Hypertension

US hypertension guidelines in disarray

Prof Eoin O’Brien, Professor of Molecular Pharmacology, The Conway Institute, University College Dublin, summarises the debacle around the new blood pressure guidelines issued in December that are putting doctors at odds

In the US the National Heart, Lung and Blood Institute (NHLBI) provides global leadership for a research, training, and education programme to promote the prevention and treatment of heart, lung, and blood diseases and enhance the health of all individuals so that they can live longer and more fulfilling lives.

One of the activities of the NHLBI has been to appoint a Joint National Committee (JNC) to oversee the publication of reports for the prevention, detection, evaluation and treatment of high blood pressure (BP). The first JNC Report was published in 1977. Subsequent reports published every four-to-six years with the last one, JNC 7, being published in 2003.

Credibility of JNC 8

JNC 8 has been long awaited, having been variously dubbed ‘JNC late’ and ‘JNC-wait’. Well it has arrived, a decade after its predecessor, in the Journal of the American Association (JAMA), where it has been ushered in by less than three editorials.

But is this JNC 8? Is it the successor to JNC 7? In an article just published in Hypertension, I have highlighted what can be described as the deceptively by both the authors of the article and indeed by the editors of JAMA. If we compare the titles and authorship of the JNC 7 report and the so-called JNC 8 report, it becomes apparent that the latter is not all it claims to be and a small disclaimer informs the reader that although NHLBI appointed a panel in 2008 to write JNC 8, it informed the panel in 2013 that it would no longer back publication of the report, thereby removing from the process a body of expert consensus opinion that had given JNC 7 the credibility and authority it exerted on clinical practice for a decade.

However, despite NHLBI removing its imprimatur, the deleted panel “elected to pursue publication independently in order to bring the recommendations to the public in a timely manner while maintaining the integrity of the predefined process”.

How, one has to ask, can the integrity of a predefined process be maintained if that process is no longer in existence? However, by inserting the words “JNC 8” in the title of the JAMA article, both the authors and the editors of JAMA wanted readers to assume that this report was in fact JNC 8, which is exactly what has happened with various commentators referring to the paper as ‘JNC 8’. To compound matters, five of the 17 authors of the JAMA article have now published their disagreement on the all-important stipulation to raise the target systolic BP from 140 to 150 mmHg in persons aged 60 years or older. Surely, given the importance of this issue for practice, it would have been more principled for these dissenting authors to withdraw from the entire process.

Blood pressure measurement

Leaving aside the fact that JNC 8 might now be best described as ‘JNC-Fake’ for the reasons enumerated, one has to ask also how the authors managed to make their recommendations without even mentioning this methodology on which they are based. If the measurement of a marker (and BP is simply a marker) is inaccurate, it follows that recommendations based upon it will be flawed.

There is general agreement that conventional BP measurement as applied in practice is that conventional BP measurement as applied in practice is necessary, wasteful and expensive. Indeed, the technique was originally employed to screen for hypertension as a cause of cardiovascular disease and to evaluate patients for an MRI scan of the brain for a knock on the head but will not utilise the technique of ABPM for the diagnosis and management of hypertension.

Consequences of recommendations

The JNC recommendations on hypertension have influenced the diagnosis and management of hypertension not only in the US but across the world for nearly 40 years and the publication of the latest report is raising the threshold for hypertension and its treatment to levels that any editor would consider it worthy of peer review. To put it another way. Imagine that the term ‘cancer’ was substituted for ‘hypertension’ and one had a biomarker for cancer that had a 20 per cent false positive rate.

It is also to believe that one would label all people with the abnormal biomarker as having cancer. Simple further testing would clarify the diagnosis. The further simple testing is ABPM and one has to wonder at the transgression of clinical practice that will countenance referral of patients for an MRI scan of the brain for a knock on the head but will not utilise the technique of ABPM for the diagnosis and management of hypertension.

References

1. Conway Institute, University College Dublin, summarises the debacle around the new blood pressure guidelines issued in December that are putting doctors at odds


3. FRCPI, Consultant Dermatologist, Roath Street Community Hospital, Dublin 4.

Taking care of the carbohydrates

Consultant Dermatologist Dr Charles Dupont examines some of the not-so-readily-acceptable fads on the dietary bandwagon and re-emphasises the role of carbohydrates

There are, it is said, more diëts than fat people. The dietary bandwagon has been jumped on by huge numbers of ‘therapists’, many with no qualifications whatsoever.

Despite intense research, the magic pill, which will eliminate appetite without serious side-effects, has not been discovered and this medication is discredited and used much less than formerly.

It is generally accepted that eating less and exercising more are the answer and respectable diets of diminishing fat or rather of all carbohydrates are the top of the list of therapies.

Unusual dietary fads

There are, however, unusual dietary fads; in the Hitchcock film North by Northwest, the eternal femme fatale Cary Grant asked his secretary did she “look heavy”. She looked at him with ill-disguised admiration and said “no”. Cary Grant replies, “I feel heavy – put a notice on my desk in the morning – think thin.”

At a dinner one evening I was sitting beside an English lady who weighed, through illness, more than 10 stone, and when I inquired of her son why doctors are fighting over blood-pressure-guidelines/website three times a day, she answered my unassuming question – “we just didn’t re

With blood pres


3. FRCPI, Consultant Dermatologist, Roath Street Community Hospital, Dublin 4.