

Whatever happened to the polypill?

Around 5 years ago, the head of London's Wolfson Institute of Preventive Medicine, Nicolas Wald, and his colleague Malcolm Law, published a case for the prevention of heart disease by using a 'polypill'. The basis of their claim, according to Geoff Watts in the *BMJ*, was that such a pill, if taken by everyone with established cardiovascular disease - and by all those aged 55 years or over - could reduce stroke and heart attack rates by over 80%.

Professors Wald and Law proposed a polypill comprising a statin, three types of antihypertensives, and folic acid - intended to lower serum homocysteine concentrations, with the logic that the majority of people in Western society are at increased risk, that cardiovascular disease is common and that the drugs effective against it are safe. It is difficult to understand why, so many years later, we are still no closer to making the concept a reality.

Mr Watts reports that the few trials that have been planned fail to realise the "scope and ambition" of Professor Wald's original proposal. In Auckland, a pilot study of a pill containing blood pressure and cholesterol lowering drugs in combination with aspirin is underway, using participants who are at increased risk of stroke or heart attack and do not reflect the majority of the population. Another, conducted out of Mount Sinai Hospital in New York, is testing a polypill comprising aspirin, a statin, and ACE inhibitor and a β -blocker. However, all participants have had a myocardial infarction and the aim of the study is to determine whether compliance will be improved when patients only have to swallow one pill.

In fact, the only researchers planning a trial in a population defined by age, is Professor Wald. He plans to set up a project in the developing world with a polypill developed by Indian generics company Cipla. Presently there is no polypill formulation licensed in Europe or America, but, according to Professor Wald, "once a polypill is on the market, doctors can prescribe it as they see fit," prompting an eventual wider exploration of its benefits.