Original research article

Is skill lab training for BLS effective?

Dr. Swarna Rekha RV
Assistant Professor, Department of Anesthesiology, GR Medical College and Research Centre, Mangalore, Karnataka, India

Corresponding Author:
Dr. Swarna Rekha RV

Abstract

There is a dearth of data on the effectiveness of skills lab training over a longer length of time, despite the fact that it is common knowledge that skills lab training has a number of beneficial effects. Despite the fact that the advantages of skills lab training have been thoroughly researched and documented, this remains the case. As a consequence of this, we made the decision to carry out a prospective, randomised controlled trial with a follow-up period of either three or six months to investigate whether or not students who were instructed in accordance with a "best practise" model (BPSL) performed one skill of different suturing in a simulated environment better than students who were instructed in accordance with a traditional "see one, do one" teaching approach (TRAD). The study compared the performance levels of the two different groups.
Keywords: Skill lab, training, clinical practice, seeing and doing

Introduction

The clinical skills laboratory at a medical school is an essential component of the all-encompassing educational programme that is provided by the educational establishment where the clinical skills laboratory is located. It provides a secure and "mistake forgiving" environment, in addition to a teaching environment that enables students to execute procedures on each other in order to develop their procedural abilities before applying them to actual patients. This allows students to gain experience in a setting that is not only safe but also teaches them how to perform procedures [2-4]. It has been established that training in skills laboratories can boost procedural abilities not only in beginners but also in seasoned specialists who have years of experience [5-8]. This is true for both beginners and those who have already accumulated a great deal of knowledge. This is crucial for having in-depth understanding of difficult surgical approaches [8], in addition to the necessary clinical talents that are practised by students when they are enrolled in medical school [9]. In addition to this, it would appear that there is evidence that simulation-based medical education is favourable (also known as SBME), which is a factor that, when present in a clinical setting, positively impacts the outcome [10, 11]. Simulation-based medical education is a factor that, when present in a clinical situation, positively influences the outcome. Issenberg and colleagues give a systematic review in which they identify aspects that play a part in deciding how effective SBME is [5]. In this review, the authors focus on components that have a function in determining the efficacy of SBME. In this analysis, the authors shed light on the constituent parts. This review was carried out so that the authors could have a more in-depth conversation about the components, and it was for this reason that the review was carried out. Educational feedback is required to be present as one of the fundamental aspects because it enables introspection into the efficacy of the operational operations and is therefore one of the fundamental components that must be present. This is the case because educational feedback is one of the fundamental aspects that must be present. Additionally, there are terms of simulators such as "validity", "integration into curriculum," and "deliberate practise" that are some of the phrases that contribute significantly to the extraordinary success of the SBME. These are some of the terms that are examples of terms that contribute to the exceptional success of the SBME. On the other hand, there is an extraordinary paucity of evidence addressing the effects over a longer length of time. This is a significant barrier to progress. Maintenance of the procedural skills taught during SBME, despite the fact that it is standard information that practical proficiencies decline over time if they are not maintained, which is not something that is often trained [12]. This is despite the fact that it is common knowledge that practical proficiencies deteriorate over time if they are not maintained. This is due to the fact that training for practical proficiencies is not something that occurs very regularly. Since it is not something that needs to be maintained, continual training is not something that is required for it either.

Detailed Aims and Objectives

It is vital to first study and appreciate the distinction between skill lab instruction and clinical practise, which consists of seeing and executing, in order to gain common surgical skills. This is the first step in the learning process.

Materials and Methods

This research was carried out at the G R Medical College in Mangalore's Department of Anesthesiology. The research was conducted between October 2021 and January 2022.

The study was carried out on students who were in their second year. The task of BLS training was taken. One hundred different students were chosen for the research project, and once they were all assembled, they were split into two groups.

The first group of students went through their training in the skill lab, while the second group of students went through their training in the casualty (only watch). Three code blues were observed.

After receiving instruction for three months, participants took part in an OSCE test that was administered in the skill lab, and their results were compared.

Results

Table 1: Pre training OSCE marks

Group 1	Group 2	P-Value (<0.001)
4.23± 0.39	4.18 ± 0.56	No Sig

Table 2: OSCE marks after 3 months

Group 1	Group 2	P-Value (<0.001)
9.12± 2.43	4.47± 2.35	Sig

Discussion

It would appear that theoretical knowledge is preserved better than practical abilities, and it would appear that one's capacity to do simpler activities tends to be lost at a slower rate than one's ability to complete more sophisticated activities [13, 14]. However, it would appear that theoretical information is retained better than practical abilities. It would appear that, on the whole, theoretical knowledge is more likely to be kept over time than practical skill. This is because theoretical knowledge is more abstract. Studies on the long-term retention of procedural skills have, for the most part, focused on the many skills that are taught in basic and advanced cardiac life support training. This is because these skills are the ones that are most likely to be used in an emergency situation. This is due to the fact that these being the abilities that are most likely to be required in the event of an unexpected emergency. This is owing to the fact that they are the skills that are most likely to be utilised in an unforeseen event. Consequently, this is something that should be taken into consideration. In the current scenario, it is possible to establish that a perceptible reduction in performance began as early as a few weeks after the beginning of initial training, or it is possible to demonstrate that it began as late as an entire year later. Either way, it is possible to show that the loss in performance began at some point after the beginning of initial training. In each scenario, it is easy to demonstrate that the performance decline started at some point after the beginning of the initial training. The largest and most substantial decrease took place between 6 and 12 months after the start of the trial [15-18]. During this specific time frame, the rate of decline was at its peak and its significance was at its peak as well. Studies on the efficacy and retention of other skills that are taught in an SBME context have been carried out on a much less regular basis than other types of studies. Additionally, there is a large amount of variability about the skills done, the subjects of the research, and the training methodologies; all of these factors contribute to the difficulties in interpreting the data. In addition to this, there is a great deal of variety in terms of the skills that are performed. There are several examples of this phenomenon, including surgical residents maintaining their competence in laparoscopic surgery or colonoscopy after three months [13, 19], nephrology fellows experiencing a significant decline in their ability to insert temporary haemodialysis catheters after six months [20] and trained anaesthetists maintaining satisfactory retention of a rare but crucial procedural skill like coniotomy up to a year [21]. It is extremely difficult, if not impossible, to arrive at any findings on the efficacy of skills lab training for medical undergraduates because the data that have been collected have been so variable. This makes it extremely difficult to draw any conclusions regarding the success of the training. In conclusion, our current understanding of the components that contribute to the long-term retention of SBME training abilities has a restricted range of application in terms of the areas in which it may be used. This is because there is a general lack of data, there are weaknesses in the research design (such as heterogeneity in training methods, number of redundant practising, etc.) and there is variety in assessed skills in terms of the degree of difficulty of the abilities that are being evaluated. There is a severe lack of data across

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the board. This is because there is a significant gap in the amount of data that is readily available. The "best practise" skills lab training that is carried out within an SBME environment involves a range of distinct instructional components. Instructional techniques such as Peyton's "Four-Step Approach," which looks to provide a dependable and yet very popular teaching method [22], as well as feedback and repetitive practise as vital components of efficient SBME [5] are some examples of the types of instructional strategies that fall under this category. In this regard, the European Resuscitation Council [23] mandated that it be included as a mandatory component in the training that is provided as part of the resuscitation training courses that it delivers and that it be included into the training that is provided as part of the resuscitation training courses that it delivers. In addition, it mandated that it be included as a mandatory component in the training that is provided as part of the resuscitation training courses that it delivers. There is, however, evidence that is contradictory regarding whether or not skills lab teaching that follows a "best practise" approach (BPSL) leads to a better performance than other established teaching methods, such as a more traditional teacher-centered "see one, do one" approach (TRAD), which is a primary component of clinical bedside teaching [24]. This is because BPSL stands for "best practise" approach to skills lab teaching, and TRAD stands for "see one, do one". This is because the "best practise" method to teaching skills in a skills lab is known as the "best practise" approach to teaching skills in a skills lab. This is the reason why this is the case. This is because BPSL relates to the "best practise" approach to skills lab education, whereas TRAD stands for the phrase "see one, do one." As a result, this situation has arisen. Students are able to learn knowledge through this method of training by seeing an experienced medical practitioner while they show and explain a particular skill [25].

Conclusion

It indicates that teaching skills in a lab environment is highly beneficial for the reproduction of simpler abilities when it comes to performance measured over a longer length of time. This is particularly true for the more complex talents.

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