

Original research article

Skill lab training vs. clinical practice to learn common surgical skills

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Abstract

Despite the fact that the benefits of skills lab training are well known, there is a dearth of data on the effectiveness of the training over a longer period of time. 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 purpose of this study was to determine which group was superior in terms

Keywords: Skill lab, training, clinical practice, seeing and doing.

Introduction

The skills lab at a medical school is a well-established component of the overall curriculum training programme at the institution. It provides a safe and "error forgiving" environment, a training environment that enables students opportunity to practise ^[1] operations can be practised on manikins, on standardised patients, or on real people. [Citation needed] It is possible to practise procedures on real individuals. in order to refine their procedural skills before applying them to actual patients, they practise on each other first. ^[2-4]. Training in skills laboratories has been shown to improve procedural abilities not only in novices but also in professionals with years of experience ^[5-8]. In addition to essential clinical skills learned in medical school ^[9], this is relevant for in-depth knowledge of sophisticated surgical procedures ^[8]. In addition, it would appear that there is evidence that simulation-based medical education is advantageous (also known as SBME), which is a factor that, when present in a clinical context, positively effects the outcome ^[10, 11, 12]. Issenberg and colleagues give a systematic review in which they explain components that play a role in deciding how effective SBME is ^[5]. This review was conducted so that the authors could discuss the parts in greater detail. One of the fundamental factors that must be present is educational feedback, which provides an opportunity for reflection on the effectiveness of the operational procedures.

On the other hand, there is a lack of information regarding the long-term effects. maintenance of the procedural skills acquired during SBME, despite the fact that it is common knowledge that practical proficiencies deteriorate over time, if they are not maintained.

Aims and Objectives

To Study and understand Skill lab training Vs Clinical practice of seeing and doing to learn common surgical skills.

Materials and Methods

This research was carried out at the KMC, Mangalore, Obstetrics and Gynecology Department with assistance from the Medicine Department. Between October 2012 and October 2013, the research was carried out.

The study was carried out on students who were in their second year. The task of suturing was used as a criterion. 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.

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)
4.4± 0.64	5.12± 0.6	No Sig

Table 2: OSCE marks after 3 months

Group 1	Group 2	P-Value (<0.001)
7.02± 1.11	4.68± 1.08	Sig

Discussion

It would appear that theoretical knowledge is retained better than practical skills, and that the capacity to complete simpler activities appears to be lost at a slower rate than more complex ones^[13, 14]. In general, it would appear that theoretical knowledge is preserved better than practical abilities. The vast bulk of studies on the long-term retention of procedural skills has focused on the many skills that are taught in basic and advanced cardiac life support training. This is because these skills are the ones most likely to be used in an emergency situation. In the present scenario, it is possible to demonstrate that a detectable decline in performance started as early as a few weeks after the beginning of initial training, or it is possible to demonstrate that it started as late as an entire year later. The most notable decline took place between 6 and 12 months after the beginning of the investigation^[15-18]. [Show citation] There have been fewer studies done on the effectiveness and retention of other skills that are taught in an SBME setting. [Citation needed] [Citation needed] [Citation needed] In addition, there is a large amount of variation regarding the skills done, the subjects of the research, and the teaching techniques, all of which contribute to the difficulty in interpreting the findings. A few examples of this phenomenon include 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 highly difficult, if not impossible, to arrive at any judgments regarding the efficiency of skills lab training for medical undergraduates due to the wide variety of data. In conclusion, our present understanding of the elements that contribute to the long-term retention of SBME trained abilities is still somewhat restricted. [Citation needed] This is due to a general lack of data, defects in research design (such as heterogeneity in training methods, number of redundant practise, etc.), and heterogeneity in assessed skills in terms of the complexity of the abilities that are being tested. A general lack of data is to blame for this. Multiple instructional components are included in the "best practise" skills lab training that is carried out within an SBME setting. Instructional strategies such as Peyton's "Four-Step Approach," which seems to provide a reliable and yet fairly popular teaching method^[22], as well as feedback and repetitive practise as crucial aspects of efficient SBME^[5] are some examples of these. In this context, the European Resuscitation Council^[23] mandated that it be incorporated into the training that is provided as part of its resuscitation training courses as a mandatory component. 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. Through observation of an experienced medical practitioner as they explain and perform a skill, students are able to learn knowledge through this mode of education^[25].

Conclusion

When it comes to performance over a longer period of time, it appears that teaching skills in a lab setting is particularly effective for the reproduction of simpler abilities.

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