A digital approach to improving junior doctors’ diabetes knowledge


Inpatient diabetes management is a ‘wicked’ problem, i.e. one that remains difficult or impossible to solve because there are complex interdependencies and it is resistant to resolution. The National Diabetes Inpatient Audit (NaDIA) demonstrates that there are so many variable aspects to good glycaemic control for individuals in hospital, that even knowing where to begin can be a contentious issue. Certainly ‘trying harder’ or ‘more training’ on their own are unlikely to be successful. What needs addressing holistically are the structures, systems and philosophy of inpatient diabetes management.

We already know that one important aspect of hospital diabetes care – the monitoring, supervision and prescribing habits of junior doctors – can often be suboptimal. This is usually through no fault of their own. The seminal TOPDOC study in 2009 outlined how undergraduate and postgraduate medical education relating to diabetes care is inadequate and this means that the confidence and ability of clinicians in training are less than ideal. The knock-on effect is that the majority of doctors who look after diabetes inpatients are not providing good enough care and this causes more diabetes-related complications and emergencies, increased lengths of stay and fewer ‘good diabetes days’.

So to tackle this particular aspect of improving diabetes management for doctors without the experience or background knowledge is quite a challenge. Step forward Al-Yassin et al. who have developed an innovative approach to the teaching and training of juniors. They, like several other hospital trusts, have created a web-based diabetes e-learning module (DMEM) into their induction programme for junior medical staff. It has become an essential part of joining the trust. Several previous studies have looked at outcomes (either learning orientated or academic) following e-learning. Perhaps the most familiar e-learning module in the land of diabetes is the ‘Safe Use of Insulin’ module from NHS Diabetes which has had a massive uptake and opened up diabetes-relevant, accessible training to a wide range of health care professionals.

However, the paper in this issue of Practical Diabetes is the first to use sequential NaDIA results over the last few years to analyse clinical outcomes following the launch of the DMEM, and it has shown some very interesting results. The authors found significant improvements in junior doctors’ self-reported knowledge and confidence levels in all key areas of inpatient diabetes care. The results regarding the improvements in the NaDIA data were encouraging, showing a trend of improvement over time (e.g. in prescribing errors, management errors, ‘good diabetes days’). However, the true effect of the extent of clinical changes is difficult to ascertain. Due to the surprisingly small sample sizes for the numbers of insulin-treated inpatients, the results unfortunately do not achieve statistical significance. Hopefully, the DMEM module can be rolled out more widely, refined and the analysis undertaken again next year because this form of digital training constitutes a useful, accessible and engaging component in the battle for good glucose control.

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References

Drug notes
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