

- b there will usually be evidence of effective knowledge management
- c there is always someone senior within the organisation in charge of knowledge management
- d there will usually be evidence of effective sharing and dissemination of knowledge
- e the importance and value of knowledge is shared by all staff, not just those in senior positions.

## MCQ answers

1	2	3	4	5
a T	a F	a T	a T	a T
b F	b F	b F	b F	b T
c F	c F	c F	c F	c F
d T	d F	d T	d F	d T
e T	e F	e T	e T	e T

## Commentary

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'Knowledge management' is not a term which makes the pulse race. It smacks of a combination of dull facts and bureaucracy. It could almost be something from a European Commission (EC) directive on the training of taxicab drivers. Neither Bellinger *et al's* (1999) definition of knowledge ('the collation of information for a particular purpose, intended to be useful') nor Sensky's (2002, this issue) own definition of knowledge management make it sound much more exciting.

This dryness does the subject no favours. The key issue here is not about some anodyne or trendy new management tool, nor a further extension of bureaucracy into our working lives, but rather about how we make the best of the knowledge base that defines our disciplines, in an age where such knowledge arrives through the post by the kilogram and down the wires by the megabyte. The methods we devise to cope creatively with new information are at the heart of knowledge management, and the volume of new knowledge only enhances the importance of the process.

There is a danger in this of seeming to reinvent the wheel, or at any rate the cycle: the knowledge management cycle is to all intents identical to the

learning cycles found in adult-learning literature, which again look very like the audit cycle. This is not surprising: they are simply different ways of expressing the same concepts from differing needs and viewpoints.

It seems to me that there are three reasons for developing our knowledge management skills. The first is personal: we need to have a strategy which makes sense of a burgeoning knowledge load for our own good practice and professional satisfaction. The second is for our teams, to allow them to use and understand best practice at whatever level they are working in our organisations and, by doing so, to improve their professional competencies and make their work more fulfilling on a personal level. The third reason is that, by organising and aggregating knowledge in ways that give it meaning and context, we provide the foundations on which our own understanding can be progressively elaborated and deepened and on which the next generation of clinicians can build.

I still shrink from the term 'knowledge management'. There are other, more venerable words which perhaps feel strange when applied personally. It may feel uncomfortable saying 'I am an expert' (try it in

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front of the mirror) even though this is in fact a perfectly accurate descriptive statement of one's abilities. The educational wisdom of the 1970s was that levels of generic 'thinking skills' defined personal expertise. Knowledge was the neutral substrate to which such skills were applied. We now realise that this badly undervalued the role of knowledge to the extent that the most important factor in determining expertise is now believed to be in the quantity and quality of knowledge possessed by an individual. So, good knowledge management links directly to emerging levels of expertise and is thus a critical part of personal intellectual development.

It is naïve to think that such expertise comes easily, or that all can be equally good at it. It is similarly naïve to think that it can be written down in easy steps, but to attempt to express it is crucial. Education experts have long been aware that nothing focuses our understanding more than having to give it expression. It is not that by expressing it we prove that we have the understanding, but rather that the very act of expression forces us to systematise and make sense of an issue. It goes without saying that although this is essential for us as individuals, it is also important as we try to ensure that members of our teams have access to this wisdom in a form that each can access and use. Not all will be experts, but for all there is the opportunity to improve personal levels of understanding and ability.

Notwithstanding the importance of knowledge to the development of expertise, knowing facts is not synonymous with being an expert. The expert is a person who makes a good judgement where others may make a less good one. It is not always clear what informs such good judgement; knowledge is obviously an important aspect, but not the only one. Sensky comments on the orthodox teaching of clinical decision-making based on Bayes' Theorem, in other words of probabilistic decision-making based on our prior knowledge and experience. But real life is not so elegant. Georges Bordage, the Canadian medical educationalist, has found that expert clinicians do not use a probabilistic model of problem-solving, but rather carry with them something more like a series of templates (Bordage & Zacks, 1984). Diagnoses for them are not the painfully slow process of working through probabilistic algorithms, but they emerge swiftly after a few well-chosen questions. Literature about thinking in the general psychological world is

emerging to support this: solutions to problems often arise not through any logical deductive process but when the brain is apparently switched off or concentrating on something else. Although knowledge informs such a process, the way it does so is anything but clear. However, the fact that we are unable to systematise all expertise does not mean that it is not there. None of this makes the task of disseminating wisdom or managing knowledge easier, but neither does it make it less important. For their own sakes as well as that of others, experts need to open up their thinking processes as far as they are able, making them 'explicit'. If they fail to do so, they risk making opaque judgements unknowingly coloured by prejudice.

The old concept of clinical freedom which doctors enjoyed has all but vanished. Is it a coincidence that the new doctrine of patient-centredness has arisen as the other has fallen? I think not. Clinical freedom was about doctor-centredness: the right of a doctor to treat his [*sic*] patients the way he thought best. It was a doctrine that valued personal prejudice above clinical knowledge. It spoke of the omniscience of the doctor and his lack of need to justify decisions to either patient or colleague. Patient-centredness requires decisions based on the best available evidence, managed by an informed team and negotiated with patients in ways which allow them to be active participants. The philosophies underpinning knowledge management are near the heart of patient-centred care and team-based practice. They require us to sift the evidence, synthesise the knowledge and articulate it in appropriate ways to patients and team members alike.

Knowledge management is perhaps to the 21st century what alchemy was to the 12th. Alchemists aspired to turn base metals into gold; knowledge management experts aspire to turn basic data into wisdom. Let us hope that our success is the greater.

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## References

- Bellinger, G., Castro, D. & Mills, A. (1999) Data, information, knowledge and wisdom. <http://www.outsights.com/systems/dikw/dikw.htm>.
- Bordage, G. & Zacks, R. (1984) The structure of medical knowledge in the memories of medical students and general practitioners: categories and prototypes. *Medical Education*, **18**, 406–416.
- Sensky, T. (2002) Knowledge management. *Advances in Psychiatric Treatment*, **8**, 387–395.