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# Practicing BLS on mannequin, do the medical students learn?

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**Abstract**
There is a lack 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 variety of positive effects. This is the case despite the fact that the benefits of skills lab training are well documented. This is in spite of the fact that it is general knowledge that training in skills labs has positive benefits on one's performance. This continues to be the case in spite of the fact that the benefits of skills lab training have been the subject of a significant amount of study and data. 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 BLS in a simulated environment better than students who were instructed in accordance with a traditional "see one, do one" teaching approach (TRAD). The study assessed and contrasted the levels of performance attained by the two separate groups of participants.

**Key words:** Skill lab, training, clinical practice, seeing and doing

## Introduction

The clinical skills laboratory at a medical school is an integral part of the comprehensive educational programme that is provided by the educational establishment where the clinical skills laboratory is housed. This is the case since the clinical skills laboratory is where students learn how to perform clinical procedures. It provides a safe and "mistake forgiving" environment, in addition to a teaching environment that enables students to carry out procedures on one other in order to enhance their procedural abilities before applying them to actual patients. In other words, it allows students to practise their skills before applying them to real patients. Students are able to obtain valuable experience in a setting that is not only risk-free but also instructs them in the proper execution of processes thanks to this [2-4]. It has been shown that training in skills laboratories can increase procedural abilities not only in novices but also in seasoned specialists who have years of experience [5-8]. This is true for both beginners and those specialists who have already accumulated a lot of knowledge. This holds true for people who are just starting out as well as those who have already amassed a significant amount of information. This is essential for having an in-depth comprehension of complex surgical techniques [8], in addition to the necessary clinical talents that are practised by students when they are enrolled in medical school [9]. It is also important to note that students have the opportunity to practise these abilities while they are enrolled in medical school. In addition to this, it would appear that there is evidence that simulation-based medical education is beneficial (also known as SBME), which is a factor that, when present in a clinical situation, positively effects the outcome [10, 11]. This is a factor that, when present in a clinical setting, positively impacts the outcome. The presence of simulation-based

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medical education in a clinical setting is a factor that has the potential to positively affect the outcome of the scenario. Issenberg and colleagues present a systematic review in which they identify characteristics that play a part in deciding how effective SBME is [5]. In this review, the authors highlight the factors that are taken into consideration. The authors of this review concentrate their attention on aspects of SBME that play a role in determining the effectiveness of the treatment. The authors of this investigation shed light on the various components by providing this. This review was carried out so that the writers could have a discussion that was more in-depth regarding the components, and it was for this reason that the review was carried out. Because it permits insight into the efficiency of the operational procedures, educational feedback is necessary to be present as one of the essential components that must be present. Because of this, educational feedback is required to be present as one of the fundamental components that must be present. This is the situation due to the necessity of including instructional feedback as one of the core components that must be present.

In addition, there are terms of simulators such as "validity", "integration into curriculum" and "deliberate practise" that are some of the phrases that contribute greatly to the amazing success of the SBME. These phrases are examples of terms of simulators. These are some examples of terms that contribute to the remarkable performance of the SBME, and they are examples of terms that are included in this list. On the other hand, there is an alarming lack of information that addresses the impacts over a more extended period of time. This is a serious obstacle to the progress being made. Maintenance of the procedural skills taught during SBME, despite the fact that it is common knowledge that practical proficiencies diminish over time if they are not maintained, which is not something that is typically trained [12]. This is despite the fact that it is common information that practical proficiencies deteriorate over time if they are not maintained. Despite the fact that it is general known that practical proficiencies are lost over time if they are not maintained, this is what has been observed. This is because training for practical proficiencies is not something that takes place very frequently. This is the root cause of the problem. Continuous training is not required for it because it is not something that has to be maintained. As a result, it is not something that needs to be maintained.

## Aims and Objectives

It is vital to first study and appreciate the distinction between skill lab instruction and clinical practice.

## Materials and Methods

This research was carried out at the Anna Medical College, Mauritius.

The study was carried out on students who were in their final 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.

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## Results

**Table 1:** Pre training OSCE marks

| Group 1 | Group 2 | P-Value (<0.001) |
|---|---|---|
| 3.38± 0.56 | 3.61 ± 0.67 | No Sig |

**Table 2:** OSCE marks after 3-6 months

| Group 1 | Group 2 | P-Value (<0.001) |
|---|---|---|
| 8.12± 1.68 | 5.57± 1.54 | Sig |

**Table 3:** Students performance before and after the online classes

| Before | After | P-Value (<0.001) |
|---|---|---|
| 4.58± 2.62 | 8.58± 0.65 | Sig |

## Discussion

It would appear that theoretical information is kept 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 complicated tasks [13, 14]. Both of these findings are consistent with the hypothesis that theoretical knowledge is more likely to be retained than practical talents. On the other hand, it would appear that theoretical knowledge is retained more effectively than practical talents. It would indicate that theoretical knowledge is more likely to be retained over time than practical skill, on average. This is due to the fact that theoretical knowledge is more abstract than practical knowledge. Studies on the long-term retention of procedural skills have, for the most part, concentrated on the many abilities that are taught in basic and advanced cardiac life support training. This is because these are the skills that are most likely to be employed in an emergency. This is due to the fact that these being the talents that are most likely to be utilised in the event of an unexpected emergency. This is because these are the skills that are most likely to be required in the event of an unforeseen emergency. As a result, this is the reason why this is the case. This is due to the fact that these are the kinds of skills that are most likely to be put to use in the course of an unexpected occurrence. As a direct consequence of this, this is something that needs to be taken into mind. In the current scenario, it is conceivable to establish that a detectable drop in performance began as early as a few weeks after the commencement 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 establish that it began as early as a few weeks after the starting of initial training. In either scenario, it is feasible to demonstrate that the decline in performance started at some point in time following the beginning of the initial training. It is not difficult to establish that the performance decline occurred at some point after the beginning of the initial training in any of these scenarios. The most significant drop occurred between 6 and 12 months following the beginning of the experiment [15-18]. This was also the period during which the decrease was the biggest. During this particular window of time, the pace of decrease was at its highest point, and the significance of this fact was also at its highest point. Studies on the effectiveness and retention of other skills that are taught in an SBME context have been carried out on a considerably less regular basis in comparison to the frequency of other types of studies. Additionally, there is a considerable level of variety about the skills done, the subjects of the research, and the training procedures; all of these aspects contribute to the challenges that are associated with evaluating the data. In addition to this, there is a significant amount of variety in the skills that are demonstrated throughout the competition. There are several examples of this phenomenon, some of which include surgical residents maintaining their competence in laparoscopic surgery or colonoscopy after three months [13,

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[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]. Due to the fact that the data that have been collected have been so variable, it is exceedingly difficult, if not impossible, to arrive at any conclusions regarding the effectiveness of skills lab training for medical undergraduate students. Because of this, it is quite challenging to get any kind of conclusion regarding the effectiveness of the training. In conclusion, the components that contribute to the long-term retention of SBME training abilities have a constrained range of application in terms of the domains in which they can be applied. Our current understanding of these components has a limited range of application. This is due to the fact that there is a general lack of data, there are shortcomings in the research design (such as heterogeneity in training techniques, number of redundant practising, etc.), and there is variety in assessed skills with regard to the degree of difficulty of the capabilities that are being evaluated. Across the board, we are suffering from a significant lack of data. This is due to the fact that there is a substantial gap in the amount of data that is easily accessible. The "best practise" skills lab training that is carried out within an SBME environment incorporates a variety of different instructional components. Instructional methods such as Peyton's "Four-Step Approach," which aims to provide a reliable and yet very popular teaching method [22], as well as feedback and repetitive practise as essential components of effective SBME [5] are a few examples of the types of instructional strategies that are included in this category. Another type of instructional strategy that is included in this category is feedback. 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 into the training that is provided as part of the resuscitation training courses that it delivers of addition to this, it specified that it be included as a mandatory component of the training that is delivered as a component 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 the "best practise" approach to teaching skills in a skills lab is known as the "best practise" approach to teaching skills in a skills lab. This is due to the fact that BPSL refers for the "best practise" approach to skills lab instruction, and TRAD stands for the phrase "see one, do one." This is due to the fact that the "best practise" method of teaching skills in a skills laboratory is also known as the "best practise" approach to teaching skills in a skills laboratory. This is the rationale behind why things are the way they are. This is due to the fact that BPSL refers to the "best practise" approach to skills lab teaching, whereas TRAD stands for the phrase "see one, do one". As a direct consequence of that, this predicament has materialised. Students are able to acquire knowledge through this kind of instruction by observing a knowledgeable medical practitioner as they demonstrate and discuss the application of a certain skill [25].

## Conclusion

It implies that teaching skills in a laboratory setting is particularly useful for the reproduction of simpler abilities when it comes to performance evaluated over a longer period of time. This is the case since laboratories are designed to simulate real-world environments.
This is especially true for those skills that require a higher level of complexity.

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