Editor’s comment

‘Me medicine’

An article in a recent New Scientist caught my eye recently. Entitled ‘All about me’, Donna Dickenson thinks that the growth of personalised medicine threatens the communal approach that has brought our biggest health gains.

Personalised medicine is definitely on the agenda in the developed world, and is being talked about elsewhere as well. The idea is that we will eventually be able to understand enough about an individual’s genome to be able to apply medicine that is specific to an individual and his/her pathologies. Even Barak Obama jumped onto the bandwagon when still a lowly US senator, declaring ‘in no area of research is the promise greater than in personalised medicine’. ‘Me medicine’ is glamourous – backed up by new biotechnologies such as direct-to-consumer genetic testing – something that many experts warn is potentially fraught with danger. However, knowing how lay people jump on any new approaches to health, it is likely that many who have the means will use this – and subsequently demand personalised medicine from their doctors.

As Dickenson points out, ‘we medicine’ – public health programmes such as childhood vaccinations are increasingly distrusted and even subject to cuts in austerity programmes. But it is these very old-fashioned programmes – along with other changes in general living standards – that have brought the greatest benefits. Countries such as Cuba, with a social approach to providing healthcare and less individualistic attitudes, have better health outcomes across their entire population.

The prononents of personalised medicine predicted a paradigm shift in the way that medicine would be practiced – but this hasn’t happened. A poll carried out in the US in 2012 found that physicians only ordered personal genetic tests for around 4% of their patients. Another study put the figure at only 2%. But governments in the developed world are still pouring money into this vote-catching approach to healthcare. In the UK, the government recently announced that it would offer private companies a subsidy from a £300 million fund to encourage investment in a personalised medicine initiative, Genomics England. In 2012, the US administration increased the National Institutes for Health budget for personalised medicine, at the same time cutting the budget for the Centers for Disease Control and Preventions Office of Public Health by 90%.

And what of the outcomes of ‘me medicine’? The drug vemurafenib, used in the treatment of advanced melanoma, was reported recently to extend the life span of 1 in 4 patients by 7 months if they carry a specific genetic mutation in their cancer. But only about half of those with the ‘right’ type of tumour responded and the mutation in question only occurs in about half of these melanomas. These drugs are likely to be even more expensive than other, already expensive, cancer treatments. Already, public pressure in the UK is pushing the government to announce massive new spending on cancer drugs that will have a negligible effect on length and quality of life. How much more pressure will be placed on governments to spend on these expensive drugs that will, possibly, benefit a tiny fraction of the population?

How did we move from the overarching humanitarian approach of the Human Genome Project to using its results to promote an expensive, exclusive approach to individual medicine? As Dickerson says, these are big questions that need to be asked and we need to examine the social landscape in which we are asking them.