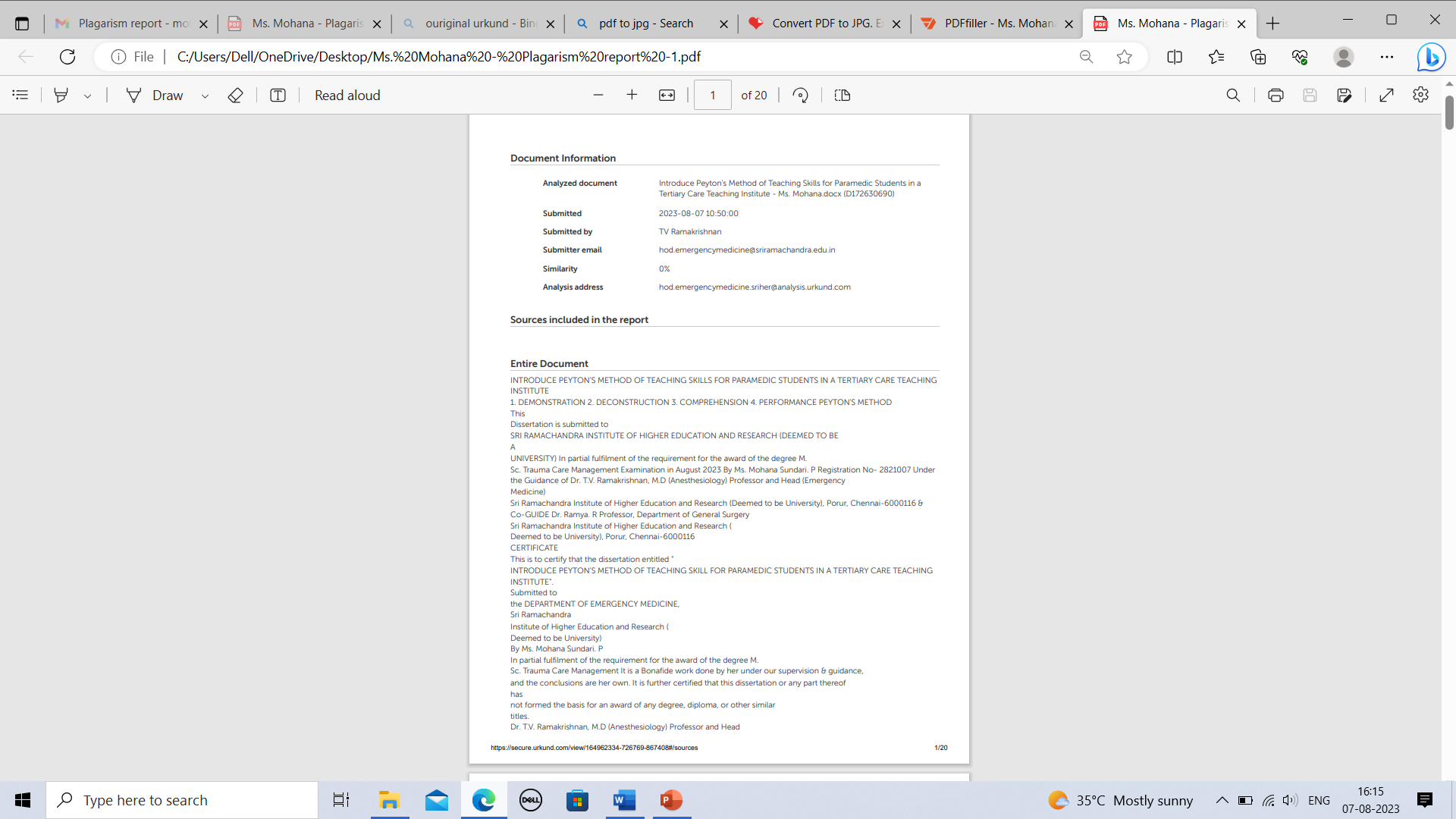
**CONTENTS**

|  |  |  |
| --- | --- | --- |
| **S. NO** | **TOPICS** | **PAGE NO** |
| 1. | Ethics committee Approval letter | 7 |
| 2. | Plagiarism Report | 9 |
| 3. | Background | 11 |
| 4. | Review of literature | 16 |
| 5. | Aims and Objectives | 23 |
| 6. | Material and Methods | 25 |
| 7. | Proforma | 29 |
| 8. | Questionnaire and OSCE | 31 |
| 9. | Feedback form | 38 |
| 10. | Consent Form (English) | 40 |
| 11. | Consent Form in Regional Language | 45 |
| 12. | Results | 52 |
| 13. | Discussion | 68 |
| 14. | Limitations | 73 |
| 15. | Recommendations | 73 |
| 16. | Conclusion | 75 |
| 17. | References | 77 |
| 18. | Master Chart | 80 |

**ETHICS COMMITTEE APPROVAL LETTER**



**PLAGIARISM REPORT**

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**BACKGROUND**

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Teaching methods are the broader techniques used to help students achieve learning outcomes, Instructors should identify which teaching method will properly support a particular learning outcome. The importance of teaching is to help students to have a deeper understanding of the topic, remain active in the teaching-learning process, provide students with experiences of real events, help them learn, and raise students’ interest and motivation.

Nowadays, practically all medical faculties use skills-lab teaching as a systematic teaching strategy in their training programs. It has been demonstrated that certain elements are necessary for a skills-lab learning experience to be successful. Although there is little question that the instructional strategy used to introduce new clinical technical abilities to learners has a significant influence on subsequent skill performance, little is known about the differences in impacts of different instructional strategies as of yet.

Learning processes are an essential element of health professions education. In other words, a teacher explains and performs a method before the students practice it. Walker and Peyton proposed a more contemporary method of teaching students how to acquire procedural abilities. Demonstration, deconstruction, comprehension, and performance are the four steps that make up Peyton's stepwise teaching methodology.

Types of Teaching methods are Teacher-centered methods, Learner-centered methods, Content-focused methods; and Interactive/participative methods. Teaching methods used for teaching skills vary from the traditional See One–Do One to Peyton’s method. Peyton’s teaching technique is an important method for teaching procedural skills. Learning skills using this method leads to accurate and faster performance. Clinical skills learning forms an important part of paramedic education. Peyton's approach is a valuable teaching and learning method for most students, independent of their predominant learning style.

It has been proven that a healthcare professional with a good didactic background needs to convey these complicated psychomotor skills. Students often learn these abilities by watching their teachers do certain tasks and by practicing with other students. There is mounting evidence suggesting motor learning concepts like mental practice, augmented feedback, or various training regimens can facilitate the acquisition of skills. [1]

kills-lab training as a methodological teaching approach

is nowadays part of the training programs of almost all

medical faculties. Skills-labs offer a protected, “mistake-

forgiving”training environment [1] that allows students

to practice procedures on mannequins, with standardized

patients or with each other prior to performing procedural

skills on real patients [2-4]. Skills-lab training has been

shown to improve procedural skills both in novices and

experts [5-8]. This applies to complex surgical skills [8]

as well as basic clinical skills performed by medical stu-

dents [9].

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dents [9].

Nowadays, practically all medical faculties include skills-lab education as a methodical teaching strategy in their training programs. Before conducting procedural skills on actual patients, trainees can practice techniques on mannequins, with standardized patients, or with each other in a safe, "mistake-forgiving" setting provided by skills labs. Procedural abilities can be improved by skills-lab training for both novices and specialists. This holds true for both the fundamental clinical skills used by medical students and the advanced surgical skills. [2]

Additionally, there appears to be proof of whether simulation-based medical training (SBME) affects clinical outcomes in a beneficial way. The reliability of the simulated scenarios, prolonged purposeful practice, feedback, and pre-determined learning goals and curricular integration have all been proven to be essential components of effective education in skills laboratories. Although it is undisputed that the instructional strategy used to expose learners to novel clinical technical abilities also significantly impacts subsequent skill performance, nothing is known yet about the differences in impacts of different instructional strategies. [3]

It has been established that Peyton's four-step strategy is superior to normal instruction for skills-lab instruction during undergraduate medical education, but it is uncertain whether this superiority can be due to any one particular phase. Numerous instructional strategies with numerous steps have been documented in the literature for teaching learners clinical technical skills.[3]

Peyton’s teaching approach is a stepwise teaching approach and consists of the following four steps:

1. Step 1: refers to the demonstration of the whole procedure in real time **(“demonstration”);**
2. Step 2: the teacher repeats the demonstration but this time all procedural sub-steps are described **(“deconstruction”);**
3. Step 3: the student talks the teacher through the procedure. The teacher performs the procedure under the guidance of the student **(“comprehension”)** and
4. Step 4: the students carry out the procedure on their own initiative **(“performance”).**[1]

There is substantial proof that a wide range of different cognitive factors, including attentional focus, visuospatial abilities, performance monitoring and physical metaphors, memory retention, and both declarative language and procedural memory capacity, influence the development of motor skills. Given that performing high-value skills requires declarative memory, it is possible to hypothesize that Peyton's four-step strategy also has an impact on memory that is declarative for skill performance. According to the Cognition Theory, one can assume that Step 3 of Peyton's four-step strategy, which involves using motor imagining, verbalization, and teaching the teacher, results in a deeper and more complicated declarative language processing of the individual processes to be taught.[2]

**REVIEW OF LITERATURE**

**REVIEW OF LITERATURE**

1. [**Markus Krautter**](https://pubmed.ncbi.nlm.nih.gov/?term=Krautter+M&cauthor_id=21745059)**,**[**Peter Weyrich**](https://pubmed.ncbi.nlm.nih.gov/?term=Weyrich+P&cauthor_id=21745059)**, (2011 Sep 23),** This study intended to assess the learning outcomes of two alternative instructional methodologies in the context of gaining procedural-technical abilities through a randomized controlled experiment.

34 pupils in all consented to take part in the experiment. Regarding age, sex, medical qualifications, or medical clerkships, there were also no statistically significant variations between groups. A binary checklist used to evaluate the groups' correct step-by-step performance of the technique revealed no differences between them. However, IG received a considerably higher rating based on global rating scales judging competence and accompanying patient-doctor conversation The duration of the various instructional strategies did not significantly differ among the two groups.

Peyton's Four-Step Method is superior to conventional training in terms of competence and accompanying doctor-patient contact. It also results in more rapid performance when students use what they have learned for the first time. [4]

1. [**Katia Giacomino**](https://pubmed.ncbi.nlm.nih.gov/?term=Giacomino+K&cauthor_id=33083149)**,**[**Rahel Caliesch**](https://pubmed.ncbi.nlm.nih.gov/?term=Caliesch+R&cauthor_id=33083149)**,**[**Karl Martin Sattelmayer**](https://pubmed.ncbi.nlm.nih.gov/?term=Sattelmayer+KM&cauthor_id=33083149) **(2020 Oct 9),**The Learning processes are a crucial component of health professions education. An old-fashioned method of teaching procedures is the "see one, do one" method. In other words, a teacher explains and performs a method before the students practice it. Walker and Peyton suggested a more modern approach to instructing students on how to develop procedural skills. Demonstration, deconstruction, comprehension, and performance are the four steps that make up Peyton's stepwise teaching methodology. The objectives of this study were to determine if research studies in a smaller number of pupils per instructor demonstrated a greater difference compared to examines with more students per teacher, and to evaluate the impact of Peyton's 4-step instructional strategy on the development of procedural abilities in health professions education. Its teaching strategy of Peyton is useful for helping students learn procedural skills in the study of health professions. The efficacy of Peyton's teaching style is less obvious whenever fellow pupils or pupil tutors act as teachers. When Peyton uses small groups with just a few pupils as a teacher, her method of instruction is more successful.[1]
2. [**Lukas B Seifert**](https://pubmed.ncbi.nlm.nih.gov/?term=Seifert+LB&cauthor_id=32552805)**,**[**Benedikt Schnurr**](https://pubmed.ncbi.nlm.nih.gov/?term=Schnurr+B&cauthor_id=32552805)**(2020 Jun 17).** This study is aimed at high-level instruction of complicated motor skills that are still difficult to find in medical education. Large quantities of instruction time and content are frequently used in established approaches. The use of standardized videos in those techniques could result in resource savings. In this research, the video-based versions of Halsted's "See One, Do One" and Peyton's "4-Step Approach" are compared. We predicted that the video-based "4-step Approach" would be superior to the "See One, Do One Approach" in terms of teaching procedural skills. For teaching particularly complicated motor skills on a broad curricular scale, a modified video-based version of Peyton's "4-step Approach" is the best approach. Additionally, a successful technique to use Peyton's approach in a group context might be shown. The extended retention of knowledge of this strategy in a formative environment has to be studied further.[5]
3. [**Tobias Münster**](https://pubmed.ncbi.nlm.nih.gov/?term=M%C3%BCnster+T&cauthor_id=27579360)[**1**](https://pubmed.ncbi.nlm.nih.gov/27579360/#full-view-affiliation-1)**,**[**Christoph Stosch**](https://pubmed.ncbi.nlm.nih.gov/?term=Stosch+C&cauthor_id=27579360) **(2016 Aug 15).** This study has aimed at the ability to sustain at least a minimal level of perfusion in cardiac arrest until additional medical measures can be taken is a very significant talent. One technique for developing skills is Peyton's 4-Step Approach, which consists of the processes of demonstration, deconstruction, comprehension, and execution. This method is purportedly extensively used with an emphasis in CPR skill training, although Peyton's 4-Step Approach for CPR skill training has received little research compared to other skill training methods. In our study, we compared the medium-term effects of learning external chest compression with a CPR training tool between the following three categories: (Peyton's 4-Steps-Approach) or (Peyton's 4-Steps-Approach without Step 3), and STDM, the standard model, in accordance with the widely used method "see one, do one" (this is equivalent to Peyton's steps 1 and 3).[6]
4. [**Markus Krautter**](https://pubmed.ncbi.nlm.nih.gov/?term=Krautter+M&cauthor_id=26060417)**,**[**Ronja Dittrich**](https://pubmed.ncbi.nlm.nih.gov/?term=Dittrich+R&cauthor_id=26060417) **(2015 May 27)** This study has established that Peyton's four-step strategy is superior to normal instruction for skills-lab instruction during undergraduate medical education, but it is uncertain whether this superiority can be due to any one particular phase. To examine the diverse learning results of Peyton's four steps individually, we designed a randomized controlled trial. 97 people in all consented to take part in the trial. Regarding age, sex, finished medical education, complete clinical clerkships, initial memory tests, and self-efficacy ratings, there were also no significantly different group differences. In terms of checklist ratings, the Step-2 group outperformed the Step-1 group in terms of initial independent CVC placement, the Step-3 group outperformed the Step-2 group, and the second step team with the Step3 team did not vary. The results of the accidental free recall test were comparable. According to our research, Peyton's third step—the most important one in his four-step method—contributes substantially to student achievement than the other steps and goes beyond the value of just repeating skills demonstrations. [2]

1. [**Frederike Lund**](https://pubmed.ncbi.nlm.nih.gov/?term=Lund+F&cauthor_id=22427895)**,**[**Jobst-Hendrik Schultz**](https://pubmed.ncbi.nlm.nih.gov/?term=Schultz+JH&cauthor_id=22427895) **(2012 Mar 12).** This study has aimed to do training in a skills lab that is well known for its effectiveness. However, there hasn't been much research done on the translation of procedural abilities learned in skill labs to clinical practice. In order to determine whether students who received bedside instruction in intravenous (IV) cannulation were perceived as more professional in terms of both their technical and verbal abilities if evaluated logically by distinct video testers and subjectively by patients, we carried out a prospectively, randomized, double-blind in controlled trial. When graded by impartial video raters using IPPI and BC, the transfer of Intravenous cannulation-related skills learned in an expert laboratory is superior to bedside teaching. It gives students the opportunity to cannulate IVs more expertly on willing volunteers.[7]
2. [**Christoph Nikendei**](https://bmcmededuc.biomedcentral.com/articles/10.1186/1472-6920-14-68#auth-Christoph-Nikendei)**,** [**Julia Huber**](https://bmcmededuc.biomedcentral.com/articles/10.1186/1472-6920-14-68#auth-Julia-Huber) **(**[**02 April 2014**](https://bmcmededuc.biomedcentral.com/articles/10.1186/1472-6920-14-68#article-info)**).** Nowadays, practically all medical faculties use skills-lab teaching as a systematic teaching strategy in their training programs. It has been demonstrated that certain elements are necessary for a skills-lab learning experience to be successful. Although there is little question that the instructional strategy used to introduce new clinical technical abilities to learners has a significant influence on subsequent skill performance, little is known about the differences in impacts of different instructional strategies as of yet. "Peyton's Four-Step Approach" is a teaching strategy that is growing popular in medical schools. The purpose of the current study was to create and assess a modified Peyton's Four-Step Method for teaching in small groups because Peyton's Four-Step Strategy was created for a 1:1 instructor-to-student ratio. When viewed by expert raters, the approach was well received by trainees and assessed as being simple to implement. This led to a successful teaching flow and success in grabbing trainees' attention. The modified Peyton's Approach has proven to be workable, well received by trainees, and simple for tutors to implement when utilized with a small number of participants in skills-lab training sessions. The implementation of the approach in bigger skill-lab training groups should be the subject of future research. [3]
3. **Melanie Le MD, Johannes Boettcher (**[**2022**](https://doi.org/10.1016/j.jsurg.2022.04.003)**).** This study is aimed at high-level procedural skills have been taught using a variety of motor learning models in medical education. Healthcare providers frequently use two methods: Peyton's four-step technique and Halsted's "See one, do, teach one" philosophy. It has been suggested that Peyton's breakdown of the process of learning into four smaller parts is preferred for learning, gaining, and imparting sophisticated clinical abilities. The spaced learning method, on the other hand, is a recent and rapidly gaining methodology. In a previous investigation, we were able to demonstrate the fact that the scheduled instruction concept is superior to traditional training curricula for laparoscopic stitching and knot tying. The current study sought to determine the impact of placed acquiring when combined with Halsted's as well as Peyton's teaching approaches on medical students' ability to tie laparoscopic knots. In comparison to Peyton's Four-Step strategy combined with spaced learning, Halsted's "see one, do one, teach one" strategy appeared to be superior in surgical naive students. We advise further research into the effectiveness of combining phased knowledge using Halsted and Peyton's teaching strategies. [8]
4. [**Kylie Burnley**](https://pubmed.ncbi.nlm.nih.gov/?term=Burnley+K&cauthor_id=34760570)**,**[**Koshila Kumar**](https://pubmed.ncbi.nlm.nih.gov/?term=Kumar+K&cauthor_id=34760570) **(2019 Oct 11).** This study has aimed that Sophisticated clinical expertise, sonography. Despite its complexity, very little information regarding whether these abilities are imparted in Australia or elsewhere has been published. With a focus on the procedural aspect of the process, this research investigates how Australian sonographer educators and trainees see the instruction of sonography skills. The recognition regarding the Australian sonographer instructor workforce and educational environments is a secondary goal. Following informed permission and ethics approval, data were gathered from educator and trainee sonographers using semi-structured interviews and an online survey. All data were de-identified or made anonymous. For quantitative data, descriptive statistics were produced, and thematic analysis was used to assess qualitative data. This mixed-methods exploratory study focuses on the trainee and educator viewpoints on sonography skill teaching. Based on these data, the authors suggest that teaching sonography skills maximize the chances for students to participate in observation, hands-on learning, and get helpful criticism. Additionally, it has been recommended that sonography procedures assist teachers in developing their instructional strategies to guarantee excellent clinical instruction. [9]

**AIMS AND OBJECTIVES**

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**The aim of the study:**

* The aim of this study is to compare the effectiveness of two alternative instructional strategies for teaching procedural-technical skills in terms of learning outcomes.

**The objective of the study:**

1. To introduce Peyton’s 4 step method of teaching skills to paramedic students.
2. To compare Peyton’s method with the conventional method of teaching a skill for paramedic students.
3. To obtain feedback from the students regarding this instructional method.

**MATERIALS AND METHODS**

**MATERIALS AND METHODS**

1. **Site of study:**

The study was conducted at the Skills Lab, Sri Ramachandra Institute of Higher education and Research, Porur, Chennai.

1. **Type of Study:**

A Prospective Observations study

1. **Period of study:**

April 2023 to July 2023 (4 Duration)

1. **Sample Size:** 36
2. **Inclusion Criteria:**

All the first-year students of B.Sc. Trauma Care management and B.Sc. Nursing.

1. **Method:**
2. All the students who have volunteered participated in the study
3. The participants were divided into two groups: Group A and Group B. Both the groups were taught the following skills: Insertion of Oropharyngeal airway, Nasopharyngeal airway and Ambu Bag Ventilation Technique in the skills lab using a manikin.
4. Group A- participants were instructed by the conventional method of interactive lecture with video demonstration
5. Group B- participants were instructed by the interactive lecture with video demonstration, and in addition, were taught using the Peyton’s method.
6. At the end of the training module, all the students (both groups) were assessed. Skills were assessed using OSCE method and the knowledge was assessed using multiple choice questions.
7. Two independent assessors who were blinded assessed the students
8. Finally, the score of the two groups (for both MCQ and OSCE) was compared and analyzed.
9. **Plan for Analysis:**

The data obtained was analyzed using SPSS version 29.0 software analysis

1. **Outcomes:**

Based on the data of collected during the 4 months of the study period, the researcher along with the guide were able to validate and identify the factors and obstacles while conducting the research and establishing the future learning.

1. **Ethical Issues if any:**

No ethical issues were identified in this study protocol. This study was conducted after obtaining approval from Sri Ramachandra Institute of Higher Education & Research (DU) Institutional ethics committee (SRU-IEC). All participants signed the informed written consent.

**PROFORMA**

**PROFORMA**

**Name:**

**Age:**

**Gender:**

**Department:**

**Year of Study:**

**Semester:**

**Email id:**

**Questionnaire**

**The Objective Structured Clinical Examination (OSCE):**

**Oropharyngeal Airway**

**Student --------------- Evaluator----------------**

**Date/ Time ------------**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no | Check ‘yes’ if student performed all of the following | Yes/ No | Marks allotted for each steps  1 mark |
| 1. | Wears Personal protective Equipment |  |  |
| 2. | Suctions the oropharynx as needed to ensure that the mouth is clear of blood or other fluids. |  |  |
| 3. | Selects an oral airway that is the correct size for the patient, measure the distance from the corner of the patient’s mouth to the angle of the jaw. |  |  |
| 4. | Positions the patient’s airway.  Uses the head tilt–chin lift maneuver  Jaw thrust in case of suspected C-spine injury and provide in-line spinal stabilization. |  |  |
| 5. | Opens the patient’s mouth with the cross-finger technique or tongue-jaw lift |  |  |
| 6. | Holds the airway upside down with your other hand, and insert the airway in the mouth with the tip facing the hard palate. |  |  |
| 7. | Advances the oral airway until it reaches the soft palate and then rotate it 180°, allowing it to follow the curvature of the tongue, until the flange rests on the patient’s lips. |  |  |
| 8. | Reassesses the airway after insertion. |  |  |



**If the candidate score is less than 5 out of 8, they can be reassessed once again.**

**Comments:**

**The Objective Structured Clinical Examination (OSCE):**

**Nasopharyngeal Airway**

**Student --------------- Evaluator----------------**

**Date/ Time ------------**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no | Check ‘yes’ if student performed all of the following | Yes/ No | Marks allotted for each steps  1 mark |
| 1. | Wears Personal protective Equipment |  |  |
| 2. | Selects a nasal airway that is the correct size for the patient, measure the distance from the tip of the nostril to the earlobe/ tragus |  |  |
| 3. | Positions the patient’s airway.  Use the head tilt–chin lift maneuver  Jaw thrust in case of suspected C-spine injury and provide in-line spinal stabilization. |  |  |
| 4. | Lubricates the airway with a water-soluble gel |  |  |
| 5. | Inserts the tip into the right naris with the bevel pointing toward the nasal septum until the flange rests on the patient’s nostril |  |  |
| 6. | If you are inserting the airway on the left side, insert the tip into the left naris upside down, with the bevel pointing toward the septum. Move the airway forward slowly until you feel a slight resistance, and then rotate the airway 180°. |  |  |
| 7. | Reassesses the airway after insertion. |  |  |

**If the candidate score is less than 4 out of 7, they can be reassessed once again.**

**Comments**

**The Objective Structured Clinical Examination (OSCE):**

**Bag-Mask Ventilation**

**Student --------------- Evaluator----------------**

**Date/ Time ------------**

|  |  |  |  |
| --- | --- | --- | --- |
| S.no | Check ‘yes’ if student performed all of the following | Yes/ No | Marks allotted for each steps  1 mark |
| 1. | Wears Personal protective Equipment. |  |  |
| 2. | Kneels above the patient’s head. |  |  |
| 3. | Selects the proper size mask |  |  |
| 4. | Maintains the patient’s neck in a neutral position. |  |  |
| 5. | Opens the airway and suction the oropharynx as needed. Insert an oral or nasal airway to help maintain airway patency. |  |  |
| 6. | Connects the bag-mask device to supplemental oxygen |  |  |
| 7. | Places the mask on the patient’s face. Ensure the top is over the bridge of the nose and the bottom is in the groove between the lower lip and the chin. |  |  |
| 8. | Places the thumb and index finger as high up on the mask as you can to form a C. Maintain the airway by lifting the bony prominence of the chin with your remaining fingers to form an E. Do not push the mask to the face; pull the lower jaw into the mask. This practice is called the EC clamp technique, and it will maintain an effective mask-to-face seal. |  |  |
| 9. | Uses the head tilt–chin lift maneuver to ensure the neck is extended. Squeeze the bag with your other hand in a rhythmic manner once every 5 to 6 seconds for adults and once every 3 to 5 seconds for infants and children |  |  |
| 10 | Observes for gastric distention, changes in compliance of the bag with ventilations, and either improvement or deterioration of the patient’s clinical status |  |  |

**If the candidate score is less than 7 out of 10, they can be reassessed once again.**

**Comments:**

**Multiple Choice Question**

1. An oropharyngeal airway of proper size extends from the:
2. Corner of the patient's mouth to the angle of mandible
3. Lips to the larynx
4. Nose to the angle of the jaw
5. None of the above
6. The purposes of suctioning may include removal of:
7. Teeth and large pieces of solid material
8. Excess oxygen from the patient
9. Blood, vomitus, and other secretions
10. All the above
11. An oral or nasal airway should
12. Inserted in all critically injured patients
13. Used to keep the tongue from blocking the airway
14. Used in order to prevent the need for suctioning
15. All of the above
16. The very first step to aid a patient who is not breathing is to
17. Clear the mouth
18. Administer oxygen
19. Apply positive pressure ventilation
20. Open the airway
21. When performing the head - tilt, chin - lift maneuver, the EMT should:
22. Allow the patient's mouth to close
23. Position himself/herself at the patient's head
24. Tilt the head by applying pressure to the patient's chin
25. Use fingertips to lift the neck
26. The main purpose of the jaw - thrust maneuver is to:
27. Open the mouth with only one hand
28. Open the airway without moving the head or neck
29. Create an airway for the medical patient
30. All the above
31. Your patient gags when you attempt to insert an oropharyngeal airway. You should
32. Insert a nasopharyngeal airway.
33. Continue to insert the airway.
34. Perform a head-tilt chin-lift.
35. Remove the oropharyngeal airway
36. An oral airway should be inserted
37. Directly insert to the oral cavity
38. Press the tongue by the OPA, then insert directly
39. Upside down, with the tip toward the roof of the mouth, then flipped 180\* over the tongue
40. None of the above
41. When a patient inhales, air enter the throat, which is divided into the:
42. Nasopharynx
43. Oropharynx
44. Laryngopharynx
45. All of the above
46. If something is placed in the patient’s throat the gag reflex causes the patient to
47. Take deep breaths
48. Pass out
49. vomit or retch
50. All the above
51. The following are all indication of oropharyngeal airway insertion except
52. Unconscious
53. Prevent tongue fall back
54. Conscious
55. Facilitation of spontaneous breathing
56. The following are the complication of Oropharyngeal airway except
57. Vomiting
58. Pharyngeal trauma
59. Dental Trauma
60. Epistaxis
61. One of the following are not in the advantage of nasopharyngeal airway
62. Better tolerated
63. Conscious patient
64. Injury in the oral cavity
65. Protect from aspiration
66. The size of black colour of oropharyngeal airway is
67. 0
68. 1
69. 2
70. 3

15. To open the airway of a patient with a suspected head, neck, spine injury, and should use a \_\_\_\_\_\_\_\_\_\_\_ maneuver

a. Jaw- thrust

b. Head- tilt, Chin-lift

c. Head- tilt, neck-lift

d. Modified chin- thrust

**FEEDBACK FORM**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | |
| **Name of the Demonstrator:** | | | | | | | | | |
| **Topic:** | | | | | | | | | |
| **Date:** | | | | | | | | | |
| Please indicate your impressions of the items listed below | | | | | | | | | |
|  | | | | | **Strongly Agree** | **Agree** | **Neutral** | **Disagree** | **Strongly Disagree** |
| **S. No** | **Evaluation Criteria** | | | |  |  |  |  |  |
| 1 | The demonstration met my expectations | | | |  |  |  |  |  |
| 2 | I will be able to apply the knowledge in my role | | | |  |  |  |  |  |
| 3 | The Quality of instruction was good | | | |  |  |  |  |  |
| 4 | The demonstration met the learning objectives | | | |  |  |  |  |  |
| 5 | The methodology, taught for student understanding | | | |  |  |  |  |  |
| 6 | Participation and interaction were encouraged | | | |  |  |  |  |  |
| 7 | Adequate time was provided for questions and discussion | | | |  |  |  |  |  |
|  |  | | | | **Excellent** | **Good** | **Average** | **Poor** | **Very Poor** |
| 8 | How do you rate the skill demonstration Over all | | | |  |  |  |  |  |
| 9 | Other Comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | | | | | | |
|  |
|  |  |  |  |  | Signature of Student: | | | | |  |

**SKILL DEMONSTRATION FEEDBACK FORM**

**CONSENT FORM (ENGLISH)**

**INFORMED CONSENT**

**Title of the study:**

**INTRODUCE PEYTON’S METHOD OF TEACHING SKILL FOR PARAMEDIC STUDENTS IN A TERTIARY CARE TEACHING INSTITUTE.**

**Principal Investigator with qualification:**

**Ms. Mohana Sundari. P**

M.Sc. Trauma Care Management

Department of Trauma Care Management

Sri Ramachandra Institute of Higher Education and Research

Porur, Chennai – 600116.

**Brief description of the study process:**

This study will be performed using a prospective research design was adopted for the study. The research involves learning skills using a new method, which is called Peyton’s Method, usual you will be learning the skill using the Peyton’s method, you may be in one group learning using this method or you may be in another group which is learning in the conventional method. The participants will be divided into two groups: Group A and Group B. Both the groups will be taught the following skills: Insertion of Oropharyngeal airway, Nasopharyngeal airway and Ambu Bag Ventilation Technique in the skills lab using a manikin. **Group A**- Will be instructed by the conventional method of interactive lecture with video demonstration **Group B**- Will be instructed by the interactive lecture with video demonstration, and in addition, will also be taught using the Peyton’s method. At the end of the training module, all the students (both groups) will be assessed. Skills will be assessed using OSCE method and the knowledge will be assessed using multiple choice questions.

**Confidentiality:**

Information obtained in this study will be kept confidential. Your name will not be used in reporting information in publications.

Participant’s right to withdraw from the study:

You have the right to refuse to participate in this study, the right to withdraw from the study and the right to have your data destroyed at any point during or after the study, without penalty.

**VOLUNTARY CONSENT BY THE PARTICIPANT**

Participation in this study is completely voluntary, and your consent is required before you can participate in this study. I have read this consent form (or it has been read to me) and I fully understand the contents of this documents and voluntarily consent to participate in this study. All of my questions considering this study have been answered. If I have any question in the future about this study, they will be answered by the investigator listed above. I understand that this consent ends at the conclusion of this study.

|  |  |
| --- | --- |
| Student Investigator – Form SRIHER | Supervisor – From SRIHER |
| **MOHANA SUNDARI. P**  M.Sc. Trauma Care Management  Department of Trauma Care Management  Sri Ramachandra Institute of Higher Education and Research  Porur, Chennai – 600116.  Email Id: mohanasep1984@gmail.com  Mobile No: 8072526709 | **Dr. T. V Ramakrishnan**,  Professor & HOD  Department of Emergency Medicine  Sri Ramachandra Institute of Higher  Education and Research  Porur, Chennai – 600116.  Email Id: [tramakrishnan2003@yahoo.co.in](mailto:tramakrishnan2003@yahoo.co.in)  Mobile No: 9940046670 |

By signing this form, I agree to participate in this study. A copy of this form has been given to me.

Date:

Name:

Participant signature:

**CERTIFICATION OF INFORMED CONSENT**

I certify that I have explained the nature and purpose of this study to the above-named individual, and I have discussed the potential benefits of this study’s participation. The question the individual had about this study have been answered, and we will always be available to address future questions.

Signature of person obtaining consent:

Investigator’s Signature:

Date:

**MOHANA SUNDARI. P**

M.Sc. Trauma Care Management

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Porur, Chennai – 600116.

Email Id: [a2820001@sriramachandra.edu.in](mailto:a2820001@sriramachandra.edu.in)

Mobile No: 8072526709

**CONSENT FORM IN REGIONAL LANGUAGE**

**INFORMED CONSENT – TAMIL VERSION**

**ஆய்வின் தலைப்பு:**

மூன்றாம் நிலை பராமரிப்பு கற்பித்தல் நிறுவனத்தில் துணை மருத்துவ மாணவர்களுக்கு பெய்டனின் கற்பித்தல் திறனை அறிமுகப்படுத்தவும்

**தகுதியுடன் முதன்மை புலனாய்வாளர்:**

**திருமதி மோகன சுந்தரி. P**

M.Sc. விபத்து பராமரிப்பு மேலாண்மை

அவசர சிகிச்சை முகாமைத்துவத் திணைக்களம்

ஸ்ரீ ராமச்சந்திரா உயர்கல்வி மற்றும் ஆராய்ச்சி நிறுவனம்

போரூர், சென்னை - 600116.

**ஆய்வு செயல்முறையின் சுருக்கமான விளக்கம்:**

ஆய்விற்காக ஏற்றுக்கொள்ளப்பட்ட ஒரு வருங்கால ஆராய்ச்சி வடிவமைப்பைப் பயன்படுத்தி இந்த ஆய்வு மேற்கொள்ளப்படும். ஆராய்ச்சி ஒரு புதிய முறையைப் பயன்படுத்தி திறன்களைக் கற்றுக்கொள்வதை உள்ளடக்கியது, இது பெய்டனின் முறை என்று அழைக்கப்படுகிறது, வழக்கமாக நீங்கள் பெய்டனின் முறையைப் பயன்படுத்தி திறனைக் கற்றுக்கொள்வீர்கள், இந்த முறையைப் பயன்படுத்தி நீங்கள் ஒரு குழுவில் இருக்கலாம் அல்லது வழக்கமான முறையில் கற்றுக்கொள்ளும் மற்றொரு குழுவில் நீங்கள் இருக்கலாம். பங்கேற்பாளர்கள் இரண்டு குழுக்களாக பிரிக்கப்படுவார்கள். குரூப் ஏ மற்றும் குரூப் பி. இரு குழுக்களுக்கும் பின்வரும் திறன்கள் கற்பிக்கப்படும்: ஓரோபார்னீஜியல் காற்றுப்பாதை, நாசோபாரிஞ்சியல் காற்றுப்பாதை மற்றும் அம்பு பேக் காற்றோட்ட நுட்பத்தை ஒரு மணிகினைப் பயன்படுத்தி திறன் ஆய்வகத்தில் செருகுதல். குழு ஏ- வீடியோ செயல்விளக்கத்துடன் ஊடாடும் விரிவுரையின் வழக்கமான முறை மூலம் அறிவுறுத்தப்படும். குழு பி- வீடியோ செயல்விளக்கத்துடன் ஊடாடும் விரிவுரை மூலம் அறிவுறுத்தப்படும், மேலும், பெய்டனின் முறையைப் பயன்படுத்தி கற்பிக்கப்படும். பயிற்சித் தொகுதியின் முடிவில், அனைத்து மாணவர்களும் (இரு குழுக்களும்) மதிப்பிடப்படுவார்கள். ஓ.எஸ்.சி.இ முறையைப் பயன்படுத்தி திறன்கள் மதிப்பிடப்படும் மற்றும் மல்டிபிள் சாய்ஸ் கேள்விகளைப் பயன்படுத்தி அறிவு மதிப்பிடப்படும்.

**இரகசியத்தன்மை:**

இந்த ஆய்வில் பெறப்படும் தகவல்கள் ரகசியமாக வைக்கப்படும். வெளியீடுகளில் தகவல்களைப் புகாரளிப்பதில் உங்கள் பெயர் பயன்படுத்தப்படாது.

**ஆய்விலிருந்து விலகுவதற்கான பங்கேற்பாளரின் உரிமை:**

இந்த ஆய்வில் பங்கேற்க மறுக்கும் உரிமை, ஆய்விலிருந்து விலகுவதற்கான உரிமை மற்றும் ஆய்வின் போது அல்லது அதற்குப் பிறகு எந்த நேரத்திலும் அபராதமின்றி உங்கள் தரவு அழிக்கப்படுவதற்கான உரிமை ஆகியவை உங்களுக்கு உண்டு**.**

**பங்கேற்பாளரின் தன்னார்வ ஒப்புதல்**

இந்த ஆய்வில் பங்கேற்பது முற்றிலும் தன்னார்வமானது, மேலும் நீங்கள் இந்த ஆய்வில் பங்கேற்பதற்கு முன் உங்கள் ஒப்புதல் தேவைப்படுகிறது. நான் இந்த ஒப்புதல் படிவத்தைப் படித்தேன் (அல்லது அது எனக்கு வாசிக்கப்பட்டது) மற்றும் இந்த ஆவணங்களின் உள்ளடக்கங்களை நான் முழுமையாகப் புரிந்துகொண்டேன், மேலும் இந்த ஆய்வில் பங்கேற்க தன்னார்வத்துடன் ஒப்புக்கொள்கிறேன். இந்த ஆய்வை கருத்தில் கொண்டு நான் கேட்ட அனைத்து கேள்விகளுக்கும் பதில் அளிக்கப்பட்டுள்ளது. இந்த ஆய்வு பற்றி எதிர்காலத்தில் எனக்கு ஏதேனும் கேள்விகள் இருந்தால், மேலே பட்டியலிடப்பட்டுள்ள ஆய்வாளரால் அவை பதிலளிக்கப்படும். இந்த ஆய்வின் முடிவில் இந்த ஒப்புதல் முடிவடைகிறது என்பதை நான் புரிந்துகொள்கிறேன்.

|  |  |
| --- | --- |
| மாணவர் புலனாய்வாளர் – ஸ்ரீஹெர் | மேற்பார்வையாளர் படிவம் – ஸ்ரீஹெரிலிருந்து |
| மோகன சுந்தரி. P  M.Sc. விபத்து பராமரிப்பு மேலாண்மை  அவசர சிகிச்சை முகாமைத்துவத் திணைக்களம்  ஸ்ரீ ராமச்சந்திரா உயர் கல்வி மற்றும் ஆராய்ச்சி நிறுவனம்  போரூர், சென்னை - 600116.  மின்னஞ்சல் முகவரி: mohanasep1984@gmail.com  மொபைல் எண்: 9962739842 | டாக்டர் டி.வி.ராமகிருஷ்ணன்,  பேராசிரியர் & எச்ஓடி  அவசர மருத்துவத் துறை  ஸ்ரீ ராமச்சந்திரா உயர் கல்வி நிறுவனம் கல்வி மற்றும் ஆராய்ச்சி போரூர், சென்னை - 600116.  மின்னஞ்சல் முகவரி: tramakrishnan2003@yahoo.co.in  மொபைல் எண்: 9940046670 |

இந்தப் படிவத்தில் கையொப்பமிடுவதன் மூலம், இந்த ஆய்வில் பங்கேற்க நான் ஒப்புக்கொள்கிறேன். இந்த படிவத்தின் நகல் எனக்கு வழங்கப்பட்டுள்ளது.

நாள்:

பெயர்:

பங்கேற்பாளர் கையொப்பம்:

**தகவலறிந்த ஒப்புதல் சான்றிதழ்**

இந்த ஆய்வின் தன்மையையும் நோக்கத்தையும் மேலே பெயரிடப்பட்ட நபருக்கு நான் விளக்கியிருக்கிறேன் என்று நான் சான்றளிக்கிறேன், மேலும் இந்த ஆய்வின் பங்கேற்பின் சாத்தியமான நன்மைகளைப் பற்றி விவாதித்தேன். இந்த ஆய்வைப் பற்றி தனிநபரிடம் இருந்த கேள்விக்கு பதிலளிக்கப்பட்டுள்ளது, மேலும் எதிர்கால கேள்விகளுக்கு பதிலளிக்க நாங்கள் எப்போதும் தயாராக இருப்போம்.

ஒப்புதல் பெறும் நபரின் கையொப்பம்:

ஆய்வாளரின் கையொப்பம்:

நாள்:

மோகன சுந்தரி. P

M.Sc. விபத்து பராமரிப்பு மேலாண்மை

அவசர சிகிச்சை முகாமைத்துவத் திணைக்களம்

ஸ்ரீ ராமச்சந்திரா உயர்கல்வி மற்றும் ஆராய்ச்சி நிறுவனம்

போரூர், சென்னை - 600116.

மின்னஞ்சல் முகவரி: mohanasep1984@gmail.com

மொபைல் எண்: 9962739842

**RESULT**

**Independent samples test**

The Independent Samples *t* Test compares the means of two independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. The Independent Samples *t* Test is a parametric test. Here it is used to compare the conventional group (group A) and Peyton’s group (group B) with the demonstration skill.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| p - value | \*\* Highly Statistical Significant at p < 0.01 | | | |
|  |  |  |  |  |
| p - value | \* Statistical Significant at 0.01 ≤ p ≤ 0.050 | | | |
|  |  |  |  |  |
| p - value | # No Statistical Significant at p > 0.050 | | | |

**Table: 7**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Independent Samples Test** | | | | | | | | | | |
|  | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| F | Sig. | t | Df | p-value | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Oropharyngeal Airway | Equal variances assumed | 10.774 | .002 | -2.079 | 34 | .045 | -.7222 | .3475 | -1.4284 | -.0161 |
| Nasopharyngeal airway | Equal variances assumed | 5.160 | .030 | -2.903 | 34 | .006 | -.7222 | .2488 | -1.2279 | -.2166 |
| Bag mask Ventilation | Equal variances assumed | 2.210 | .146 | -3.777 | 34 | .001 | -1.7222 | .4559 | -2.6488 | -.7956 |
| Knowledge | Equal variances assumed | 1.330 | .257 | 2.086 | 34 | .045 | 1.1111 | .5325 | .0289 | 2.1933 |

**RESULTS**

**GENDER DISTRIBUTION:**

|  |
| --- |
| **Totally 36 students** |
| Male students - 17 |
| Female students - 19 |
| Each Group 18 and 18 |

**Figure: 1** Gender Distribution – Group A

**Table: 1**

|  |  |  |
| --- | --- | --- |
| **Group A** | **Number** | **Percentage** |
| Male | 8 | 44.40% |
| female | 10 | 55.60% |

Among 36 study population, 18 were in Group A and 18 were in Group B.

In Group A, 8 were male and 10 were female.

**Figure: 2** Gender Distribution – Group B

**Table: 2**

|  |  |  |
| --- | --- | --- |
| **Group B** | **Number** | **Percentage** |
| Male | 9 | 50% |
| female | 9 | 50% |

Among 36 study population, 18 were in Group A and 18 were in Group B.

In Group B, 9 were male and 9 were female.

**OROPHARYNGEAL AIRWAY:**

**Figure:3**

Comparison of OSCE scores of oropharyngeal airway between two groups

**Table: 3**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Skill** | **Groups** | **N** | **Mean** | **SD** |
| Oropharyngeal Airway | Group A | 18 | 6.33 | 1.28 |
| Group B | 18 | 7.06 | 0.73 |

**P=0.045**

Inference: P<0.05, so Reject the null hypothesis, there is statistical significant difference between the scores obtained by Group A (conventional group) and Group B (Peyton’s group).

**NASOPHARYNGEAL AIRWAY**

**Figure: 4**

Comparison of OSCE scores of Nasopharyngeal airway between two groups:

**Table: 4**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Skill** | **Groups** | **N** | **Mean** | **SD** |
| Nasopharyngeal airway | Group A | 18 | 5.83 | 0.92 |
| Group B | 18 | 6.56 | 0.51 |

**P=0.06**

Inference: P<0.01, so Reject null Hypothesis, there is highly statistical significant difference between the scores obtained by Group A (conventional group) and Group B (Peyton’s group).

**BAG MASK VENTILATION:**

**Figure: 5**

Comparison of OSCE scores of Bag Mask Ventilation between two groups:

**Table: 5**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Skill** | **Groups** | **N** | **Mean** | **SD** |
| Bag mask Ventilation | Group A | 18 | 6.78 | 1.63 |
| Group B | 18 | 8.50 | 1.04 |

**P=0.01**

Inference: P<0.01 So Reject null hypothesis, there is highly statistical significant difference between the scores obtained by Group A (conventional group) and Group B (Peyton’s group).

**Figure: 6**

Result of over all Knowledge based MCQ test among the three Skills:

**Table: 6**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Questionnaire** | **Groups** | **N** | **Mean** | **SD** |
| Knowledge | Group A | 18 | 9.39 | 1.38 |
| Group B | 18 | 10.50 | 1.79 |

**P=0.45**

Inference: P<0.05, so Reject the null hypothesis, there is statistical significant difference between the scores obtained by Group A (conventional group) and Group B (Peyton’s group).

**FEEDBACK**

**THE DEMONSTRATION MET MY EXPECTATIONS:**

**Table: 8**

|  |  |  |
| --- | --- | --- |
|  | **Group A N=18** | **Group B**  **N=18** |
| **Strongly Agree** | 27.70% | 88.80% |
| **Agree** | 55.50% | 11.10% |
| **Neutral** | 16.60% | 0% |
| **Disagree** | 0% | 0% |
| **Strongly Agree** | 0% | 0% |

Here in the Group A (conventional group) 27.70% had strongly agreed, 55.50% had agreed and 16.60% were neutral. But in Group B (Peyton’s group) 88.80% had strongly agreed, and 11.10% had agreed.

**Figure: 7**

**I WILL BE ABLE TO APPLY THE KNOWLEDGE IN MY ROLE:**

**Table: 9**

|  |  |  |
| --- | --- | --- |
|  | **Group A N=18** | **Group B**  **N=8** |
| **Strongly Agree** | 66.60% | 100% |
| **Agree** | 27.70% | 0% |
| **Neutral** | 5.50% | 0% |
| **Disagree** | 0% | 0% |
| **Strongly Agree** | 0% | 0% |

Here in the Group A (conventional group) 66.60% had strongly agreed, 27.70% had agreed, and 5.50% were neutral. But in Group B (Peyton’s group) 100% had strongly agreed.

**Figure: 8**

**THE QUALITY OF INSTRUCTION WAS GOOD:**

**Table: 10**

|  |  |  |
| --- | --- | --- |
|  | **Group A N=18** | **Group B N=18** |
| **Strongly Agree** | 61.10% | 83.30% |
| **Agree** | 27.70% | 16.60% |
| **Neutral** | 11.10% | 0% |
| **Disagree** | 0% | 0% |
| **Strongly Agree** | 0% | 0% |

Here in the Group A (conventional group) 61.10% had strongly agreed, 27.70% had agreed, and 11.10% were neutral. But in Group B (Peyton’s group) 83.30% had strongly agreed, 16.60% had agreed.

**Figure: 9**

**THE DEMONSTRATION MET THE LEARNING OBJECTIVES:**

**Table: 11**

|  |  |  |
| --- | --- | --- |
|  | **Group A**  **N=18** | **Group B**  **N=18** |
| **Strongly Agree** | 66.60% | 94.40% |
| **Agree** | 27.70% | 5.50% |
| **Neutral** | 5.50% | 0% |
| **Disagree** | 0% | 0% |
| **Strongly Agree** | 0% | 0% |

Here in the Group A (conventional group) 66.60% had strongly agree, 27.70% had agree, 5.50% were neutral. But in Group B (Peyton’s group), 94.40% had strongly agree, and 5.50% had agreed.

**Figure: 10**

**THE METHODOLOGY TAUGHT FOR YOUR UNDERSTANDING:**

**Table: 12**

|  |  |  |
| --- | --- | --- |
|  | **Group A**  **N=18** | **Group B**  **N=18** |
| **Strongly Agree** | 61.10% | 94.40% |
| **Agree** | 33.30% | 5.50% |
| **Neutral** | 5.50% | 0% |
| **Disagree** | 0% | 0% |
| **Strongly Agree** | 0% | 0% |

Here in the Group A (conventional group) 61.10% had strongly agreed, 33.30% had agreed, and 5.50% were neutral. But in Group B (Peyton’s group), 94.40% had strongly agreed, and 5.50% had agreed.

**Figure: 11**

**PARTICIPATION AND INTERACTION WERE ENCOURAGED:**

**Table 13**

|  |  |  |
| --- | --- | --- |
|  | **Group A N=18** | **Group B N=18** |
| **Strongly Agree** | 77.70% | 100% |
| **Agree** | 22.20% | 0% |
| **Neutral** | 0% | 0% |
| **Disagree** | 0% | 0% |
| **Strongly Agree** | 0% | 0% |

Here in the Group A (conventional group) conventional group 77.70% had strongly agreed, and 22.20% had agreed, But in Group B (Peyton’s group), 100% had strongly agreed.

**Figure 12**

**ADEQUATE TIME WAS PROVIDED FOR QUESTIONS AND DISCUSSION:**

**Table 14**

|  |  |  |
| --- | --- | --- |
|  | **Group A N=18** | **Group B N=18** |
| **Strongly Agree** | 72.20% | 83.50% |
| **Agree** | 27.70% | 16.60% |
| **Neutral** | 0% | 0% |
| **Disagree** | 0% | 0% |
| **Strongly Agree** | 0% | 0% |

Here in the Group A (conventional group) 72.20% had strongly agreed, and 27.70% had agreed. But in Group B (Peyton’s group), 83.50% had strongly agreed, and 16.60% had agreed.

**Figure 13**

**HOW DO YOU RATE THE SKILL DEMONSTRATION OVER ALL:**

**Table 15**

|  |  |  |
| --- | --- | --- |
|  | **Group A N=18** | **Group B N=18** |
| **Excellent** | 66.60% | 100% |
| **Good** | 33.30% | 0% |
| **Average** | 0% | 0% |
| **Poor** | 0% | 0% |
| **Very Poor** | 0% | 0% |

In the conventional Group A, 66.60% rated it as excellent and 33.30% as good. On the contrary, 100% of Peyton’s Group B had rated as excellent.

**Figure 14**

**Discussion**

**DISCUSSION**

Peyton’s approach is a combination of various aspects of the learning theory. It is comprised of four steps including demonstration, deconstruction, comprehension, and performance. The efficacy of Peyton’s approach is more pronounced in learning practical skills as opposed to theory.

In a study conducted in 2016, two groups of medical students were taught principles of complex spinal manipulation skills each by Peyton’s approach and conventional method of teaching. The participants were later assessed on theoretical knowledge by a multiple choice (MC) exam and practical skills by an Objective Structured Practical Examination (OSPE). The results revealed that while there was no significant difference in the performance between groups in the MC exam. However, students instructed through Peyton’s four-step approach did significantly well in the practical (OSPE) exam. [10]

A study conducted on December 2020, compared the effectiveness of Peyton's method versus a conventional teaching technique on antenatal examination skills. the first training session, Group B, which underwent Peyton's method, achieved a higher score (24.08±2.31) compared to Group A (20.32±3.59), indicating that Peyton's method was a better teaching technique. In the second training session, all students in both groups scored almost the same (28 out of 30), highlighting the retention of skills after Peyton's method. Then they concluded "four-step approach" was considered superior because it led to more profound cognitive processing and better skills performance compared to the "See One, Do One" group. Previous studies also supported the benefits of Peyton's method for complex motor skills but not for relatively easy skills. Peyton's approach has been used remotely during the COVID-19 pandemic. Students and faculty favored Peyton's approach due to increased interest, better understanding, and improved interaction. However, Peyton's method was perceived as more time-consuming than the conventional method. The study had limitations, including the one-week gap between teaching techniques and the potential bias of using the same antenatal mother for assessment. [11]

In a study in September 2014, simulation-based skill training using Peyton's 4-step approach could improve the performance of medical students in neonatal resuscitation compared to traditional front-side 2-step teaching. They did three days of neonatal resuscitation training; all students underwent a standardized simulation-based scenario using newborn manikins. They have conducted the objective of the scenario was to assess the effect of both teaching methods using an objective structured clinical examination (OSCE) and a binary checklist. The OSCE was modified to include a practical part (pOSCE) and a theoretical part (tOSCE), with maximum scores of 118 and 74, respectively. The results showed that students in the 4-stage group scored significantly higher than those in the traditional group. The 4-stage training approach provides more hands-on experience and practical skills, leading to improved competence and confidence in clinical practice. [12]

The study examined the impact of Peyton's four-step approach on nursing students' performance and their acceptance of the training sessions. The findings indicated that the intervention group outperformed the control group in performance scores for intramuscular injection and arterial puncture procedures. This aligns with previous research demonstrating the effectiveness of Peyton's approach in improving practical execution compared to traditional training methods. The approach was well-received by students, who found it easy to learn and engaging. The acceptance ratings showed that students learned a lot during the training sessions. The study also highlighted the importance of maintaining student alertness throughout the training, as well as the value of repeated observations and feedback in improving learning outcomes. Students expressed confidence in their ability to independently perform the procedures after completing the training. Fourth-level students showed greater acceptance and learning through Peyton's approach compared to first-level students, emphasizing the importance of active and standardized educational experiences in acquiring clinical technical skills. Overall, the study suggests that Peyton's four-step approach is an effective and well-received method for enhancing nursing students' performance and engagement in skill training. [13]

This study compared the effectiveness of two different teaching methods for ventilation techniques using airways, specifically Oropharyngeal, Nasopharyngeal, and Bag mask ventilation skills. The two groups involved were Group A, which was taught using a conventional method, and Group B, which was taught using Peyton's method.

1. Oropharyngeal airway skill: Group B (Peyton's method) performed better than Group A (conventional method), and the difference was statistically significant.

2. Nasopharyngeal airway skill: Group B (Peyton's method) performed significantly better than Group A (conventional method).

3. Bag mask ventilation skill: Group B (Peyton's method) outperformed Group A (conventional method) with statistical significance.

4. Knowledge (MCQ): Group B (Peyton's method) demonstrated a statistically significant improvement compared to Group A (conventional method).

Based on these results, it can be concluded that Peyton's method was more effective in teaching ventilation techniques using airways compared to the conventional method, as it resulted in better performance in both practical skills and theoretical knowledge.

The study included feedback from both Group A (conventional group) and Group B (Peyton's group) regarding their experience with the training. In terms of the demonstration meeting their expectations, a higher percentage of students in Peyton's group strongly agreed (88.80%) compared to the conventional group (27.70%). Similarly, all students in Peyton's group strongly agreed that the applied knowledge met their expectations, while the conventional group had lower percentages of agreement.

Feedback on the quality of instruction showed that a higher percentage of Peyton's group strongly agreed (83.30%) compared to the conventional group (61.10%). When it came to the demonstration meeting the learning objectives, a significantly higher percentage of Peyton's group strongly agreed (94.40%) compared to the conventional group.

Regarding methodology, again, a higher percentage of Peyton's group strongly agreed (94.40%) compared to the conventional group (61.10%). In terms of participation and interaction, all students in Peyton's group strongly agreed, while the conventional group had a slightly lower percentage (77.70%).

The adequacy of time provided for questions and discussions received positive feedback from both groups, with higher percentages of agreement in Peyton's group (83.50% strongly agreed) compared to the conventional group (72.20% strongly agreed).

Overall, the skill demonstration was found to be satisfactory for participants in both groups, with a higher percentage of students in Peyton's group rating it as excellent (100%) compared to the conventional group (66% excellent).

**LIMITATION AND RECOMMENDATION**

**LIMITATIONS:**

This study was done with a small group of students, but not able to do with a large group.

Time Restrictions: Peyton's method may require more instructional time than more conventional teaching methods due to its regimented nature.

Student Engagement: Some students can have trouble sustaining their participation throughout the procedure or with the hands-on learning methodology.

**RECOMMENDATIONS:**

Peyton’s is a good method and it should be used more often. It allows for the maximum use of the time assigned to student practice. It consolidates the information and facilitates its memorization through repetition. So, we need more time to demonstrate the skill.

The participants could start using the skills learned immediately, so that they would not forget the technique of performing, in the future, we could use this Peyton’s method for the other procedural skills also, because the students could implement the skills immediately and be useful for the career as a medical professional.

In reality, it allows you to consolidate your knowledge and skills, the teacher must be strong didactical background to transfer the skills. Anatomical knowledge or skills competency concerning manipulation technique acquired before the interventions.

Repeated training, as well as periodic formative assessment, might be possible solutions to the described skills and knowledge delay.

**CONCLUSION**

**CONCLUSION**

1. For teaching particularly complicated motor skills on a broad curricular scale, the lecture and video based on Peyton’s "4-step method" is the best approach. Additionally, a successful technique to use Peyton's method in a group context might be used, and long-term retention of knowledge of this strategy in a formative environment has to be studied further.
2. The teaching strategy of Peyton is useful for helping students learn procedural skills.When the instructor uses small groups with just a few pupils his/ her method of instruction is more successful.
3. Peyton's Approach has proven to be workable, well-received by trainees, and simple for tutors to implement when utilized with a handful of learners in skills-lab training sessions.
4. According to this research, Peyton's method (group B) contributes substantially towards success in learning than the Conventional group (group A).
5. Peyton’s four-step approach, contributes significantly more to learning success than the standardized method.
6. Improving Self-confidence and satisfaction in performing the skills.
7. Overall skill demonstration was found to be satisfactory for the participant in both groups as evident from the feedback provided. (Conventional group: 66% excellent, 33% good, and Peyton’s group: 100% excellent).
8. To further investigate the long-term retention of acquired skills, the study suggests conducting a follow-up study to assess both groups at a later time point. This would provide insights into how well the students retained and applied the skills they learned, which can be valuable in evaluating the overall effectiveness of the teaching methods.

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**REFERENCE**

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1. compare conventional versus peyton’s method in

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