

# E-learning for medical education: reflections of learners on patients

Kieran Walsh

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## ABSTRACT

**Introduction** There is a growing research interest in *how* healthcare professionals learn online. This paper reports an analysis of reflections that relate to patients from users of an e-learning resource, BMJ Learning.

**Methods** Healthcare professionals who use BMJ Learning are encouraged to reflect on their learning. Over one year, all of the learners' reflections that related to patients were captured by the programme's software and were analysed using thematic analysis.

**Results** A number of key themes emerged from this analysis: many learners reflected on patients in the context of their disease; many learners reflected on how they had put their learning into action or planned to put their learning into action for the benefit of patients; many learners reflected on how they would pass on what they had learned to patients; learners greatly appreciated patients contributing to the learning.

**Discussion** Learners predominantly reflect about patients in the context of their disease. The reflections demonstrate that learners are keen to put their learning into action for the benefit of their patients. Learners' reflections show a keen interest in the patient-centredness of the learning resources.

## INTRODUCTION

E-learning is a modality that is being increasingly used in medical education.<sup>1</sup> In the early years of e-learning, there was a flurry of interest on whether e-learning "works" or "works better" than face-to-face learning.<sup>2</sup> The research evidence that has been developed shows that e-learning produces broadly similar outcomes as face-to-face education.<sup>3</sup> There is now a growing interest in *how* healthcare professionals learn online and *how* they think about the impact of their online learning on patients. This paper reports an exploratory thematic analysis of online learners' reflections that relate to patients.

The reflections of learners are important. According to Mann et al "reflective capacity is regarded by many as an essential characteristic for professional competence."<sup>4</sup> Reflection is now encouraged among learners at undergraduate, postgraduate and continuing medical education levels. Reflections of learners on patients are especially important. This is because patient centredness is important in healthcare professional education. Patient centredness is a value system that puts the agenda of the patient at the centre of the focus of healthcare.<sup>5</sup> Mead and Bower describe patient centredness as consisting of the following dimensions: "a biopsychosocial perspective, patient-as-person (understanding the patient's experience of their illness), shared power (therefore increasing patient involvement), therapeutic alliance, and doctor-as-person (self-awareness of their own subjectivity)".<sup>6</sup> The learners were users of an e-learning resource, BMJ

Learning. BMJ Learning is the e-learning service of the BMJ. It contains a range of interactive and multimedia learning resources to help doctors stay updated. Its users include GPs, GP trainees, and junior and senior secondary care doctors. It covers clinical and non-clinical resources and is designed to help doctors learn practical knowledge that they can use in their day-to-day practice.

## METHODS

Healthcare professionals who use the resources on BMJ Learning are encouraged to reflect on their learning when they have completed the resources. They are encouraged to articulate their reflections and to add them to a free text box at the end of the resources. Learners are not required or incentivised to write a reflection – they do this voluntarily. All of the learners' reflections between 01 June 2016 and 01 June 2017 were captured by the programme's software. The reflections that related to patients were analysed using thematic analysis.<sup>7</sup> This was used to allow new concepts and themes to emerge from the data.

## RESULTS

Between 01 June 2016 and 01 June 2017, one thousand four

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BMJ Learning, BMJ Publishing Group, BMA House, Tavistock Square, London WC1H 9JR

kmwalsh@bmjgroup.com

Dr. Kieran Walsh



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hundred and sixty-one reflections mentioned patients at least once in the text. These reflections were subjected to thematic analysis. Six key themes emerged from this analysis.

#### *Theme 1: Patients in the context of their disease*

Many learners reflected on patients in the context of their disease. They stated how they had learned about various features of the patient and their disease – typically related to the diagnosis and management of the relevant disease. Learners often mentioned learning needs in relation to these patients – albeit in an informal way. One learner reflected: “It was worth reading. I deal with a lot of patients with cerebral palsy and it has given me brief overview (sic) of what the disease is and how it is managed.”

#### *Theme 2: Putting learning into action*

Many learners reflected upon and articulated how they had put their learning into action or planned to put their learning into action for the benefit of patients. Learners did not see their e-learning activities as an academic exercise but rather had strong practical goals related to their actual patients. Sometimes they reflected that they had confirmed that their practice was correct and sometimes they reflected on how they had already changed their practice or planned to change their practice in the future. The changes to practice mentioned by the learners typically related to the clinical investigation, diagnosis and management of various diseases. Sometimes these reflections related to communication skills. One learner reflected: “Very good educational and informative topic which has enhanced my interviewing skills during doctor-patient consultation.” Another reflected as follows: “Will definitely change my management of patients requiring anticoagulation.”

#### *Theme 3: Passing on knowledge learned to the patient*

Many learners reflected on how they would pass on what they had learned to the patient. Many reflections from learners related to how they planned to use what they had learned to better inform their patients about their condition. Learners mentioned using the content as the basis of information for patients or on using the content to advise or educate their patients. Some learners suggested that the modules could be linked to patient information leaflets that they could give directly to their patients. Learners commented as follows: “Very useful to give more information to patients”; “I would find patient info (sic) leaflet useful”.

#### *Theme 4: Patients contributing to the learning*

The resources often feature videos of patients speaking about their illnesses. We created these resources to ensure that the content is genuinely patient centred and that learners are learning about content that is important to patients. These were greatly appreciated by the learners. The learners felt that these videos brought the content to life and helped to break up the text. Many of them found that they gave a more meaningful insight into the condition

under discussion and that this resulted in deeper learning. One learner commented: “Excellent description of migraine by the patient interviewed.” Another reflected: “Thanks to patient. For giving us a perspective from the other side of the consultation.”

Not all modules contain such videos and some learners stated that certain modules would benefit from these patient insights.

#### *Theme 5: Patient scenarios*

E-learning resources can feature interactive case-based patient scenarios – many of the learners commented on these and did so in a positive and constructive way. Many learners said that the resources could feature more of these scenarios or scenarios that were more complex or that were closer to real life. One learner reflected: “A very useful module, with excellent patient scenarios which makes you think laterally”. Another reflected: “I think the use of clinical scenarios was very effective as I have met several patients in the emergency department with similar presentations as shown.”

#### *Theme 6: Learners need more knowledge about patients*

Many learners reflected that, although the knowledge that they had gained was useful, they wanted even more detail. These learners requested more detail about the diagnosis and management of patients. Sometimes they asked for content to cover real life aspects of patient care in more detail or to deal with more complex situations. One learner reflected: “Excellent module. I wish though that perhaps they went into more detail about say clinical symptoms patients would have.” Another commented: “A little bit more about managing patients who have a life expectancy of less than 10 years would help.”

## DISCUSSION

Learners predominantly reflect about patients in the context of their disease. The reflections demonstrate that learners are keen to put their learning into action for the benefit of their patients and sometimes this involves empowering patients by passing on their learning directly to patients. Learners’ reflections show a keen interest in the patient-centredness of the learning resources – sometimes this is manifested in positive contemplations about patients contributing to the learning or patient scenarios that are grounded in real life experiences.

There are limitations to this analysis. All of the learners were users of a single e-learning resource (BMJ Learning): they may not be representative of users of other e-learning resources. Only reflections in the English language were analysed. Some reflective statements were incomprehensible – these were not analysed. Lastly these were all self-reflections that were articulated immediately after completion of the learning resources – we do not know what or how learners thought about patients in the long term.

This was an initial exploratory analysis. However, we plan to continue to analyse feedback to BMJ Learning that relates

to patients and to produce more resources that encourage such reflections – such as learning resources where patients contribute to the learning or learning resources that use patient scenarios grounded in real life experiences.

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None

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None

#### CONFLICT OF INTEREST

Kieran Walsh is clinical director at BMJ

#### ETHICAL APPROVAL

This was not sought as this was not a trial.

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