CanMeds Characteristics of Final Year Students' On-ward Activities and Team-Integration: a Prospective Longitudinal Study

A. Koechel¹, R. Scarpone¹, J. Stiepak², J. Groener³, W. Herzog¹, C. Nikendei¹, T. Bugaj¹

¹ Department of General Internal and Psychosomatic Medicine, University of Heidelberg Medical Hospital, Germany ² Department of Cardiology, Angiology, Pneumology, University of Heidelberg Medical Hospital, Germany

Introduction

Facilitating clinical practical experience in patient treatment and management, and integration in ward teams, is a core responsibility of final year medical education.

While final year students make a significant socio-economic contribution with their clinical occupation and have a significant share in the integration of pre-final year medical students on ward, several studies indicate that workplace learning during final year education shows severe deficits in a dedicated onward education, with a lack of structure, integration, supervision, and personal feedback.

However, as far as we are aware, there is not much known about the students on-ward activities.

Methods

N = 34 Final year students were asked to record their 5-days on-ward activities of their 2nd and 6th week of the trimester at the University of Heidelberg Medical Hospital.

Furthermore, they noted the properties of each activity: duration (minutes), mode (independent vs. observed), relevance for later practice (7-point-Likert scale: irrelevant — very relevant), difficulty-level (7-point-Likert scale: very easy — very hard) and whether they were supervised (cat.: performed with or without supervision).

The students as well as the other team-members evaluated the level of integration using a questionnaire to assess the personal team-integration (12 items, 7-point-Likert scale).

Main Results

• Participants characteristics:

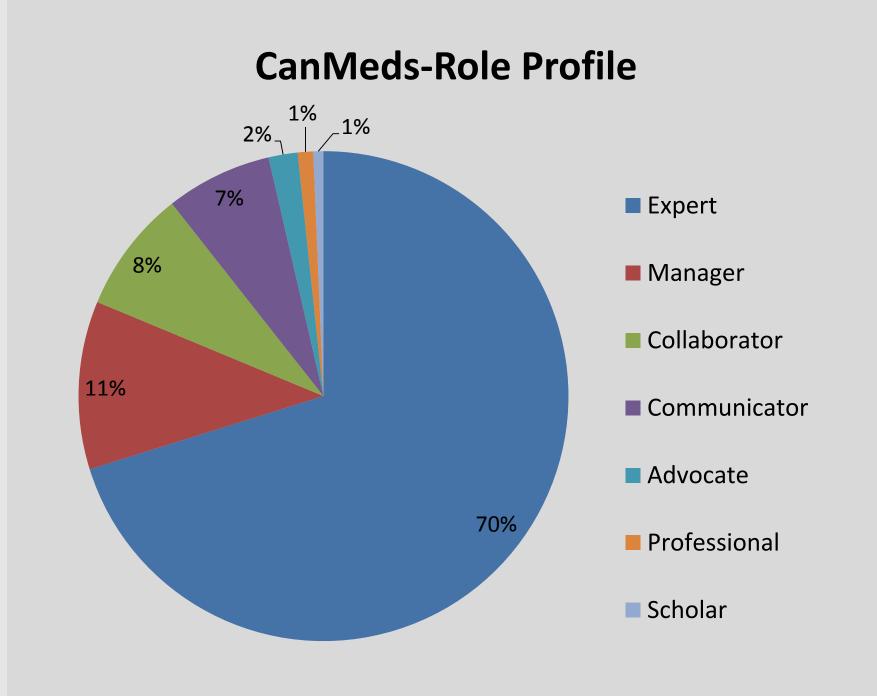
Age: M = 26,43 (SD=2,37); Gender: female 73%, male 27 %; Semester: M = 11,43 (SD=2,9); PHQ-D: M = 2,72 (SD = 3,4).

Level of integration:

The mean level of external assessments was higher than the self assessment both in the 2nd and 6th week and positively correlated (w2: r = 0.18; w6: r = 0.35). The students rated themselves as being more integrated in the 6th week than in the 2nd (p < 0.001). However, the external view didn't show significant changes at the different points of measurement.

On-ward activities:

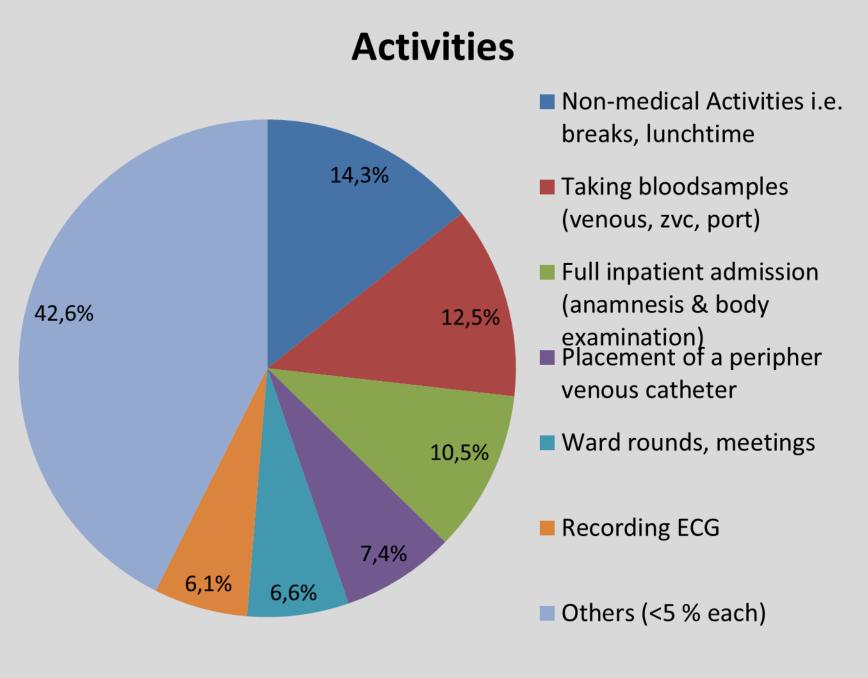
There were 3498 recorded single activities with an overall duration of 2287,5 hours. The analysis showed 62 different kinds of activities. Most acitivities were performed independently (78 %) and without supervision (17,9 %). Only 10 % of the activities were performed for the very first time and, if independently performed and supervised, rated significantly more relevant and difficult.



On-ward team Integration	Overall	Week 2	Week 8	Sig.
subjective	3,43	4,3	4,76	p<.03*
doctors' view	5,76	5,77	5,76	p<.95



Properties of Activity	Relevance (Mean (SD))	Difficulty (Mean (SD))	
Independently performed	4,85 (1,77)	3,07 (1,24)	
Supervision	5,77 (1,46)	3,70 (1,2)	
Newly acquired & independently performed	5,31 (1,6)	3,83 (1,24)	



Properties of activity	Overall	Week 2	Week 6
Independently performed	80,5 %	78 %	83 %
Supervision	21,5 %	23 %	20 %
Newly acquired	8 %	10,9 %	5,2 %

Conclusion

The present study shows that the perceived level of integration rises over the time as the students get more versed in their daily-routine. But even though most of their activities are daily-routine, the students experienced the on-ward work relevant

for their clinical practice. As shown before there is a lack of supervision. Efforts should be made to introduce the students to more complex activities, i.e. ward-rounds or case management.

Literature

Daelmans HE, Hoogenboom RJ, Donker AJ, Scherpbier AJ, Stehouwer CD, van der Vleuten CP. Effectiveness of clinical rotations as a learning environment for achieving competences. Med Teach. 2004;26(4):305-312.
Wahlstrom O, Sanden I, Hammar M. Multiprofessional education in the medical curriculum. Med Educ 1997; 31: 425-9.

Contact

Ansgar Koechel, Department for General Medicine and Psychosomatics, University of Heidelberg Medical Hospital, INF 410, 69120 Germany. Ansgar.Koechel@med.uni-heidelberg.de

³ Department of Endocrinology and Clinical Chemistry, University of Heidelberg Medical Hospital, Germany