

Everyone a patient? Beware the *Commoveamus* effect!

I read in the medical press that up to 90% of the population have raised blood pressure that should be treated, and heard on the radio that two-thirds of the population have high 'cholesterol'. Instinctively I knew that Charles would feel that this approach would manufacture many unnecessary patients with the consequent morbidity of being a patient, so I asked him for his comments.

'Charles, have you seen or heard the recent publicity that suggests, in terms of some risk factors, that more than half of us are abnormal and require treatment?'

'A very dangerous belief and almost by definition untrue!' *he replied.*

'But surely *appropriate* management must be beneficial,' *I replied.*

'I agree, Coe, but only because you chose your words wisely.'

Flattered by this response, I asked him to expand.

'My first question is, "Can we use the word *'abnormal'* in this context?" I believe there was a famous battle about this in the middle of the last century.'

'Pickering *v.* Peart on blood pressure. Match drawn,' *I replied.*

'It was drawn because the debate was over whether there were two populations. The evidence and the distribution (skewed normal) suggested a substantial normal population overlapped by several smaller groups. This might reflect small genetically different subsets and several different morbidities. I am sure that there are many other examples.'

'Surely it does not matter what you call those factors as they are associated with higher risk?'

'My contention is that it matters profoundly for *appropriate* management if risk varies within the truly normal range. "*Appropriate management*" are your words not mine, Coe!'

'But sometimes the measurements are clearly abnormal!' *I interrupted.*

'Granted!' *he replied.*

'Then how do we distinguish the normal from the abnormal?'

'There are at least two approaches. One might make a comparison with a different and geographically distinct population which is perceived to be normal. I do not like this because selection pressures might be different or perceived "good". Furthermore, results may reflect problems confined to the reference population.'

'Lower serum lipids might be due to poorer nourishment?'

'That's the idea Coe!' *he replied, adding,* 'Let's look at the other approach, manipulating data derived from the same population. In a stable population in a constant environment, distributions follow a narrow symmetrical bell or "normal" shape. Recent changes in environment or behaviour, and disease will tend to broaden and distort the curve. If they are all pushing or pulling in the same direction, say to the right, the curve will become skewed, but the left side and the peak – now the mode – will be relatively stable. One could then construct a normal population in both senses of the word by using the mirror image of the left in place of the skew on the right.'

'What's the point?'

'This would give you a good idea of the proportion within the true normal range and its limits. People within two standard deviations of the median on the revised curve should be regarded as normal and, more importantly, told that their tests are normal in the course of any management of that risk factor.'

'But the results must be abnormal if they are associated with more disease?'

'No more so than the height of a modern man who is from a taller generation and so has to be careful about bending his knees if he wants to enter a seventeenth century cottage without bruising his head.'

'But if the interventions are succeeding in controlling the risk factors, then surely converting the majority of those who are not in the habit of seeing a doctor into patients is a price worth paying?'

'Not if you have a price to pay in converting the "healthy well" into the "unhealthy well", with consequent worry and a perception that they are ill and need treatment at all costs! That is likely to be counterproductive in terms of mortality.'

'Where's the evidence?'

'So far as surgery attendances are concerned, I believe there is plenty.'

'Granted,' *I replied*, 'But that is not death!'

'No, but it is years lost to life! But seriously, there is a little recognised fact that does give some support to the hazard,' *and he continued*, 'Let's look at recent experience with the two genders. Is there not one large-scale intervention to prevent cancer that is universally accepted to be useful?'

'Yes, cervical screening.'

'And many would say breast screening as well?'

'Somewhat more controversial Charles!' *I replied*.

'Nevertheless together they should give women a good start on men. Both are common cancers and sufficient to impact on female life expectancy over the last thirty years, a period in which women are said to have become far more health conscious than men.'

'Yes it was even suggested in the BMJ that men might become redundant over the next 200 years if sperm banks developed and men did not stop neglecting their health.'¹

'But what happened over those thirty years?'

'Life expectancy increased,' *I replied*, *thinking I was stating the obvious*.

'But which gender did best?'

I smelt a rat. 'Men?' *I ventured*.

'Yes,' *he replied*. 'Survival in men increased by four years and in women by three. Should the trend continue, far from being the poor relations, men will outlive women in 200 years time!'

'But isn't the explanation something that you applaud: the one thing in which men are ahead of women is a change in smoking habits?'

'Certainly, that might seem to be a major factor,' *he agreed*. 'But then you would expect the effect to be much stronger in the higher social classes. In practice, the large differences in survival are not diminishing, but men are still doing better than women in all classes.'

'So there is not an easy answer.'

'No,' *he said*, 'there clearly is not an easy answer and the contributory factors are legion. We must not forget the positive. The second half of the twentieth century was the first time life expectancy increased from 65. I profoundly believe that this is due to exercise and a determination to stay young at heart rather than a fear of growing old.'

'That should be the same for both sexes. Any other suggestions?'

'The longevity of monks and nuns and others living in similar communities is well recognised. Is this due to willing dependence on others in providing life's necessities? If this is so, recent social changes cannot have helped women, as they become the worried rich as well as the worried well. Gender differences in concern about the environment might be another factor.'

'We've drifted away from our original point.'

'Not entirely,' *he replied*, 'but to come back to the main point, it is incumbent on those who seek to prevent disease not to induce undue worry and make patients of the healthy. One of the ways to do this is to present their interventions as management of the normal.'

'So, Charles, you are suggesting that failure to do this may be one of the reasons why women are outliving men by less than they did 30 years ago?'

'Yes, Coe. We are talking about non-specific harm done by an intervention that may offset some of its specific benefit. Don't you think we need a name for it?'

'I am sure you have one in mind!' *I replied*.

'It is really the opposite of the placebo effect. "Placebo" means I please, so how about "Commoveo", I disturb?'

'Not bad,' *I replied* 'But your comparison of men and women implies that the disturbance might not be one sided!'

'You are quite right!' *he replied* 'Complicity must be recognised! The right word is "Commoveamus"!'

Charles hastened to explain that 'commoveamus' means 'we disturb'. Like the absolute placebo effect, the absolute commoveamus effect would be very difficult to measure because observation is itself an intervention, perhaps even more relevantly for the latter than the former. Nevertheless, Charles believes it is real and I think he convinced me.

Coemgenus

Reference

- 1 Siegfried M, Jadad AR. The future of men and their health. *BMJ* 2001;323:1013-14.