The Advantages and Disadvantages of Self Directed Learning: A Survey Study of Saudi Medical Students

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Abstract

Aim

To evaluate the advantages and disadvantages of self-directed learning (SDL) to Saudi medical Students. We hypothesize SDL is advantageous and effective teaching tool in Saudi medical college curricula.

Method

A dichotomy survey was circulated and collected manually among medical students in Taif and Jeddah (King Abdul Aziz, and King Khalid medical colleges) respectively. Students of third, fifth and sixth academic years were randomly selected, they were asked to point out the advantages and disadvantages of SDL, whether it was better than other teaching tools including Team Based Learning (TBL), and their recommendations to including it in all modules. It is a cross-section qualitative study.

Result

A total of 113 students responded to the survey 69 (61.1%) males and 44 (38.9%) females.

The advantages of SDL were in free selecting of sources, topics, time, space and time management were 23.3%, 27.9%, 7.6%, 20.9%, and 20.3% respectively, while the disadvantages were the difficulties in selecting sources and materials, accessing guide/tutor, time wastage, and language barrier in that order were 21.3%, 29.4%, 16.3%, 20.6% and 12.5% in that order, 21.1% saw it as a helpful teaching tool, 33.6% recommended it, while 4.4% suggested the inclusion 61-80% of SDL per module.

The overall accumulated advantages and disadvantages was 30.4% and 28.3% respectively

Results showed no difference between the advantages and disadvantage of SDL $[\chi^2(1) = 140.4, p < .001]$
Conclusion

Most of the students under study were not in favour of SDL, indicating dearth in the concept of its objectives and advantages, probably a reflection of the defect in pre-college education system. We suggest faculty members development will create cognization and inure students with DSL.

Keywords: Key words: self-directed learning, Saudi education system, medical education

Introduction

Self-directed study has been in practice for quite some time, meant for both, brilliant and normal students, a challenge for the former and concocting interest to the later. Moreover, helps improve quality of curriculum understanding, and is cost effective (Shafto MG 2015). ‘Directed Self-Learning’ term is suggested to be more suitable and correct (Harden & Laidlaw 2012), for teachers who act as facilitators through providing guidance as to what student should learn, read and providing other supportive teaching options. Nevertheless, success relies on self-discipline, independence, communication skills, acceptable of critical feedback, self-evaluation and reflection.

Primary education in Saudi Arabia, is teacher centred by default, and involves rote memorization (Ruch WA 2002; Abir A 1993), yet, when they later join medical college, converse to student-cantered mode, whereas teaching and assessment methods are completely different and challenging (Harden et al 1984)

A dichotomy survey conducted to evaluate the perception, advantages and disadvantages of SDL by Saudi medical students in Taif and Jeddah (King Saud and King Abdul Aziz medical colleges). According to our knowledge there is no similar study in the English literature.

Methods

A survey was circulated and collected manually among medical students in Taif (College of Medicine) and Jeddah (King Abdul Aziz and King Saud medical colleges). The study was conducted between February and April 2017. It is a qualitative and cross-sectional study. Students were randomly selected. The survey listed advantages (free selection of education source, topics, time, space, and time management) while the disadvantages, (difficulty in accessing education materials, selecting teaching source, accessing tutor/guide, language barrier and time wastage) respectively. Candidates were asked to select one or more from the list. On Likert scale, where 1 was highest and 5 the lowest, students were also asked to indicate how helpful SDL was in comparison to lecture and TBL respectively. And finally, the percentage selected (10-20%, 21-40%, 41-60%, 61-80%, >80%) of SDL to be included per module. There was no inclusion or exclusion criteria. Results was analysed by SSPS 23, IBM Corporation 1 New Orchard Road, Armonk, NY 10504-1722 US.

This study was approved by the chairman of the research ethics committee of the Kingdom of Saudi Arabia, Ministry of Higher Education, Taif University (Application No 38-36-0038).

Combined results
Since both sexes shared the same teaching and assessment methodologies strategies, we thought it is justified to combine the results.

Results

A total of 113 students responded to the survey, 69 (61.1%) males and 44 (38.9%) females. The advantages of having to freely select sources, topics, time, space and time management were 23.3%, 27.9%, 7.6%, 20.9%, and 20.3% respectively (Figure 1). While the disadvantages, of difficulty in selecting source and material, accessing guide/tutor, time wastage, and language barrier were 21.3%, 29.4%, 16.3%, 20.6% and 12.5% were in that order (Figure 2). Likert scale used to indicate SDL as a better teaching tool in comparison to TBL where 1 was the highest and 5 the lowest, was as follows (1) 26.2%, (2) 41.3%, (3) 49.5%, (4) 42.7%, (5) 31.6%. And if SDL being a helpful teaching tool, the selection was as follows (26.8%) extremely helpful, (41.9%) helpful, (77.1%) did not know, (27.9%) not helpful, (20.5%) definitely not helpful (Figure 3). And finally, 58.9% (10-20%), 66.4% (21-40%), 52.1% (41-60%), 13.9% (61-80%) and 7.1% (>80%) were the percentage of student recommendation to include SDL in the curriculum respectively. There was no difference between the advantages and disadvantages of SDL [$\chi^2$(1) = 140.4, p <.001]

Discussion

Medical education in Saudi Arabia follows the SPICES (student-cantered, problem-based, integrated, community-based, elective and systematic) model for more than ten years (Khalid BA 2008). The rapid increase in the number of medical schools, with the number doubling over the past five years to 31 (Bin Abdulrahman 2011), has created a challenge for planning education strategy. This, however, was a challenge especially for developing medical colleges, where lack of strategic planning, curriculum designing, and the required resources (Tekian A & Al Mazrou 2011) were encountered. This was further entangled by the demand for trained health educators to assist develop faculty members with curriculum issues, assessment etc. (Tekian A 2011) likewise, endure mandatory (Harden & Crosby 2000), appropriate teaching and learning training. In short, the demand exceeds the attainable. College of medicine in Taif and King Saud bin Abdul Aziz are developing colleges while King Abdul Aziz was founded more than 50 years ago. However, the survey did not show gross difference when it comes to appraising SDL, as so as the primary education system is a common co-factor. The overall review of student responses indicated inconsistency, as so as in the dichotomy of advantages, self-selection of source was 40 (35.4%) on one hand and the difficulty in selecting source as a disadvantage 34 (30.1%) on the other. Moreover, twenty-six (23%) had problems with guide/tutor access, an important factor for the success of SDL. Furthermore, despite the freedom given (to select space, time, methods and sources), thirty-three (29.2%) thought it was wastage of time, while 45 (39.8%) did not recommend it to be a teaching tool (Figure 4). The lack of perception and nescient with aims of SDL among student of both sexes under study, probably a reflection of pre-college education system mentioned above. It is interesting to note that English, the adopted teaching language in medical colleges, was not a significant barrier for the surveyed students 20 (12.5%), considering its learning strategies was inconsonant in pre-college education system (Alkubaidi 2014, Rajab 2013) Non-specification of grades, where senior students who are more settled, were embodied with the novice, likewise, exclusion of tutors/faculty participation, whose access is only a little more than 16% by the surveyed, a disadvantage, may had added valuable information, were the study limitations. For optimum benefits of SDL and other related student-centred teaching and education methods, further studies and critical review of the primary education system is suggested.
Conclusion

Self-Directed Study is a well-established education tool; however, certain criteria are required to optimise the benefits. Saudi medical students lack its apperception, which is probably related to pre-college teaching system. We suggest faculty members development will create cognization and inure students with DSL.

Figure 1

![SDL Advantages](image)

Fig 1: Time and source selection are the most advantages of Self Directed Learning noted by students

Figure 2
Figure 2: Difficulties in material, source are among the most disadvantages noted by students.

Figure 3

Figure 4

Fig 3: Most of students did not consider SDL is a helpful teaching tool.
Take Home Messages

Notes On Contributors

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Dr. Firas L Al Kindy is a keen young doctor, married, doing his intership and is chief interns. He was involved in a number of social and awareness programes including obesity, and cancer.

Mr. Anmar K Al Kindy is an undergraduate medical student, with interest in researches, he has attended a number of symposiums.

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Appendices
Declaration of Interest

The author has declared that there are no conflicts of interest.