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Continuing Professional Development (CPD): where the workplace becomes the classroom Is it where research begins?

Abstract

CPD views learning as a lifelong activity that a professional must be committed to. Hence, CPD is an integral part of professional life, as opposed to being an optional add-on. Over the years, CPD has undergone considerable change to make it more meaningful to the practitioner, while satisfying the requirements demanded by governing bodies of the profession. From being just an event, it has metamorphosed into a process. In the past, attending a CPD event was sufficient to claim CPD. However, today, CPD requires a professional to show an impact on practice, either directly or indirectly. This article explores how CPD could be organized, practised, and documented to meet the modern-day demands of the profession while not being an overtly extra burden to the practising clinician. Such CPD could naturally lead to action research benefitting the practitioner, the profession, and above all the patient.

Keywords: Continuing Professional Development (CPD), Continuing Medical Education (CME); reflective practice; portfolio; lifelong learning; action research

Introduction

“I do not know what I should do.”

“I do not know why.”

“Did I do the right thing?”

“Is that the best way of doing it?”

If a professional has not stumbled upon at least a few of the above dilemmas, then perhaps they have not been practising their profession. Many of us do grapple with such issues. Some of us try to address them actively. Some may ignore them. Those in the former group are practitioners of CPD.

Way back in 2000, in a landmark publication titled ‘To Err is Human’¹ under the aegis of the Institute of Medicine Committee on Quality of Health Care in America, the editors made a startling revelation: the annual mortality due to medical errors in the USA is more than that caused by road traffic accidents, breast cancer and AIDS – the three causes that gain the most public attention. What is

perhaps more important in this book is its title. The title implies an acceptance that professionals, being human, are prone to making mistakes. However, a true professional is someone who strives not to make the same mistake twice. To avoid repeating mistakes, one should know how to learn from one’s mistakes. Thus, learning from one’s own mistakes forms a significant part of CPD. Arguably, what is even more important would be to prevent mistakes – or put it in another way, foreseeing mistakes before they occur and taking corrective action to prevent them from happening. For a practising medical professional, the only way to avoid either repeating or making fresh mistakes is CPD.

One may critique the above conceptualisation of CPD as being rather negative, and as a process that may even promote defensive medicine. CPD can also be looked at more positively as advancing the profession by pushing the boundaries of our knowledge about both disease processes and their treatments - even in the absence of

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‘mistakes’. Therefore, if ‘mistakes’ are viewed not merely as errors, then the current practice could also be termed a ‘mistake’ (though not an error) awaiting improvement. Thus, CPD could be operationally defined as the means of both avoiding and learning from mistakes. This would certainly be the celestial aspiration of CPD.

There are more formal definitions of CPD in the literature, both within and outside medicine. For example, the Chartered Institute of Personnel and Development defines CPD as “The conscious updating of professional knowledge and the improvement of professional competence throughout a person’s working life. It is a commitment to being professional, keeping up to date and consciously seeking to improve.”² It is important to note that in this definition, improvement should not be limited only to knowledge or even to the technical (e.g., clinical) domain, but should also be extended to encompass a more holistic and wide-ranging set of abilities, including those known as socioemotional skills or soft skills. Some even go to the extent of claiming that learning confined to technical abilities should not be called CPD. Instead, they argue such learning should not be termed Continuing Medical Education (CME)³. In terms of professional practice, this is a crucial distinction. Often in the past, professionals were criticised for engaging in CPD using work time but not converting what was learnt to practice. This happens typically when learning is limited to knowledge, but not to other domains of learning, particularly skills and perhaps attitudes.

This ‘attitude’ is perhaps one of the most fundamental requirements of CPD. And looking closely at it one realises in fact this is the same attitude that one needs to conduct research. The World Health Organization’s definition of CPD drives this point home: “The wide-ranging competencies beyond clinical update, research and scientific writing, the multidisciplinary context of patient care, ethical practice, communication, management and behavioural skills, team building, information technology, audit, and appropriate attitudinal change to ensure improved patient outcomes and satisfaction.”⁴

CPD: why?

If formal professional training programmes in undergraduate and postgraduate medicine conducted by accredited educational institutes such as universities

are supposed to train doctors adequately, why is CPD needed? The answer to this question is at least four-fold.

First, medical content expands rapidly. It was said that in 1950 medical knowledge doubled every 50 years, in 1980 every 7 years, in 2010 every 3.5 years and in 2020 every 0.2 years (73 days)⁵. So, although in the 1950s the learning in the medical school may have been sufficient to sustain a career, by 1980 a doctor’s understanding of diseases and their treatment became outdated within a decade of graduation from medical school! This trend is certain to continue. This means that formal training alone is insufficient for future practice. So much so, that many undergraduate and postgraduate programmes today aim to provide only the foundation for future lifelong learning.

Second, within five years in medical school or a few years in postgraduate training, a student cannot be taught everything that a medical professional needs. This is so, even if one does not factor in the expansion of medical knowledge and skills, mentioned earlier. Medical curricula increasingly recognise this limitation and aim to produce ‘day-one’ practitioners. The day-one abilities of any professional would not be the optimum abilities expected of them. This means that beyond day one, the practitioner is supposed to keep on improving on their own, without a formal, organized training programme.

Third, new diseases emerge and it is difficult to predict those new diseases with any certainty. A recent example of this is COVID-19. Although such pandemic proportions are not always needed to trigger learning, a practitioner needs to be up-to-date on new diseases that they may encounter.

Fourth, rapidly changing technology may alter diagnostic and treatment modalities. Technology can update the current treatment modalities. So, even without an increase in the current knowledge, the practice may change due to technology. An example would be keyhole surgery. Our understanding of the pathophysiology of conditions treated by laparoscopic procedures hardly changed, but the invention of the laparoscope changed the treatment to the extent that open surgeries became almost outdated in certain situations.

Even if all the above reasons as to why formal training is inadequate for a lifetime of medical practice are ignored, still CPD is essential for a practitioner to improve his/her practice. That is, even if one assumes that medical school and postgraduate training have taught everything neces-

sary for practice, medical science has not advanced after the graduation of a doctor, and no new disease conditions or technological advancements in the detection and treatment of diseases have emerged; a practitioner must improve simply to optimise care. Optimisation of care must happen due to two reasons. First, as much as all professionals are prone to mistakes, they are also liable for their mistakes. So, correcting mistakes is crucial as the public does not expect, as mentioned above, a professional to make the same mistake twice. CPD provides the mechanism for the correction of one's mistakes. Second, a professional should not wait until a mistake happens to improve. Even in the absence of mistakes, there is room for improvement in every professional's practice. Every professional needs to perfect the art of every aspect of their practice. The dictum 'practice makes perfect' does not hold if the practice is not accompanied by a conscious effort to change the current practice for the better. Again, CPD is how a professional attains such improvement in practice.

All of these processes are embodied in research. At the end of the day, all research is done to find the best 'care', optimise the best 'care' and the delivery of that 'care' to the patient.

CPD: how to?

In the past, CPD was defined by conferences, symposia, and workshops. Both the employers and governing bodies of the profession were concerned about the loss of time and money spent on these CPD events which had little or no impact on patient care. Some went to the extent of ridiculing such events and the money spent per professional on those was called 'sitting allowance,' implying that if a professional is seated in those events, they earned sufficient 'CPD credit points' to show that they have engaged in CPD. Others argued that one does not need to be even 'seated' to gain those CPD points. Merely signing the attendance sheet and disappearing from the event was sufficient. In short, the accountability of CPD was in question.

How can this issue of accountability of CPD be addressed? One way would be to pull out clinicians from their day-to-day practice and make them go through formal classes, with an assessment of their learning at the end. Then, however, patient care may suffer due to the extended non-availability of clinicians for patient care. Moreover, different clinicians

will have different learning needs. Offering the same class to all may not then be useful. Offering all possible classes may also not be cost-effective as some classes may go unattended. Finding what clinicians want to learn through a formal survey may also be not very effective, as the learning needs of the clinician may be instantaneous as opposed to pre-determined. Hence, CPD learning should not only be 'just for you' but also 'just in time'. So, taking clinicians out of their workplace is not a viable option.

All these bring home one crucial revelation. CPD cannot be externally imposed. It has to be driven by the intrinsic motivation of the clinician. This means a successful CPD programme will have to be flexible enough to accommodate the clinician's needs. Such a programme cannot rely on 'one-size-fits-all' classes. Nor can it afford to pull out clinicians from the workplace. Instead, the workplace needs to provide learning material for the clinician to learn on their own with a mode of learning of their choice. Such learning will indeed be practice-relevant as it is the practice that gave rise to the learning. A CPD programme that turns the workplace into a classroom is thus the answer to all the issues discussed above.

When the workplace becomes the classroom, the learning will be more individualistic and contextual. Though massive CPD sessions may not be very appealing, there should be adequate resources for the clinician to satisfy their learning needs. They can be the usual conferences, symposia, and workshops, but more importantly, there should be resources for self-learning such as journals, textbooks, reviews, manuals, and online tools that the learner can access on their own, at a time that they prefer, and in a way that is most suitable for their needs. Although there is no uniform process, there still could be an overarching theoretical framework to guide the learner. That framework is grounded on reflective learning.

Reflection has been defined as "deliberate, purposive exploration of experience, undertaken in

order to promote learning, personal and professional development, and improvement of practice".⁶ The most crucial term in this definition is 'improvement of practice'. It implies that improvement of practice should be the result of any professional development activity. The means of achieving such professional development is through 'deliberate, purposive exploration of experience', which is essentially 'reflective

learning'. This and other such definitions of reflection have been operationalised by various reflective cycles. The commonest and the oldest of those cycles is Kolb's cycle.

Kolb⁷ conceptualised reflective learning into a four-stage cycle. He termed the four stages as:

1. Concrete experience
2. Reflective observation

3. Abstract conceptualization
4. Active experimentation.

These four stages describe a very simple process that can be simplified into five basic questions: what was the learning event/experience; what did I learn; what more do I have to learn; how do I learn it; what is the evidence for learning/change of practice? These five questions superimposed on the cycle are shown in Figure 1.

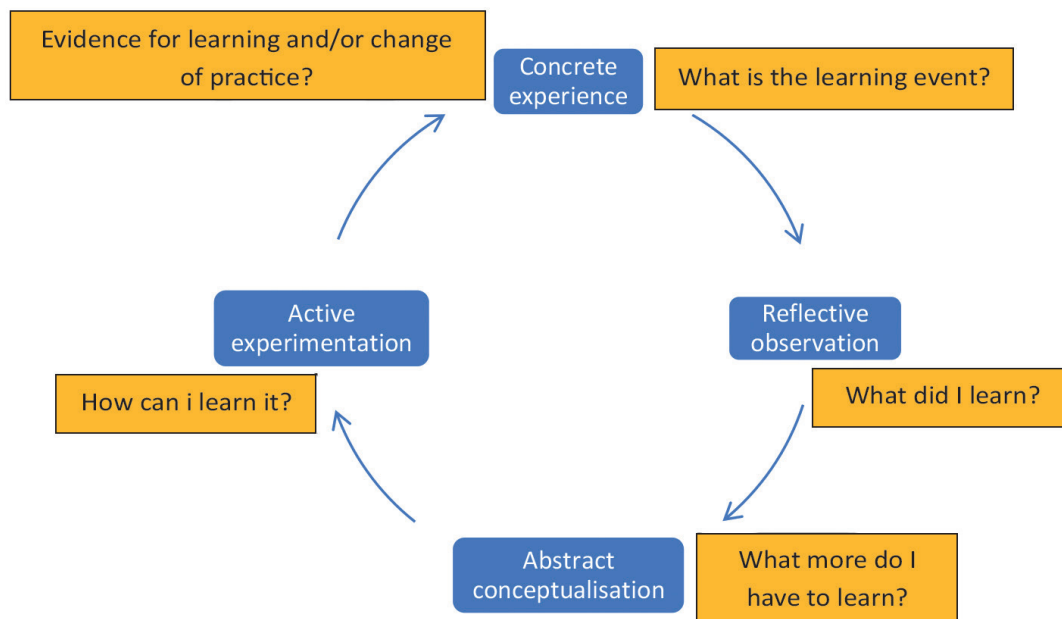


Figure 1: Kolb's cycle simplified with five basic questions

CPD in action

An example of how Kolb's cycle works in practice could be illustrated with the following basic, hypothetical reflection. This can be considered as a reflection by an early postgraduate trainee.

What was the learning event:

Managed a 12-year-old male patient with a distal end of radius and ulna fracture (bayonet deformity) using closed reduction.

What did I learn:

Despite an initial acceptable position, this was lost over the next two weeks leading to a repeat manipulation, K-wiring and re-casting.

What more did I have to learn:

Should I have done something different the first time?

How did I learn it:

(a) Discussing it with seniors. (b) Reading textbooks or better still, published research

Evidence for learning and change of practice:

Different approach (closed reduction with percutaneous pinning) to the next adolescent with a similar fracture, leading to successful management of the fracture. Appended evidence of x-rays taken before and after reduction with follow-up x-rays.

The above example highlights a few important points.

1. CPD is not confined to the post-training setting. CPD should start during early training so that the culture of CPD and reflective practice is inculcated in the formative years. Many modern undergraduate and postgraduate training programmes actively promote CPD (i.e., in terms of reflective practice) through their curricula.

2. Learning material is from routine, daily practice. The primary learning material or the learning trigger comes from the workplace, not from a textbook, conference, or workshop. The latter modes of learning can be used to learn what was identified as a learning trigger from the workplace.
3. Simple events are more than sufficient to act as a trigger for learning. One need not wait for catastrophic significant events to start reflecting. Also, reflection need not always lead to major advances in training such as shown in the above example. Rather, it could be a very minor improvement in practice, e.g., the positioning of the equipment trolley during a procedure.
4. Documentation in CPD need not be voluminous. A few sentences would do, as long as they adequately illustrate the learning and the completion of the cycle.
5. Evidence for learning must be authentic in that the reader of a reflective log must be convinced that the learner has done it. For example, in the above example, only giving as evidence the titles of book chapters, journal articles and manuals used to learn the procedure would constitute poor evidence as no one would know whether the learner has used those learning modes to learn. However, evidence for the application of what was learned back to practice in terms of radiological evidence in this case is superior evidence as it is stronger proof of learning.
6. Only completing the learning (i.e., discontinuing the cycle at the stage of 'active experimentation') would complete all four stages, but not the cycle. To complete the cycle, one needs to move from 'active experimentation' to 'concrete experience' of another cycle.
7. Finally, this point is on something that is not illustrated in the above example. It is not a must that the learner should always meet with success after every cycle. If for example, in the above exercise, the fracture reduction with pinning during the second attempt (i.e., following new learning) was complicated by a pin site infection. Then the question arises once again should I have done something different 'this time'? So, this subop-

timal result would be the concrete experience (or the learning event) for the next reflective cycle. Hence, the cycles can go on several iterations until the learner is satisfied.

What one also begins to appreciate is that this process of CPD of an individual event when applied broadly becomes research. As one can see this single event is a powerful trigger for research. A number of questions can be asked. What percentage of fractures lose position? Does the initial degree of correction co-relate to the later loss of position? Does the type of immobilization below elbow versus above elbow make a difference? etc. As one can see all these lead to the formulation of the all-important 'research question/s'.

Documentation of CPD

Strictly speaking, if CPD is all self-driven then documentation would serve only as a personal memo. Such memos, if methodically organised and stored, would facilitate easy reference should the need arise to revisit and refresh previous learning. So, proper documentation is important even at a personal level. However, documentation in the modern world of accountability is not always personal. There will be various governing bodies of the profession that accredit professionals in order to extend their license to practise. Also, there will be various employment recruiters interested in the CPD that the professional has engaged in to maintain their current competency of practice, should the professional apply for a new posting.

The external sources that monitor a professional's CPD activities may also want to quantify the CPD undertaken in terms of CPD credits. This they do by assigning credits for each learning activity that has been accredited by them as a potential CPD activity. However, such CPD activities will be meaningless if they are not accompanied by appropriate reflection to complete the reflective cycle. Nonetheless, external requirements such as credit points also demand proper documentation of CPD activities, quite apart from the internal (i.e., personal) requirements.

The reflective logs such as the one above with their accompanying evidence for learning is usually collated, organized and documented using a portfolio.

By definition, “a portfolio is a collection of student work, which provides evidence of the achievement of knowledge, skills, appropriate attitudes, and professional growth through a process of self-reflection over a period of time.” The learner can organize the reflective logs and the material that they have collected in a way that best suits the purpose for which the portfolio is built, i.e., for internal or external use.

Conclusion

There is more than one reason to believe that CPD is here to stay. A holistic approach to CPD, involving not just mere improvement of knowledge but the advancement of knowledge, skills, and attitudes, leads to more meaningful learning that is likely to impact one’s day-to-day practice. To ensure the benefits of CPD are extended to the patient, underpinning CPD with reflective practice is essential. Reflection is an iterative, cyclical process which is never complete without showing a change of practice. Such a reflective process could be documented through a portfolio. At a personal level, a portfolio is a good personal memo of one’s own CPD and learning. More importantly, a portfolio serves as a mirror for an outsider to find out the quality of a professional. Material for such reflection should originate from the workplace as formal learning disconnected from the workplace is unlikely to improve patient care. Thus, a practising professional’s workplace is the classroom. However, it may not stop there. The workplace activities that are adequately reflected upon can bring about change that goes beyond personal gain. If the planned change

leads to new findings and developments, then CPD could benefit the discipline at large. Thus, if CPD is conducted using the proper methodology and in the right spirit, the workplace becomes not only a classroom but also a laboratory of a practising clinician.

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