

Impact of a Video on Learning the GALS Musculoskeletal Screening Exam in Medical Students



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Introduction

The musculoskeletal system is complex and difficult to examine. Yet, MSK issues are among the most common complaints in hospital inpatients and in general practice and contribute to considerable disability in our society¹. The GALS (gait, arms, legs, spine) examination is a fast and easy screening tool with a simple method of recording MSK findings that can be taught to young doctors to improve awareness and recognition of rheumatologic disorders².

Objective

To assess the impact of a GALS screening examination training video in medical students.

Methods

A GALS DVD was distributed to McMaster University's School of Medicine Class of 2007 (N=130) during a large group session in the MSK Unit 4 (September 2005). According to the medical school curriculum there was an OSCE in November 2005 and in April 2007 which included a GALS station. A questionnaire was distributed to the students after the OSCE exam in both November 2005 and April 2007. Students responded to six questions regarding their awareness of the GALS exam and whether they had reviewed the training video with a 'yes' or 'no'. Students also responded to eight statements using a scale from 1 (disagree) to 5 (agree) regarding their confidence in performing the GALS exam relative to other clinical exams, and the usefulness of the training video in learning the screening exam. The questionnaire provided to students is shown below:

Prior to Unit 4 I had no MSK teaching	YES	NO
I have heard of the GALS Screening Exam	YES	NO
I have received a DVD on GALS	YES	NO
I viewed the video on GALS	YES	NO
I attended the large group session on GALS	YES	NO
I did attend the small group session on GALS	YES	NO

The GALS examination was easy to learn	1	2	3	4	5
Disagree					Agree
I am confident in my ability to complete a GALS musculoskeletal screening exam	1	2	3	4	5
Disagree					Agree
Cardiovascular exam	1	2	3	4	5
Disagree					Agree
Respiratory exam	1	2	3	4	5
Disagree					Agree
Neurological exam	1	2	3	4	5
Disagree					Agree
GI exam	1	2	3	4	5
Disagree					Agree
Was the DVD on GALS helpful in learning this physical examination skill?	1	2	3	4	5
Disagree					Agree
The DVD should continue to be distributed?	1	2	3	4	5
Disagree					Agree

Results

1. Students' Confidence in performing the GALS exam versus other clinical exams

Five statements on the GALS questionnaire were scored on a scale of 1 to 5.

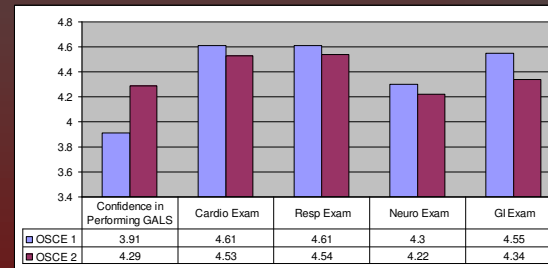


Figure 1: Comparison of students' confidence in performing the GALS exam relative to other clinical exams after OSCE #1 and OSCE #2.

2. Impact of the DVD as a learning tool

Three statements on the GALS questionnaire were scored on a scale from 1 to 5.

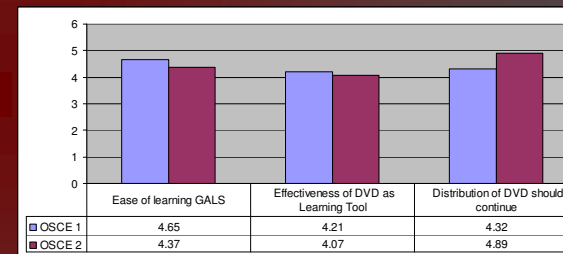


Figure 2: Impact of DVD as a learning tool after OSCE #1 and OSCE #2.

3. Student's Performance on the GALS OSCE station

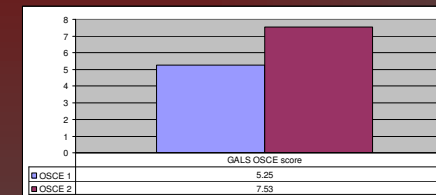


Figure 3: Comparison of Students' scores (out of 10) on the GALS OSCE station in OSCE #1 and OSCE #2. P value is <0.001.



Conclusions

Results here show a significant improvement in performance on the GALS OSCE station suggesting that McMaster students found the GALS to be a relatively simple skill to learn in their musculoskeletal unit and were able to retain this knowledge in their graduating year. The questionnaire indicates that students found the GALS DVD helpful to their learning of the GALS exam. Regardless of which specialty new medical graduates choose, they will have the skills to screen for rheumatological disorders in a fast and efficient manner.

References

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- Doherty M, Dacre J, Dieppe P, Snaith M. The 'GALS' locomotor screen. *Annals of the Rheumatic Diseases* 1982;51:1165-1169.