



## Lessons from COVID and looking to the future

**Elizabeth Kay**

*Editor, Evidence Based Dentistry*

**A**lthough we are still in the grip of COVID-19 and its fallout, it seems to me that the time is right to ponder for a moment on what we might have learnt thus far. And for once I do not mean ‘what have we learnt scientifically?’ or ‘what evidence have we collated?’. On this occasion I mean the question to be more philosophical than methodological. So what have we learnt over this past year?

Well, I think we first need to look back and remember the world as it was, and ourselves as we used to be, pre-COVID-19, and recognise that we could never have imagined or anticipated that something like this would happen to us. Or that something could arise that would affect our lives so utterly, and so profoundly.

Who among you could have imagined that we would drive down roads that were all but deserted? Who would have envisaged the population shopping wearing surgical masks? Who in their right minds would have contemplated the thought of children having no formal schooling for six months and no exams at the end of the year? And none of us ever thought we would see a day when flights would be grounded, that all sport would be cancelled, and that the long awaited, and much prepared for, Olympics would not take place. And who would have dreamt of a scenario of supermarket shelves stripped bare, of queues of people waiting to go shopping, snaking around massive carparks? And for those in dentistry, who could ever have pictured the inconceivable

prospect of no dentistry....except the most utterly basic?

It seems to me that the only way that we can move forward both professionally, and personally, from this event that would never, ever, we thought, happen is to reflect on some of the assumptions and misunderstandings. The first of my reflections is to reconsider the concept of risk, and our ability to assess it sensibly. The risk of something, is not the probability of it happening. Risk is the product of the probability of an event occurring multiplied by the impact it will have if it does. And although assessment of risk is often distorted by recent personal experiences, our egos and the media, it is real and quantifiable. Did any of us ever in our risk assessments contemplate the possibility, let alone the probability, of a worldwide pandemic, or examine the likely effect on our practising lives if it did?

The second thing that occurs to me is the apparent profound lack of understanding of the concept of testing. All tests have a number of parameters which vary in importance, depending on the context of the test, the prevalence of the disease, the mortality and morbidity rates, the outcomes of diagnosis, and the prognosis with treatment. These parameters are, at the most basic level, its sensitivity, its specificity, its positive predictive value, its negative predictive value, and its position on a receiver operator characteristic curve. All these things are crucially important in relation to any test....be it a radiograph, a salivary flow test, or a COVID-19 test. And yet the vast majority of the population (and, it seems the politicians) just believe that tests give simple answers. They do not.

The third part of my reverie relates to the trade offs between survival and quality of life. This, surely is a balance which is hugely meaningful to all of us? Endless studies have demonstrated that almost all of us will trade years of life for increased wellbeing and happiness. We all take risks every day...some of us more than others, but all of us do things which have an element of risk. For example, some like to ski, many women have had children, and we drive on roads which have the potential to be the cause of our demise. And we do these things in order that we can live the lives we wish to live. Somewhere in our heads, we calculate those risks as being ones which are worth taking. My belief is that we need to properly understand the actual risk each one of us faces each day from the virus, so that we can make informed decisions as to what path it is best to take.

So, my lessons from COVID-19, and my thoughts for the future are:

- Change is inevitable and constant
- One’s degree of risk acceptance is a personal trait
- Things we think we understand are almost always more complex than we imagined them to be
- External change can benefit us if it induces internal change
- It is only by working together and being open to truly understanding evidence that we will survive.

And so, I believe, this is a cathartic moment for dentistry. It is a time to reboot and rebuild.

*Evidence-Based Dentistry* (2020) **21**, 118.

<https://doi.org/10.1038/s41432-020-0145-z>