



M.E. Analysis – Evaluating the results of the PACE study

a project supported by Phoenix Rising

10. Future studies should aim for a more rigorous scientific structure (more)

One day, at Keele in 1971, one of my tutors ambled into the room with a new stick of chalk in his hand and a smile on his face. He went across to the blackboard, and, holding the chalk at just the right angle, drew an arc across it, and the chalk made that dreadful squealing sound that sent shivers down our spines.

"You know what makes that sound, don't you? Gremlins! The board is covered in millions of them, much too tiny to see, but if you get the angle of the chalk just right, it tickles them as you go across them, and each one goes Oooooooooo," and he gave a little wriggle as he said it, just to illustrate the point.

We looked at each other, with that look that young people reserve for when someone older is being daft.

"Well, come on, argue me out of it" he continued.

For the next ten minutes we tried all sorts of arguments, but he answered or deflected all of them with an internally consistent logic that was hard to break.

"You are all missing the point! It is easy enough to come up with different theories to explain a known set of facts, and to construct a coherent argument around each one. But a proper scientific theory should do two things: it should give us a greater understanding of what is going on, but it must also predict something that we would not expect with other theories, so that we can test it rigorously."

And that is what the PACE trial was really doing. Knowing that CBT and GET are specifically tailored to deal with false illness perceptions and deconditioning, the trial was effectively testing the hypothesis that it was these psychological problems that lay at the heart of ME/CFS. As such it was expecting the results to be highly successful. The failure to state exactly that is a failure in scientific logic.

The fact that the results were poor totally destroys the hypothesis. Now of course people will try to patch it up to fit the resulting facts. Astronomers were doing that years ago trying to patch the motion of the planets in the heavens to fit in with the church's position that the Earth was the centre of the universe. Their model grew increasingly complex and they got more and more desperate (as Galileo found out to his cost), but eventually the more rational explanation prevailed.

The PACE results were of the same order as those testing CBT or GET on other serious illnesses, such as heart disease or multiple sclerosis. No one has suggested that, for most patients, these other illnesses have a mainly or even significant psychological component. But until very recently, the UK government had not spent a penny on properly biomedical research on ME/CFS, but had effectively put all of their research money behind this one hypothesis.

It is time that changed, and that the training for medical workers reflected the failure of the psychological interpretation of ME/CFS.