

Bioresonance, a Study of Pseudo-Scientific Language

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Key Words

Alternative medicine (language, risk)

Summary

Clarity of language is an essential element for effective communication. Using the example of bioresonance therapy, this article demonstrates how pseudo-scientific language can be used to cloud important issues. This can be seen as an attempt to present nonsense as science. Because this misleads patients and can thus endanger their health, we should find ways of minimizing this problem.

Introduction

When researching complementary/alternative medicine (CAM), one comes across many strange phenomena, not least linguistic phenomena. This short essay is an attempt to analyse what I call pseudo-scientific language. It seems to me that this is particularly abundant in the published literature on 'bioresonance' (BR). BR is therefore used here as an example. The ultimate aim of this article is to stimulate critical thinking about the use of language in such papers.

Definition

Brügemann, a proponent of BR, described this method as 'the new type of therapy using the endogenous vibrations in the ultrafine range of bioenergy. [It] allows the endogenous regulatory energies to carry on their 'activities' without being disturbed. By this, a strong impulse is given to the spontaneous healing energies of the body for self-regulation. This is one of the main

Schlüsselwörter

Alternativmedizin (Sprache, Risiko)

Zusammenfassung

Eine klare Sprache ist essentiell für effektive Kommunikation. Am Beispiel der Bioresonanztherapie wird aufgezeigt, wie pseudowissenschaftliche Sprache zur Unklarheit wichtiger Themen beitragen kann. Dies kann als Versuch angesehen werden, Unsinn als Wissenschaft zu präsentieren. Da dies Patienten in die Irre führt und so ihre Gesundheit gefährden kann, sollten wir Wege finden, dieses Problem zu minimieren.

purposes of the bioresonance therapy '[1]. The dictionary defines BR as 'a method introduced in 1917 by the physician Franz Morrell which employs the 'patients' own vibrations'; the aim is to measure biophysical vibrations (frequencies) of a patient using an instrument (Mora instrument, Bicom) and subsequently feed them back into the body in modified form via a second electrode' (my own translation) [2].

Essentially BR claims that, with sophisticated electronic devices (of which several modifications exist), electromagnetic waves can be measured (the diagnostic element) and, if abnormal, be normalised (the therapeutic element of the approach). There are several synonyms of BR, e.g. MORA therapy, and the device often used in BR is the BICOM – all terms that will appear below.

Examples of Pseudo-Scientific Language

The following is not a comprehensive or systematic overview. It is rather an analysis of selected quotes from the BR litera-

ture. These serve as examples and lend themselves to developing more general points. In order to avoid quoting out of context, only entire paragraphs have been used without changes or corrections of mistakes in the original. To avoid quoting minor passages of a larger article or introduce bias through my own translation, only the English abstracts have been used.

Quote No. 1

‘The biophysical control processes are superordinate to the biochemical processes. In the same way as the atomic processes result in chemical compounds the ultrafine biocommunication results in the biochemical processes. Control signals have an electromagnetic quality. Disturbing signals or ‘disturbing energies’ also have an electromagnetic quality. This is the reason why they can, for example, be conducted through cables and transformed into therapy signals by means of sophisticated electronic devices. The purpose is to clear the pathological part of the signals’ [1].

Here the author uses highly technical language which, at first, sounds very complicated and scientific. However, after a second read, one is bound to discover that the words hide more than they reveal. In particular, the scientific tone distracts from the lack of logic in the argument. The basic message, once the pseudoscientific veneer is stripped away, seems to be the following. Living systems display electromagnetic phenomena. The electromagnetic energies that they rely upon can make us ill. The energies can also be transferred into an electronic instrument where they can be changed so that they don’t cause any more harm.

Quote No. 2

‘A very important advantage of the BICOM device as compared to the original form of the MORA-therapy in paediatrics is the possibility to reduce the oscillation, a fact which meets much better the reaction pattern of the child and gives better results’ [3].

This paragraph essentially states that the BICOM instrument can change (the frequency or amplitude of) some sort of (electromagnetic) wave. We are told that, for children, this is preferable because of the way children tend to react. This would then be more effective.

Quote No. 3

‘The question how causative the Bioresonanz-Therapy can be must be answered in a differentiated way. The BR is in the first place effective on the informative level, which means on the ultrafine biokybernetical regulation level of the organism. This also includes the time factor and with that the functional aspect, and thus it influences the material-biochemical area of the body. The BRT is in comparison to other therapy procedures very high on the scale of causativeness, but it still remains in the physical level, and does not reach into the spiritual area. The freeing of the patient from his diseases can self

evidently also lead to a change and improvement of conduct and attitudes and to a general wellbeing of the patient’ [4].

This amazing statement is again not easy to understand. If my reading is correct, the author essentially wants to tell us that BR interferes with the flow of information within organisms. The process is time-dependent and therefore affects function, physical and biochemical properties. Compared to other treatments, BR is more causative without affecting our spiritual sphere. As BR cures a disease, it can also change behaviour, attitudes and wellbeing.

Quote No. 4

‘MORA therapy is an auto-iso-therapy using the patient’s own vibrations in a wide range of the electromagnetic spectrum. Strictly speaking, we have hyperwaves in a six-dimensional cosmos with two hidden parameters (as predicted by Albert Einstein and others). Besides the physical plane there are six other planes of existence and the MORA therapy works in the biological plane, a region called the M-field, according to Sheldrake and Burkhard Heim’ [5].

Here we seem to be told that the MORA therapy is a self-treatment using the body’s own resources, namely a broad range of electromagnetic waves. These waves are hyperwaves in 6 dimensions and their existence has already been predicted by Einstein. Six (or 7?) planes of existence seem to have been discovered and the MORA therapy is operative in one of them.

Quote No. 5

‘The author presents an overall medical conception of the world between mass maximum and masslessness and completes it with the pair of concepts of subjectivity/objectivity. Three test procedures of the bioelectronic function diagnostics are presented and incorporated in addition to other procedures in this conception of the world. Therefore, in the sense of a holistic medicine, there is a useful indication for every medical procedure, because there are different objectives associated with each procedure. A one-sided assessment of the procedures does not do justice to the human being as a whole’ [6].

This author introduces a new concept of the world between maxima and minima of mass or objectivity. He has developed 3 tests of BR diagnosis that fit into the new concept. Therefore, holistically speaking, any therapy is good for something because each may have a different aim. One-sided assessments of such holistic treatments are too narrow bearing in mind the complexity of a human being.

Comment

The above examples demonstrate how language can be used as an instrument to hide meaning. The quotes have several qualities in common:

- they use highly technical language
- their meaning is not easily accessible
- stripped of their pseudo-scientific veneer, their true meaning is simple but does not make sense
- they are based on hidden, obscure, or unproven assumptions.

In essence I therefore believe that the authors of these texts are disguising nonsense as science – the hallmark of pseudo-scientific language. Even though this article is not an assessment of BR, it is worth noting that, to the best of my knowledge, no evidence for the effectiveness of these methods has yet been published.

Does all this matter? In my experience, the use of pseudo-sci-

entific language is abundant in CAM. As this area of healthcare is used widely, the phenomenon of pseudo-scientific language has the potential to mislead many people. Misleading people in matters of healthcare is potentially associated with serious risks. It follows that the use of such language is counterproductive.

This is certainly not a systematic linguistic analysis of BR or of CAM and generalisations should therefore be made only with the greatest of caution. A more in-depth study of the use of language in different areas of healthcare would be clearly relevant. If my short article has stimulated others to conduct such research or to think more critically about the use of language, its goal has been reached.

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