

Time management for junior doctors: can they do it and is training necessary?

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Abstract

Background

Effective time management (TM) must be demonstrated by all newly qualified NHS doctors. Organisations are required to provide mandatory training covering TM, prioritisation and organisation. The real need for this is unknown. We aimed to measure TM skills in Foundation Year [FY] 1 doctors, and the effect of a simple teaching intervention.

Methods

All FY1 doctors (n=65) in one large NHS trust attended training. As part of session evaluation, they were asked to complete a validated self-assessment questionnaire before and six weeks after the teaching. Measurements were compared with objective peer assessment and with historical data collected from a non-medical cohort.

Results

Self-assessed TM scores were significantly higher in doctors than those reported in an historical non-medical cohort (3.43 / 5 vs 2.76/5 $p < 0.05$). Peer assessed time efficiency was high prior to the teaching session (3.95/5) and this correlated with trainee self-assessment scores ($p = 0.015$). TM skills did not improve significantly after teaching.

Conclusion

Most doctors have excellent TM skills and compare favourably with other professionals. Formal teaching of TM skills does not appear to benefit the majority of new doctors. More intensive intervention targeted at those few individuals demonstrating poor TM skills may be necessary.

Introduction

'Time management' is defined as the development of skills and procedures that serve to increase efficiency. These include: goal setting, prioritising and planning, scheduling, decision-making, ability to delegate and optimising work-life balance¹.

These are essential skills for professionals. Over the past 20 years there has been a growing recognition of the importance of effective time management in the business sector and considerable time and resources are expended in training workers in these skills². However, there is conflicting evidence as to the success of these interventions in promoting efficiency of the individual, as well as the business organisation³.

Poor performance as a junior doctor has been linked to problems in time management and difficulties in setting priorities⁴. However, it is not known how common or clinically relevant these issues are. With the advent of the European Working Time Directive and the reduction in the number of hours worked by junior doctors, coupled with the move to shift working patterns, it is vital that juniors use their remaining hours effectively. But there are few data on the abilities of new doctors to manage their time in the clinical arena and on the effectiveness of related training.

Demonstration of effective time management is a core competency for junior doctors in the UK NHS and training in time management skills is a mandatory part of the Foundation generic curriculum. However, many young doctors feel that such teaching is unnecessary and would prefer a greater emphasis on clinical subjects.

We aimed to describe the time management abilities of a cohort of junior doctors using a validated measure, to compare them against the objective assessments of their seniors, and to assess the effectiveness of a short intervention given as part of the generic teaching programme. Thus we aimed to assess and so improve our Foundation Programme generic skills teaching series.

Methods

The project was designed as part of an evaluation of the generic skills course. During their second four month placement of the year FY1 doctors were invited to complete a self-assessment questionnaire and obtain similar feedback from a senior colleague (FY2, or above).

All data were collected anonymously, and participation was voluntary at all times by FY1 doctors and assessors. Data were analysed blind to the identity of the FY1 doctor and their peer. Ethical approval was sought and judged not required as this was an evaluation of a teaching program.

Questionnaire

A 27-point questionnaire addressing time management taken from Van Erde's 2003 paper on procrastination⁵ was selected and piloted using eight F2 doctors who reported that all questions were relevant to medical practice and gave a range of responses comparable to van Erde's cohort. Accordingly the questionnaire was used unadapted.

The questionnaire is divided into four sections dealing with different aspects of time management, specifically: time management skills, avoidance, worry and emotional stability. Each question was answered using a discrete rating 1-5 where "1" was no agreement and "5" complete agreement with the statement. Most statements described positive behaviours or competencies. Where these were negative, the scoring was reversed

exactly as in van Erde's analysis.

An explanation of the study aims & accompanying questionnaire were distributed to all FY1 doctors (N=65) one month prior to the anticipated teaching sessions. This was sent by email or given out in person by one of the study coordinators. Each participant had the choice of one of three identical sessions held in the second or third placement of their first year.

Participants were asked to nominate an immediately senior colleague (FY2 or above) who could rate their TM abilities on an 8-point scale prior to the training session. This scale focuses on the practical abilities of the trainee.

Intervention

As part of the FP generic skills program all FY1 doctors attended the time management module. This had three parts: background reading, a diary exercise, and an hour long interactive discussion delivered by a senior trainee with educational training. The session covered practical techniques for using time, the emotional effects of working, and the identification of avoidance behaviour.

Data analysis

The self assessment questionnaire data were analysed by calculating the mean response of each section for each candidate, taking into account the polarity of each question as described above.

Baseline data (self and peer) are presented for each section as mean and standard deviation, and compared to Van Erde's data for non medical professionals using two tailed t testing assuming equal variance.

Assessments (self and peer) are compared before and after the intervention using a paired t test.

Results

All 65 doctors responded to the original pre time management-training questionnaire. Of these 55 trainees obtained initial feedback from a senior

peer. After training 26 completed questionnaires and 24 obtained senior peer feedback. Thus 26 had self assessment and 19 both (self and peer) assessment before and after training.

Baseline self assessment

Data are shown in table 1, compared to Van Eerde’s data for non medical professionals Practical time management skills are significantly greater for doctors and for the majority meet the standards to a large extent or completely. Avoidance behaviour is similar, but doctors are more likely to worry and are less emotionally stable when thinking about work.

Correlation between self and peer assessment at baseline.

There was a significant linear relationship between self and peer assessed time management skills ($r=0.55, p=0.015$). To the extent that these assessments are independent this lends validity to the self assessment

Effect of intervention

There was no significant difference in mean responses to all self-assessment parameters (Table 2). Similarly, peer ratings of FY1 TM skills did not change significantly as a result of the dedicated teaching session ($p>0.05$).

Table 1. Baseline Self assessment of TM skills.

	Doctors (n=65)	Non medical professionals (n=50)	significance
Time management	3.43 (0.43)	2.76 (0.48)	<0.05
Avoidance	2.43 (0.58)	2.48 (0.73)	NS
Worry	2.30 (0.82)	2.83 (0.66)	<0.05
Emotional stability	2.62 (0.39)	3.50 (0.71)	<0.05
Peer assessment	3.95 (0.64) n=55	3.31 (0.49) n=32	<0.05

Table 2. Effect of teaching on TM skills, self and peer rating

		Mean	N	Std. Deviation
Time Management	pre	3.39	26	0.45
	post	3.36	26	0.42
Avoidance	pre	2.40	26	0.68
	post	2.56	26	0.71
Worry	pre	2.44	26	0.82
	post	2.32	26	0.92
Emotional Stability	pre	2.73	26	0.44
	post	2.69	26	0.51
Peer rating	pre	4.17	19	0.59
	post	4.29	19	0.59

Discussion

These data describe the time management skills of a large cohort of foundation doctors in one trust. The data are robust, being based on a standard validated measure and so can be used to compare doctors against other professionals. Our trainees found the questions relevant, and the distribution of results is consistent with others, again supporting the validity of the method.

There is consistency between the doctors self assessment and the independent assessment of their immediate senior, strongly suggesting that both measure the efficient use of time. Junior doctors underestimate their abilities when compared to their peers.

There are significant differences between our population of junior doctors and a different group of

professionals in three of the four domains and in the peer rating. There are likely to be different explanations for each domain.

Practical time management skills are already established early in FY1, as indicated by peer responses and self assessment, perhaps because of training or experience at medical school, or because of factors selected by the admissions process. It is clear that the majority of doctors easily meet the standards set in the foundation curriculum, and so for these doctors, teaching aimed at that curriculum is unlikely to help. Indeed the assessment of their immediate senior (usually the ward registrar or senior SHO whose workload depends directly on the efficiency of the FY1) suggests that there is little room for improvement.

A minority of doctors do have significant problems with self organisation. The relationship between self and peer ratings suggests that many of these doctors could identify themselves using this questionnaire and so more intensive training could be directed to them. Alternatively the peer questionnaire could be used as a basis for workplace base assessment.

It is perhaps less surprising that there are differences between doctors and others in the domains of worry and emotional stability. These sections of the questionnaire clearly depend on the nature of the job as well as the behaviour of the professional. It is to be expected that the first year of medical practice will induce significant emotional reactions. It is also possible that doctors have been selected because they are more careful, and so are more likely to worry.

Effect of intervention

It was disappointing to find that our teaching session did not change time management behaviour. This is in contrast to a significant improvement in such behaviour in van Eerde's study⁵. However the baseline behaviour of our doctors before the teaching was already at or

above that of non medical professionals after it. Furthermore the intervention studied was longer and more intensive than ours. Subjects underwent training by choice, whilst for our doctors training is mandatory and not always engaged with at any more than a superficial level. Other studies have also failed to demonstrate a significant effect of time management training in non-medical populations⁶.

Limitations

This was an evaluation of a teaching program, not a research study, so response rates after teaching were voluntary and are not complete. Non responders could not be identified. However, despite this response rates are still comparable with other published survey data.

Conclusions

Whilst formal TM teaching is a requirement of the FP curriculum, this study suggests that doctors already have appropriate time management skills on entering FY1 and work efficiently without the input of specific structured teaching on this topic. However, FY1 doctors express greater anxiety and emotional stress. Demonstration of competency in time management might be improved using structured self and peer assessments.

Intervention may not be necessary for all. Intensive intervention might be better reserved for trainees identified during the course of clinical supervision and by self, or peer assessment.

However, the worry and emotional stability ratings suggest that intervention to ensure our new trainees well-being & maintenance of a healthy work-life balance might have more wide-reaching benefits for the cohort of FY1 trainees, and indirectly, patient wellbeing.

References

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