Wind Turbine Syndrome: a communicated disease

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Wind turbine syndrome
A communicated disease
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Electrophobia has a long history

• “more than 30 years after Thomas Edison invented the incandescent bulb in 1879 and soon afterwards installed a lighting system in a business section of lower Manhattan, barely 10% of American homes were wired. Even after the First World War that percentage rose only to 20%”
“A new disease, called photo-electric opthalmia, is described as due to the continual action of the electric light on the eyes. The patient is awakened in the night by severe pain around the eye, accompanied by an excessive secretion of tears.”
THE TELEPHONE AS A CAUSE OF EAR TROUBLES.

As civilization advances, new diseases are not only discovered, but are actually produced by the novel agencies which are brought to bear on man's body and mind. The increase of insanity throughout the world is unquestionably due to the "storm and stress" of our crowded modern life, and almost every addition which science makes to the convenience of the majority seems to bring with it some new form of suffering to the few. Railway travelling has its amari aliquid in the shape of slight but possibly not unimportant jolting of the nervous centres; the electric light has already created a special form of ophthalmia; and now we have the telephone indicted as a cause of ear troubles, which react on the spirits, and indirectly on the general health. M. Golli has observed, not in women only, but in strong-minded and able-bodied men, symptoms of what we may call "aural overpressure" caused by the condition of almost constant strain of the auditory apparatus, in which persons who use the telephone much have to spend a considerable portion of each working day. In some cases, also, the ear seemed to be irritated, by the constantly recurring sharp tinkle of the bell, or by the nearness of the sounds conveyed through the tube, into a state of over-sensitiveness which made it intolerant of sound, as the eye, when inflamed or irritable, becomes unable to bear the light. The patients suffered from nervous exac- cibility, with buzzing noises in the ear, giddiness, and neuralgic pains. In addition to these subjective symptoms, M. Golli in some cases found objective lesions, such as a subinflammatory condition of the membrana tympani. A similar condition of things is often seen in persons who spend a large portion of their lives amid the jar and crash of machinery. All the trouble speedily vanishes if the ear is allowed a sufficient measure of physiological rest; this is not only obtainable by the cause of the evil being withdrawn. The victims of "telephone tinnitus," if we may so baptise this latest addition to the ills that flesh is heir to, seem all to be of markedly nervous organisation, and the moral may be drawn that such persons should not use the telephone. Mr. Edison has already done something to increase the plague of "nerves" which afflicts our generation, and, if his brilliant career as an inventor is not cut short, there can be little doubt that he will do yet more.
Causes included:

• “wireless telegraphy, science, steam power, newspapers and the education of women; in other words modern civilization”
Since then: televisions, microwave ovens, electric blankets, computer screens, powerlines, WiFi, smart meters, wind turbines
Growth in mobile phones & the flat-line incidence rate for brain cancer, Australia 1982-2017

Trend
The number of new cases of brain and other CNS cancer per year more than doubled from 911 cases in 1982 to an estimated 2,076 in 2017, whereas the incidence rate remained relatively steady—ranging between 6.7 and 7.8 cases per 100,000 persons over that time period (Figure 2.2). The increase in the number of new cases therefore can be largely explained by the increase in the Australian population.

Figure 2.2: Trends in incidence of brain and other CNS cancer, 1982 to 2017
Is there anything not caused by wind turbines?

- lung cancer
- skin cancer
- haemorrhoids
- gaining weight
- losing weight
- disoriented echidnas
- Symptoms of anxiety

http://ses.library.usyd.edu.au//bitstream/2123/10501/2/Wind_Disease_List.pdf
Psychogenic illness: worrying yourself sick

- “Infections ... if you fear them, you call them upon you.”
- Francis Bacon (1561 –1626)
Nocebo Phenomena in Medicine

Their Relevance in Everyday Clinical Practice

Winfried Häuser, Emil Hansen, Paul Enck

SUMMARY

Background: Nocebo phenomena are common in clinical practice and have recently become a popular topic of research and discussion among basic scientists, clinicians, and ethicists.

Methods: We selectively searched the PubMed database for articles published up to December 2011 that contained the key words “nocebo” or “nocebo effect.”

Benefits: By definition, a nocebo effect is the induction of a symptom perceived as negative by sham treatment and/or by the suggestion of negative expectations. A nocebo response is a negative symptom induced by the patient’s own negative expectations and/or by negative suggestions from clinical staff in the absence of any treatment. The underlying mechanisms include learning by Pavlovian conditioning and reaction to expectations induced by verbal information or suggestion. Nocebo responses may occur through unintentional negative suggestion on the part of physicians and nurses. Information about possible complications and negative expectations on the patient’s part increases the likelihood of adverse effects. Adverse events under treatment with medications sometimes come about by a nocebo effect.

Conclusions: Physicians face an ethical dilemma, as they are required not just to inform patients of the potential complications of treatment, but also to minimize the likelihood of these complications, i.e., to avoid inducing them through the potential nocebo effect of thorough patient information. Possible ways out of the dilemma include emphasizing the fact that the proposed treatment is usually well tolerated, or else getting the patient’s permission to inform less than fully about its possible side effects. Communication training in medical school, residency training, and continuing medical education would be desirable so that physicians can better explain the potential of side effects to their patients’ benefit, rather than their detriment.

Cite this as:

Words are the most powerful tool a doctor possesses, but words, like a two-edged sword, can mean as well as lead.”, Bernard Levin (52).

Doctor–patient communication and the patient’s treatment expectations can have considerable consequences, both positive and negative, on the outcome of a course of medical therapy. The positive influence of doctor–patient communication, treatment expectations, and sham treatments, termed placebo effect, has been known for many years (52) and extensively studied (16).

The efficacy of placebo has been demonstrated for subjective symptoms such as pain and nausea (1). The Scientific Advisory Board of the German Medical Association published a statement on placebo in medicine in 2010 (2).

Method

The opposite of the placebo phenomenon, namely nocebo phenomena, have only recently received wider attention from basic scientists and clinicians. A search of the PubMed database on 9 October 2011 revealed 151 publications on the topic of “nocebo,” compared with over 150 000 on “placebo.” Stripping away from the latter all articles in which “only” placebo-controlled drug trials were reported left around 2200 studies investigating current knowledge of the placebo effect. In comparison, the data on the nocebo effect are sparse. Of the 151 publications, only just over 20% were empirical studies; the rest were letters to the editor, commentaries, editorials, and reviews (Figure). Our intention here is to portray the neurobiological mechanisms of nocebo phenomena. Furthermore, in order to sensitize clinicians to the nocebo phenomena in their daily work we present studies on nocebo phenomena in randomized placebo-controlled trials.
The Pattern of Complaints about Australian Wind Farms Does Not Match the Establishment and Distribution of Turbines: Support for the Psychogenic, ‘Communicated Disease’ Hypothesis

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What is uncontested in the evidence (1)

• The direct causation hypothesis would predict that all wind farms should affect some people. BUT a small minority of wind farms have a small minority of residents who claim to be affected.

• The great majority of complaints occur in English-speaking nations, despite the proliferation of wind farms in Europe, China, and many other non-English speaking nations.

• Ontario (English-speaking) has a history of complaints. Quebec (French speaking) next door has had very few complaints.
Wind farms in Europe
What is uncontested (2)

• Wind farms with a history of being targeted by opposition groups are more “affected” by wind turbine syndrome. Just 6 farms of 78 wind farms in Australia have had 73% of all complaints.

• Those with negative views about wind farms are more likely to report symptoms than those with positive views.
What is uncontested (3)

• Those being paid to host turbines very rarely complain, suggesting that the drug “money” may be a powerful preventive

• Claims about only “susceptible” individuals (like those who get motion sickness while others don’t) struggle to explain why there are apparently no susceptible people in, for example, all of Western Australia or Tasmania, where they are wind farms but zero records of health complaints

• Claims about “over 40” Australian families having to abandon their infrasound affected homes have never been validated, with those making the claims saying that many of the “windfarm refugees” do not want publicity.
What is uncontested (4)

• While some complain of acute effects within minutes of exposure, the first known complaints about wind farms date from 2002. But many wind farms were operational for many years prior to 2002. So why were there no reported acute effects occurring in those years?

• Not a single clinical case report of WTS in any peer reviewed journal

• Experimental subjects randomised to be exposed or not exposed to negative news footage about wind farm harms and then exposed to infrasound and sham infrasound show that prior exposure to anxiety producing messages increases reporting of symptoms, even to sham infrasound.
Number of symptoms

Crichton, Dodd, Schmid Gamble & Petrie (2013). Can expectations produce symptoms from infrasound associated with wind turbines? Health Psychology
“ground borne vibrations, and rapid fluctuations in barometric pressure, sufficient to explode bats lungs and at times with sufficient energy to perceptibly rock stationary cars even further than a kilometer away from the nearest wind turbine.”

http://docs.wind-watch.org/Laurie-Collector.pdf

wind turbines can make people’s lips vibrate “from a distance of 10km away”

Sarah Laurie. CEO
Waubra Foundation
“some people are ‘so exquisitely sensitised to certain frequencies that their perception of very, very low frequency is right off the shape of the bell curve’, such that they can, for example, from Australia, perceive an earthquake in Chile.”

11,365km
George Papadopoulos, pharmacist & wind farm complainant

• “On another occasion, and by far the worst of all days, the problem had dissipated when arriving at Young about 100km from the closest turbines”
Noel Dean, farmer and wind farm complainant

• ‘I’ve had my ... mobile phone go into charge mode in the middle of the paddock, away from everywhere.’
We “suffer from infrasound .. even when they are not operating”

Ann Gardner

Hamilton Spectator 7 Feb 2015

Around the Macarthur wind farm, residents suffer from infrasound emitted by the turbines, even when they’re not operating, similarly to Cape Bridgewater. Even when the turbines are turned off, we feel the same “sensation”, being headaches, ear pressure, nose pressure, heart palpitations, nausea, dizziness etc., and still cannot sleep at night.
Bruce Rapley, New Zealand

• “In the future, I believe that the adverse health effects of wind turbines will eclipse the asbestos problem in the annals of history. In my opinion, the greed and scientific half-truths from the wind industry will be seen by history as one of the worst corporate and government abuses of democracy in the 21st century.”
Confirmation bias across 400 years

Francis Bacon 1561-1627

- On confirmation bias: “What a man had rather were true he more readily believes”
Complaints to Australia’s National Wind Farm Commissioner in 37 months to Dec 2018

- Across 37 months that the office has been open, it has received 283 complaints about wind farms:
  - 65 (23%) about 11 operational wind farms
  - 191 (67%) about 51 proposed wind farms
  - 27 (10%) which did not specify any existing or proposed farm

- Is this a “disease” now on life-support?