28 March 2014

Dr Steve Hambleton, President,
Prof. Geoffrey Dobb, Vice-President,
Australian Medical Association,
P.O. Box 6090,
KINGSTON, A.C.T. 2604

Dear Dr Hambleton, Professor Dobb and AMA members,

I recently became aware of your position statement on wind farms and health dated 14 March, 2014.

I have to say that this public statement has given me great concern with respect to a number of points which I will outline for you.

Your opening statement:

> "Wind turbine technology is considered a comparatively inexpensive and effective means of energy production."

This raises a number of issues that I feel are inappropriate for a medical organisation to comment on. Firstly, line one is a statement regarding the economics of wind turbines which has no place in a statement regarding potential health effects. It is not within your organisation's professional competence to comment on economic matters and to do so raises questions regarding your credibility and apparent bias. How would your organisation feel about the OECD (Organisation for Economic Co-operation and Development) making statements about medical practice?

Secondly, your position statement then passes comment on acoustic immissions:

> "Wind turbines generate sound, including infrasound, which is very low frequency noise that is generally inaudible to the human ear."

To the best of my knowledge, medical practitioners are not generally known for their skill or expertise in acoustics, other than that directly associated with audiometry. To pass comment on areas beyond your knowledge is dangerous and leaves you wide open to serious challenge. Purporting to be experts in areas outside of medicine does not serve your credibility well.

The statement goes on to comment on infrasound, comparing immissions from different sources, yet lacking any sort of scientific credibility because of the significant lack of detailed evidence. Rather, the statements are reckless generalisations that provide no basis for comparison, let alone comprehension, other than in the broadest sense.

> "Infrasound is ubiquitous in the environment, emanating from natural sources (e.g. wind, rivers) and from artificial sources including road traffic, ventilation systems, aircraft and other machinery."

Such broad comparisons do not enhance scientific debate and offer little enlightenment to the uninformed, rather, they are more likely to mislead due to their lack of specificity. It is a well-established fact that low frequency and infrasound immissions from industrial wind turbines differ significantly in a number of critical ways, compared to natural sources like wind and water. Further, man-made sources such as road traffic all differ significantly from natural sources of infrasound. The most significant difference

relates to the amplitude modulation of the signal due to blade pass frequency. This phenomenon is not apparent in natural or many other man-made sources: your comparison is without scientific foundation.

Next you appear to have become experts in engineering:

> "All modern wind turbines in Australia are designed to be upwind, with the blade in front of the tower. These upwind turbines generate much lower levels of infrasound and low frequency sound."

The first statement is factual. The second statement leaves out an important fact; when turbulent air is fed into the 'modern' upwind-bladed industrial turbines, they can generate significant quantities of infrasound and low-frequency noise. This was established in 1989 in Hawaii by NASA researchers Hubbard and Shepherd. Turbulence resulting from wind turbines being installed too close together, without complying with the international standard for turbine separation distances, is thought to be contributing to the infrasound and low-frequency noise problems at number of Australian wind development sites. Based on the evidence, it would not be unreasonable for the general public to assume that wind developers and turbine manufacturers are more concerned with maximising profit and income from renewable energy certificates (RECS) than from achieving engineering efficiency and safeguarding public health. While the profit motive is an integral part of normal, accepted business practice, profiteering at the expense of public health is unacceptable. When profit overrides public health and well being of the general public, in the face of clear scientific/medical evidence, the practice is doubly damnable and ethically indefensible. To quote the obvious: "The devil is in the detail". The fact that upwind industrial turbines create sounds that affect animals and humans is abundantly obvious and to compare this version of industrial wind turbine to older technology is of no benefit to those who suffer from the acoustic immissions from the current machines.

Your second paragraph alludes to such 'devils'. While you state that:

> "Infrasound levels in the vicinity of wind farms have been measured and compared to a number of urban and rural environments away from wind farms. The results of these measurements have shown that in rural residences both near to and far away from wind turbines, both indoor and outdoor infrasound levels are well below the perception threshold, and no greater than that experienced in other rural and urban environments."

the reality is that these statements misrepresent the facts. In essence, what you have done is to 'cherry-pick' the data. Further, your statement leads the reader to believe that as long as sound levels are below conscious, and perhaps audible perception, there is no problem. This could not be further from the truth.

A significant problem with the determination of environmental noise relates to the inappropriate use of the A-weighting, still so commonly applied. As it significantly underestimates frequencies below 1,000 Hz and above 3,500 Hz this negates its usefulness in measuring low frequency and infrasound. The point should be obvious. Unfortunately regulation so often lags behind scientific knowledge.

Medicine, while based on a good deal of science, remains, as practiced, an *ART*. The reason for this is that the practice of medicine involves human beings. Human beings are not simply a collection of chemicals, cells and tissues, randomly existing in the biosphere. Rather they are sentient beings that are subject to multiple stimulatory mechanisms. This is one instance where a holistic viewpoint is nearer the truth than the traditional reductionist viewpoint. The consequence of this view needs further elaboration which you have chosen to omit . . .

The scientific method is something which is much talked about, but little understood, even by some scientists! The fact of the matter is that science begins with *observation*. This observation then gives rise to a question: how is that so? What caused that? How does that work? How did that happen?

The question, which usually has some practical relevance, leads to the creation of a 'model' of the 'how'. That model is referred to as the *hypothesis*. And of course a hypothesis leads to the development of a testing methodology to see if it can be used to explain the facts. The testing usually takes place in a controlled environment where the idea (hypothesis) is put to test by way of practical experiments. With good design, these should attempt to limit the number of variables (things that can be manipulated/ changed) and keep all other factors the same. In an ideal world, a control situation could be used to compare the test circumstances to the 'normal' condition. A perfect example is a drug trial. Subjects would be randomly assigned (so as not to bias the results) to one of two groups. One group would receive the 'test substance' while the other, the *control group*, would receive a placebo. That is, they would receive a substance (for example a pill) but it would be inactive, that is, lacking the chemical species under test. The strength of the findings is further enhanced if the experimenter and the subjects are both blinded as to who got the real drug. That is the basis of the modern scientific method.

Another perfectly legitimate and accepted method of study for obtaining comparative data is that of the **case crossover design**, where people act as their own controls. This design is used to demonstrate a causal relationship in situations like allergic reactions to some foods and particular drugs, for example. People living with industrial wind turbines are conducting this experiment all the time. They go away, and notice their symptoms ameliorate. They come back home, and under certain predictable wind and weather conditions, their symptoms recur. This is a clear demonstration, using the scientific method, of a direct and causal relationship between exposure and response. This is why some doctors are advising their patients to move away. It is clear that the exposure to wind turbine noise is damaging their patient's health, and there is nothing else they can suggest.

A common mistake, when selecting scientific data, relates to a process of choosing what to include. When selection bias exists in data selection, this is colloquially known as 'cherry-picking'. When this occurs, it necessarily introduces a bias that affects the results. This is apparent from your statement above relating to human perception of sound. If you scan the literature more widely, then a plethora of papers appear which contradict the basis of your argument. To only present one side of the argument is to short-change the readers and the general public. It also facilitates the generation of false impressions.

To return to the scientific method for a moment: when an observation has been made; a question arisen; a hypothesis created; a series of experiments formulated to test the hypothesis and ultimately the results analysed, there are two relevant tests that need to be applied. First, the results have to either support or reject the hypothesis. That means that the hypothesis needs to be able to be falsified and results obtained which are relevant to support or rejection the hypothesis's claim. Variables need to be measurable. The second test, and equally important, is that the consequences of the results, i.e. acceptance or rejection of the hypothesis, have to be consistent with what is already known. To take an example: If the results of an experiment lead to the conclusion that the 'conservation of momentum' did not always occur, then there would be a great deal of concern. Physicists are most unlikely to let go of such a well-supported observation as the conservation of momentum. So, the new findings of an experiment have to fit with our existing reality.

In order to fit with our current reality, or paradigm, there needs to be both internal (within the experiment) and external (in relation to what is already generally known and accepted) consistency to be valid. This is not to say that one day we might not reject the generally accepted view of the conservation of momentum, only that there would need to be extraordinary evidence to cause us to reach that conclusion.
What assists us with comprehending new knowledge and integrating it into our existing understanding of how the universe works is the existence of a mechanism. That is, a way in which we can explain the circumstances we discover through our experiment within the current bounds of knowledge. For your stance to be accepted, there would need to be not only *no evidence to the contrary,* but also the *lack of any understandable mechanism of action*. Neither are in fact the case.

Many scientific papers expound the observation that stimuli below conscious perception do, in a number of instances, result in physiological response. This is the case for the effects of low frequency and infrasound, and was noted by Kelley 1987, Chen, Qibai & Shi 2004, Swinbanks 2012, and Schomer 2013 in addition to the work of Professor Salt, a leading neurophysiologist working in this area. Further, there are many plausible mechanisms to explain how sub-conscious perception threshold stimuli may interact with living organisms. The old notion that perception is the threshold above which biological effects occur is not only out-dated, it is a non-sequitur. Take x-rays for example, they are not readily consciously perceivable yet can be quite harmful. Light is in a similar category. Sound is another physical phenomenon that does not need conscious perception to be received by an organism or for that organism to react.

The work of Professor Alec Salt has done much in recent years to elucidate theory on the biological reception of low-frequency sound, complimenting this with extensive laboratory experimentation. To ignore this work is a travesty and is tantamount to lying by omission to the general public. It is another example of cherry-picking the data that effectively distorts the final impression. To add to this work, the research of Dr. Carey Balaban has done much to throw light on the neuronal mechanism of sound reception by the human body. We now have theory, experimental evidence and empirical observation, all pointing in the same direction. To blithely ignore such a body of science and come up with a generalisation of 'no harm' is not only lying to the general public but supports a point of view that is largely sympathetic to the commercial, industrial profit motive. This commercial bias has no place in medicine or public health.

The most recent article to come out of Washington University, St. Louis, Missouri, from Professors Salt and Lichtenbaum is worthy of mention here. Their landmark paper appears in Acoustics Today, Volume 10, Issue 1, pp 20-28, Winter 2014. In their paper: *How does wind turbine noise affect people?*, they succinctly describe the results of their recent work on the effects of low frequency and infrasound on the cochlea mechanism. It appears that the roles of the inner and outer hair cells differ in many significant ways. In particular, the outer hair cells account for only 5 % of the afferent nerve fibres in the acoustic nerve and are of Type II in comparison to the inner hair cells which equate to 95% of the acoustic nerves and are of Type I. Further, the inner hair cells, which are largely responsible for the faculty of hearing in the accepted frequency spectrum of 20 to 20,000 Hz, do not touch the tectorial membrane. They operate by way of transducing movements in the fluid below the membrane into nerve impulses. The outer hair cells, by contrast, are directly connected to the tectorial membrane and are far more responsive to low frequency and infrasound.

The point that Salt and Lichtenbaum are making is that the energy that enters the ear canal as low frequency and infrasound is readily translated into neural impulses which reach the brain, albeit they may not be consciously interpreted as sound, but they still reach the cognitive engine. Another critical point concerns their findings that biologically generated amplitude modulated signals occur in the pulse trains of nerve impulses from the inner hair cells as a result of stimulation from a 500 Hz tone summed with 4.8 Hz. (Their Figure 2.)

Their work is a clear demonstration of a biologically-generated modulation to a non-modulated stimulus. The cochlear microphonic response is generated by the outer hair cells, responding to both the high and low frequency components. This occurs either by saturation of the mechano-electric transducer or by cyclically changing the mechanical amplification of the high frequencies. Being insensitive to the lower frequencies, the inner hair cells detect only the high frequency component, which is amplitude modulated at twice the infrasound frequency, in their example. Thus, the inner hair cells essentially 'see' the effect of a high-pass filtered version of what the outer hair cells perceive. This is the most clear demonstration of the effect of infrasound on the cochlea. The biophysics of the ear creates an amplitude-modulated signal from a non-amplitude modulated source of two pure tones. This is a neurophysiological explanation of the effect reported by subjects who complain of adverse effects from living too close to industrial wind turbine installations. To ignore such clear evidence is to deny the very substance of the scientific method in favour of a biased commercial approach to public health.

The deliberate exclusion of empirical data, failure to acknowledge existing scientific knowledge and theory is to effectively *lie by omission*. Such distortion of reality is to degrade science, medicine and discredit the practitioners of those disciplines. I take exception to such biased reporting and the distribution of such misinformation. It is to degrade my profession as a scientist, researcher and consultant.

Your clear statement:

> "The available Australian and international evidence does not support the view that the infrasound or low frequency sound generated by wind farms, as they are currently regulated in Australia, causes adverse health effects on populations residing in their vicinity."

is but another example of cherry-picking the data to suit your own position. To arrive at this position it is necessary to actively ignore any scientific data to the contrary. This is clear evidence of bias. What makes this all the more serious is that it appears to be based on the commercial profit motive.

As if adding insult to injury, the following sentence only serves to reinforce this bias viewpoint and flies in the face of the first principle of scientific methodology: OBSERVATION.

> "The infrasound and low frequency sound generated by modern wind farms in Australia is well below the level where known health effects occur,"

There is a veritable mountain of evidence to the contrary, yet your organisation chooses to dismiss it. This can be interpreted in no other way than a deliberate attempt to distort reality. The number of observations of demonstrable harm are enormous. The fact that working medical practitioners are observing these and reporting them, and indeed dealing with the consequences, seems to be a point that has completely passed by your organisation. I have personally investigated numerous cases where there is clear evidence of harm including: sleep deprivation; nausea; vertigo; feeling of general malaise; tiredness, irritability; changes in normal mood; inability to concentrate; reduction of appetite; headaches etc. etc. There is clear evidence of stress-related pathology and behavioural changes. Many of these, I might add, occur in people who did not initially have any negative feelings towards the construction of wind turbines, only noticing the symptoms after mechanical commissioning. This is clear evidence of the *lack of a nocebo effect*. Animal studies only add to this milieu, yet your organisation seems to have also totally ignored animal studies, again misrepresenting the situation.

As the result of health effects reported across the world by people living in close proximity to wind turbine developments, a term has arisen: Wind Turbine Syndrome. This is something of a misnomer. Rather it should be termed: Infrasound and Low-Frequency Syndrome. **The point is that the same condition has been extant for decades, associated with sources other than indsutrial wind turbines.** The introduction of large-scale industrial wind turbine installations is a relatively recent development, hence the origin of the term. However, the health effects of low frequency and infrasound have been known for much longer.

In 1984 David Lange was elected Prime Minister of New Zealand. When he moved into the top office in the Beehive (parliamentary building in Wellington, New Zealand) he suffered inexplicable bouts of vertigo and nausea. Such were the severity of the symptoms that he began spending less and less time in the office in order to reduce his feelings of malaise. It was subsequently determined that the air conditioning system was responsible for high levels of low-frequency noise and infrasound. Normally consciously undetectable by the human ear, these rapidly fluctuating levels of air pressure caused by the ventilation fans and resonance in the pipes lead to a redesign of the ventilation system in parliament's building. Once the modifications to the ventilation system had been carried out, the Prime Minister no longer became ill when working in his office. This is simply another example of a well-known phenomenon associated with

ventilation systems in buildings which result in negative health effects for the occupants. This general phenomenon, isolated in the late 1960s termed 'Sick Building Syndrome'. It is, in essence, little different from the situation that currently exists for thousands of people around the world who live close to industrial wind turbines. The physics is virtually the same. The neurobiology is virtually the same. The health effects are virtually the same. It is well-known by ventilation installers and acousticians that this phenomenon is both well-reported and well-understood. There even exist mitigating technologies to deal with the problem! Phase cancelling technology is frequently employed in situations where low frequency and infrasound resonance occurs in modern buildings. Engineers know that these problems cause health effects, that is why they developed the mitigation technology!

The existence of the phenomenon, its known health effects and potential remediation is powerful evidence as to the reality of the phenomenon. The poignant fact is that no such simple fix is technologically possible in the open environment due to physical factors. Therefore, that the same situation occurs with the physics of sound in open environments should come as no surprise. However, to omit such knowledge from the debate is to negate a significant proportion of existing scientific knowledge and technological understanding. Engineers could feel aggrieved. Commercial bias and the promotion of the profit motive ahead of public health is the only reasonable explanation for the stance taken by your organisation with the release of the statement regarding health effects of industrial wind turbines. This action is shameful and does much to discredit your organisation as a defender of public health and well-being and undermines the very process of science, upon which your discipline of medicine is so reliant.

Perhaps the most egregious statement from your organisation concerns blaming the individuals for their health conditions:

> "Individuals residing in the vicinity of wind farms who do experience adverse health or well-being, may do so as a consequence of their heightened anxiety or negative perceptions regarding wind farm developments in their area."

To pass the buck in this fashion is to abdicate the most basic responsibility of a medical practitioner. To blame the patient for being sick is not only cowardly, but it is against the Hippocratic oath. "It's all in the mind" is a coward's way of explaining the phenomenon. It blatantly ignores the evidence and is yet another indication of commercial bias. To vindicate a phenomenon for the purpose of commercial gain or social bias is reprehensible. I can find no other explanation, for to ignore such a large body of evidence to the contrary is to jeopardise the health and safety of your patients, betraying the very patients you are duty-bound and legally obliged to serve.

Apparently not content with this stance, your organisation goes further blaming the observed effects on misinformation.

> "The reporting of 'health scares' and misinformation regarding wind farm developments may contribute to heightened anxiety and community division, and over-rigorous regulation of these developments by state governments."

Nothing could be further from the truth. In my own experience I have observed, first hand, the commercial spin from wind turbine companies, predicated on their own commercial gain.

Surprisingly perhaps, we are in agreement on one point:

> "The regulation of wind farm developments should be guided entirely by the evidence regarding their impacts and benefits."

The above statement is reasonable, only providing that the process allows for ***all evidence*** to be considered, not a subset which necessarily supports only one point of view. The abundance of health

effects needs to be appropriately acknowledged, catalogued and studied. There is seldom smoke without fire. To simply blame any physiological or health effects on mental state is to consign all patients who present with adverse symptoms to the mental asylum. It also ignores the seriousness of the mental health problems being reported which include severe depression, sometimes with suicidal ideation, which I am sure you would recognise is a psychiatric emergency.

Today, a significant amount of scientific evidence exists within the literature to attribute health effects to low frequency and infrasound. Scientific evidence of reasons for individual susceptibility for acute symptoms of Wind Turbine Syndrome exist. Susceptibility factors that even Professor Geoffrey Leventhall now accepts. Three such examples of an individual's differential response to infrasound and low frequency noise would include:

The work of Paul Schomer regarding motion sickness.

The recent publication of environmental triggers for migraine headaches by Dr. Haken Enbom.

The size of the helicotrema - reference Salt and Lichtenbaum.

This work is further supported by the paediatrician, Nina Pierpont, who is eminently more qualified to speak on the subject than many others, possessing as she does degrees in biological science and medicine.

Pierpont identified in a case series cross over study that there were three susceptibility factors which increased the risk of people developing these symptoms when others in the same household did not develop the symptoms. The factors included a history of migraines, motion sickness and inner ear pathology. Why have the AMA ignored the work of a paediatric colleague when it is clearly supported by the work of others who are completely independent and in some instances their work preceded hers? Indeed the work over decades by the pathologist, Dr. Nuno Castelo Branco in Portugal has done much to elicit the underlying physiology and manifestation of what has become known as Vibroacoustic Disease.

Why has the AMA ignored this extensive body of work that centres on a potentially serious public health problem? Vibroacoustic Disease is an acknowledged problem in the aircraft industry and mitigations have been developed to deal with the health effects of workers as they become affected. These include echo cardiograms to detect endocardial thickening, as well as the recording of a number of documented behavioural and health changes. Mood alteration, changes in lung function accompany the physiology seen in the histology. Such an extensive body of knowledge has been accumulated in the previous two decades that it is surely criminal to ignore the work of so many scientists and physicians. It must be noted that Vibroacoustic Disease is not just an issue for the aviation industry.

At the Internoise conference in 2012 in New York, Alec Salt stated that infections can block the helicotrema and that such people are extremely sensitive to low-frequency noise. Salt also makes mention of the difference between the inner hair cells' response to velocity (fluid-coupled) versus the outer hair cells' response to displacement. This thesis reinforces Swinbank's assertion at the fourth international conference on wind turbine noise in Rome, 2011, ("The audibility of low frequency wind turbine noise.") that is is incorrect to assess low-frequency noise by absolute sound pressure level, but rather the acceleration or rate-of-change of pressure. This is the effect that causes low-frequency sensitivity to fall dramatically as the frequency is reduced (for the inner hair cells). For comparison with a sound level of 100dB at 1Hz, the equivalent hair cell response requires only 69dB at 6Hz, since the acceleration of pressure becomes much greater the faster the rate-of-change. Swinbanks has measured infrasound of 6 Hz at 64 dB.

The importance of the helicotrema in this respect is also recognized in the benchmark paper by Moller & Pedersen paper in 2004:

> "Extraordinary sensitivity to low-frequency sound might be explained by abnormalities in the person's hearing organs. A theoretical example could be an abnormally small aperture in the helicotrema at the apex of the cochlea. For low--frequency sound the helicotrema acts like a kind of pressure equalization vent for the perilymph in the cochlea, equalizing the pressure between the scala tympani and the scala vestibuli. If the helicotrema is unusually narrow or blocked, it cannot equalize the pressure fast enough, and an unusually high pressure will build up between the scala tympani and the scala vestibuli. The result is a greater mechanical excitation of the basilar membrane, and thus a higher sensitivity to these sounds is expected. For examples of simulations of the effect of the size of helicotrema see e.g. Schick (1994)."

This work is important as it highlights one of the most important aspects of controlling sound perception at low frequencies. Low frequency hearing is well-documented and represents a simple fluid-mechanical system. Low frequency hearing has little to do with emotional state, as you imply. It is simply the response of a hydromechanical system where the stiffness or softness of the absorber (tectorial membrane) is related to the size of the orifice between the two (helicotrema) and the tensioning of the membrane through neural biomechanical feedback (outer hair cells). Your statement of position ignores an enormous body of evidence, instead apparently relying on commercially-based industry rhetoric in the absence of good science.

I do agree with wide and open consultation, though I am yet to see this practiced in an unbiased way.

> "Such regulation should ensure that structured and extensive local community consultation and engagement is undertaken at the outset of planning, in order to minimise misinformation, anxiety and community division."

Your final position statement is yet another example of what I believe is the intention to mislead by understating the case, that is, lying by omission.

> "Electricity generation by wind turbines does not involve production of greenhouse gases, other pollutant emissions or waste, all of which can have significant direct and indirect health effects."

Yes, the actual operation of wind turbines does not directly generate CO_2 immissions in the same way as a coal-fired plant. However, the manufacture of industrial wind turbines involves a large production of CO_2 and other waste products, all of which, it could be argued, pose a risk to human health. Industrial wind turbines generators also rely an a large quantity of 'rare-earths' which are costly to extract and harmful to the environment. To tell only half the story is to mislead the public in line with a particular commercial viewpoint, rather than to present information that is relevant to public health in an unbiased, professional and scientific way.

Other pertinent facts such as life time of plant, maintenance and other issues are conveniently ignored by this blanketed approach. Medical practitioners would be well-advised to not pretend that they are any other sort of expert than those associated directly with human physiology and health. To make statements with authority on technological matters and matters of economics is beyond the mandate of a medical practitioner and your association. Medical practitioners would soon object if engineers started offering advice on brain surgery techniques and critiquing surgeons without providing all the data. There is a significant danger when members of a professional society, who are endowed with some respect due to occupation or position, extend their opinions beyond the boundaries of their knowledge.

Being a medical practitioner does not grant licence to pontification on other disciplines. Medical Practitioners have a unique place in society and that very position is put in serious jeopardy when organisations purporting to represent the body of members come out with public statements so biased and lacking in fundamental rigour that it brings the whole profession into question. Simply put: "A cobbler should stick to his last, a tailor should stick to his thread".

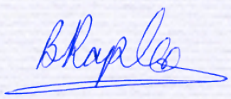
I speak with some authority on these matters as I have been a scientist for some years, having a bachelors degree in biological science, a masterate in technology and a PhD in acoustics and human health. Indeed my PhD thesis focussed on the physical measurement and consequences of low frequency sound within the working environment. Further, I have spearheaded a 15 year development project resulting in a new pc-based technology for environmental sound monitoring and analysis. This technology was recently extended to include vibration and exogenous radiation.

Through the use of this technology I have been able to observe and analyse first-hand, the occurrence of, and human effects of, noise and vibration in the work environment of soldiers. Evaluation included audiometric analysis, whereby I also spearheaded a new automated screening audiometer for use in high noise environments in the field, and psychological assessment of cognition and mood. The results of my work are embargoed for military reasons. However, I can say that sound, particularly low frequency sound, is responsible for many physiological and psychological manifestations that can seriously affect human performance and cognition.

The obviously biased statements made by your organisation regarding the impact of wind turbines on human health are an insult to my work and insulting to science as a whole. To misrepresent the physical situation and to shift blame to the mind-state of affected individuals is to abdicate your responsibility as physicians. Further, it degrades the concept and professional esteem of medical practitioners, mocking the patient who makes genuine complaint. This can only be seen to erode the patient-doctor relationship and as such is surely a serious threat in its own right to the practice of medicine and the promotion of public health.

I urge you and your colleagues to rethink your position with all due speed. Simply put: do not comment on areas beyond your own boundaries of knowledge. Do not tell half-truths, present commercially biased information in the name of health care and stop lying directly and by omission to your patients and the public at large. This matter needs to be urgently addressed to minimise the fallout and retain the respectability that the practice of medicine deserves and the good name of your organisation.

Sincerely yours,



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