1 - BIOPHOTON THERAPY AND ITS PERCEPTIBLE EFFECT ON HUMAN BLOOD

© 2011 By Menno Pet, Sjoerd Pet, Dietrich Vastenburg, Ellen Pet-Reatsch, Wim Pet, Netherlands

Here are the first ever published theses on applied biophoton sciences. I have selected 3 theses from a variety of subjects on which the research has been done. These are just the summaries. The full theses will be published very shortly and will be available through our website.

Thesis to obtain the academic degree Master of Science (MSc) at the Graz / Castle of Seggau (*college@inter-uni.net*) *www.inter-uni.net*) presented by Menno Pet and Sjoerd Pet, Graz, November 2010

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Supervisor: Chris Endler, Austria

This research was performed to investigate if Biophoton Therapy with 'Biophoton Therapy Device J. Boswinkel' will have any perceptible effect on the human blood. Biophoton Therapy is an energetic therapy method, there will be given no physical tangible treatment, such as drugs, herbs or any other substances, to the body of the person that receives treatment. This double-blind research consists of observing red blood cells in blood samples of test persons that receive Biophoton Therapy or a placebo-treatment. If these possible effects are positive or negative will not be judged in this research. Because the authors are not qualified to diagnose the blood of the test persons, there is no intention of making value judgments, neither qualitative nor quantitative, or diagnoses based on what is observed.

For this randomised controlled trial there are a total of 30 test persons, of which 20 will receive Biophoton Therapy and 10 will receive a placebo-treatment. The observation of the red blood cells in the blood samples of the test persons is done with a Dark field microscope. A total of 60 blood samples are being taken, one of each test person before the treatment and one of each test person after the treatment. From these blood samples, 120 screenshots are made, 2 screenshots for each blood sample, at 400x and 1000x magnification.

The total group of test persons is divided in two age groups to investigate if the fundamental changes in the cardiovascular system of the human body due to ageing, will have any influence on the perceptible effects of Biophoton Therapy in the blood. One group consists of persons in the age of 18 years old up to and including 45 years old and one group consists of persons in the age of 46 up to and including 80 years old. For each of both age groups there are 15 test persons, of which 10 will receive Biophoton Therapy and 5 will receive a placebo-treatment.

For the interpretation of the blood samples, the focus lies on the red blood cells only. The analysed results are also derived from the visual effects that are being seen in the characteristics in the behaviour of the red blood cells in the blood samples.

A questionnaire is used to examine perceptible characteristics of the red blood cells in the blood samples. This questionnaire consists of three different categories, with for each category four different possibilities in characteristics and behaviour of the red blood cells. The perceptible differences that are being observed and examined for all blood samples in these three categories are; the position of the individual red blood cells, the position of the red blood cells compared to each other and the spreading of the red blood cells. Perceptible changes that are being observed in all blood samples include; is an individual red blood cell lying flat or in an angle, are the red blood cells pressed against each other/lying on top of each other or are the red blood cells lying separated, and are the red blood cells spread evenly or are they forming groups together?

This questionnaire is filled out for every blood sample taken before the treatment and for every blood sample taken after the treatment. After filling out the questionnaires, the results of the questionnaires are being compared to each other, together with all the screenshots of the blood samples.

In general, it is seen that the red blood cells that are lying flat and separate are often also more evenly spread. If the red blood cells are lying in an angle and pressed against each other or lying flat and on top of each other, they are often also forming small or large groups. There are also situations seen in between these two examples; some red blood cells are lying flat and others are lying in an angle, some red blood cells are lying on top of each other/are pressed against each other and others are lying separated, some red blood cells are forming groups and others are spread evenly in between.

The blood samples taken from test persons treated with Biophoton Therapy show a clear change in perceptible characteristics when comparing the samples taken before the treatment and the samples taken after the treatment. In most cases there is a change in perceptible characteristics between a before situation where red blood cells are lying more in an angle, more on top of each other/pressed against each other and forming larger groups, to an after situation where red blood cells are lying more flat, more separated and more evenly spread. In two cases, the opposite in changes between the before and after situation, is visible.

To observe if there will be a difference between blood samples taken from test persons that received Biophoton Therapy and persons that did not, there is also a group of test persons receiving a placebo-treatment. Also the results of this observation show a clear difference between blood samples taken from test persons treated with Biophoton Therapy and test persons treated with a placebo-treatment.

In the blood samples of all test persons treated with Biophoton Therapy there is an average difference of 4.50 on a scale of 0-9 according to the questionnaire, with a standard deviation of 1.54. For all blood samples of test persons treated with a placebo-treatment there is an average difference of 0.10 on the scale of 0-9, with a standard deviation of 0.32. In only one case of a test person treated with a placebo-treatment, there is a very slight difference seen between the before and after blood samples of this person.

Comparing the results of both age groups, of 18-45 years old and 46-80 years old, the perceptible differences between the two groups are too small to conclude if there is an influence of age. Differences in the distribution of the perceptible differences between both age groups are; a standard deviation of 1.90 for the age group 18-45 and 1.17 for the age group 46-80, the distribution of perceptible changes runs from 1 to 7 on the scale of 0-9 for age group 18-45 and from 2 to 6 on the scale of 0-9 for age group 46-80. The only one case where the blood samples of a test person treated with a placebo-treatment show a very slight difference, originated from the age group 46-80.

It can be concluded that Biophoton Therapy does have a perceptible effect on the red blood cells in the blood of the test persons, since the red blood cells of test persons treated with Biophoton Therapy are showing significant perceptible differences in the before and after blood samples, and the red blood cells of test persons treated with a placebo-treatment are only in one case showing a very slight perceptible difference and for the rest none at all.

Although this study is set up as a double-blind randomised controlled trial, this study can not be compared to a laboratory blood test where physiological and biochemical states of the blood are determined by a specialist. This study is aimed to be a first step to investigate if there is an perceptible influence of Biophoton Therapy on the human blood.

The blood is only examined on perceptible changes and no diagnoses where made regarding the quality of the blood, as is done in haematological or biochemical blood tests. Only red blood cells, and no other components that are – or can be – present in the blood, are examined in this research.

Since the results of this study show noticeable changes in the perceptible characteristics of human red blood cells after Biophoton Therapy with 'Biophoton Therapy Device J. Boswinkel', a clinical trial consisting of haematological or biochemical blood tests is desirable. Further research can be conducted to investigate if the perceptible changes entail a positive effect on the human blood.

1) Boswinkel, J. (2007)
Handboek Chiren Biontologie, Health Angel.
2) Bouman, L.N., Bernards, J.A., Boddeke, H.W.G.M. (2008) Medische Fysiologie, Houten: Bohn Stafleu van Loghum.
3) Coyle, M. (1988)
Advanced Applied Microscopy, Volume 1, Canada: Elbow Room Publishing.
4) Faber, D., Steenbergen, W., Mul, F. de (2000)
"De optische eigenschappen van stromend bloed", Nederlands Tijdschrift voor Fotonica, april 2000, pp. 15-20.
5) Popp, F.A. (1999) About the coherence of Biophotons, Germany: International Institute of Biophysics.

EFFECTS OF BIOPHOTON TREATMENT, ON ISOLATED RAT CORTICAL NEURONS, THROUGH THE BIOPHOTON DEVICE BY J. BOSWINKEL

Author: Dietrich Vastenburg, Netherlands
Supervisors: Christiaan Endler, Austria; M. Merlini, Switzerland

Introduction

This introduction has the purpose to inform in general about the background of the related research that is based on the concepts of Biophotons and its applied technology, and the research findings behind it.

Biophotons are weak emissions of light radiated from the cells of all living things. A photon is a single particle of light. Plants, animals and humans have an intensity of their emission from some hundreds up to one thousand photons/second/cm², and an almost continuous spectrum within the optical range of at least 200 - 800 nm [1]. All organisms, including plants, constantly produce photons as part of their vital activities. The light of the photon is too faint to be seen by the naked eye.

Biophotons create a dynamic, coherent web of light. A system that could be responsible for chemical reactions within the cells, cellular communication throughout the organism, and the overall regulation of the biological system, including embryonic development into a predetermined form. According to Popp in a live interview, to be seen on the internet [2], a chemical reaction in a cell can only happen if the molecule which is reacting, is excited by a photon. So the photon is necessary to stimulate a molecule to a chemical reaction. So every living cell is producing light.

Research Question

The main objective of this study was to see if an effect on isolated rat cortical neurons could be observed upon treatment with through the Biophoton device. To this aim the following questions were asked:

- Will the isolated neurons stay alive longer and/or will they show any differences in growth upon treatment by the Biophoton device, as compared to the non treated control group.
- Will neuronal growth be significantly affected by treatment through the Biophoton device, and if so, what will be the difference when compared with the same untreated / unexposured neurons?

Methods

Design

The research was performed in a completely sterile area under standard culture conditions (temperature (37° ± 0,1°; 7,5% CO2) on isolated neurons from rats (embryonic cortical neurons).

To be able to understand the eventual influences of treatment through the Biophoton device on neuronal viability, neurons were divided into seperate groups: a control group, an untreated part in a separate Petri-dish, and different Petri-dishes treated with several different Biophoton programmes (each Petri-dish contains about 60.000 cells).

Participants

Dietrich Vastenburg
M. Merlini (University of Zürich, Switzerland)

Materials

Biophoton device according to J. Boswinkel
Rat Cortical neurons → standard dissection protocol *
Coverslips in Petri dishes
Medium → standard neuronal culture medium *
Microscope → Bright field microscope with attached camera (Leica DMI RE2, Heerbrugg, Switzerland)
Incubator → (37°C, 7,5% CO2, 100% rel. humidity)
All treatments were performed in a sterile laminar flow hood

* Almeida A and Medina JM (1998) A rapid method for the isolation of metabolically active mitochondria from rat neurons and astrocytes in primary culture. Brain Res Prot 2(3):209-14

Performance of the Study

The study was performed in the laboratory of the University of Zürich.

Statistical Analysis

Results were analysed using the imaging software ImageJ. Statistics were approached using Student's t-test and SEM (standard error of the mean = standard deviation (SD) divided by sample size. In our case sample size is the number of repetitions (n) of the respective treatments (n=3). Statistical analysis sing SD showed a comparable degree of significance as compared to using SEM).

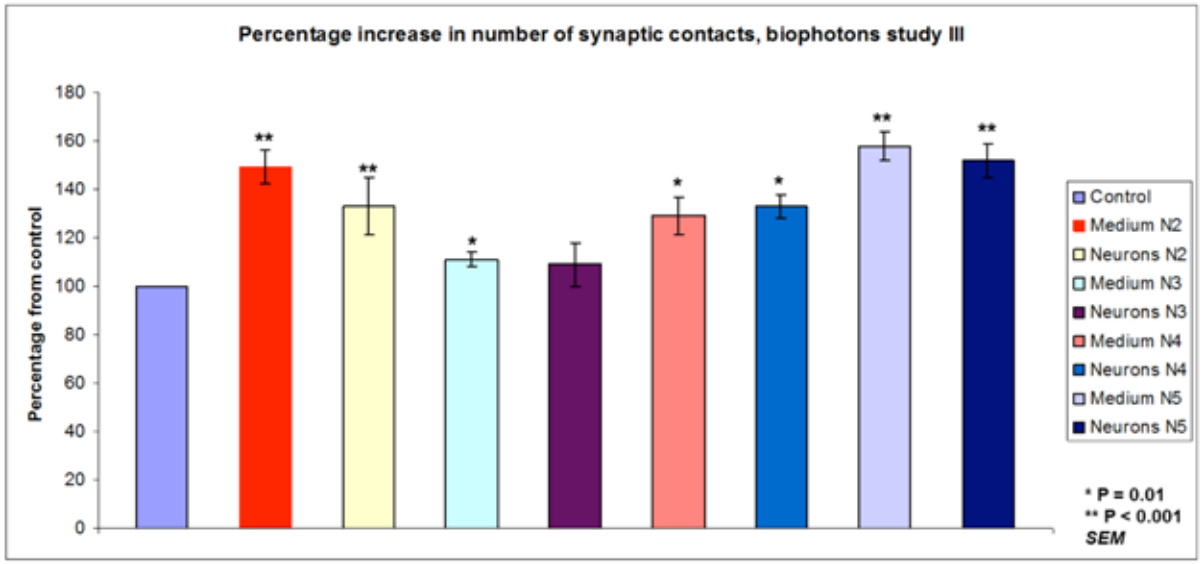
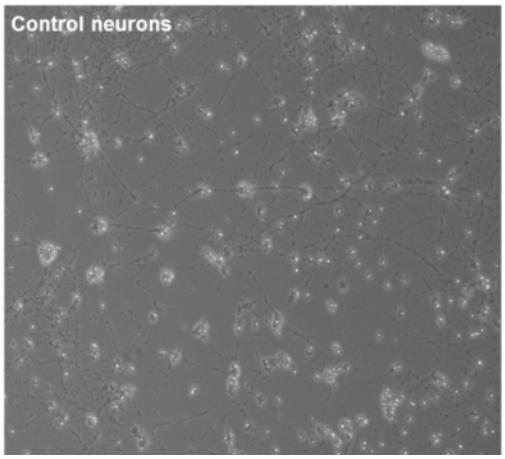


Figure 1. *Bar graph showing the effects of the different Biophoton device treatment programs on number of synaptic contacts after 10 days in culture.*

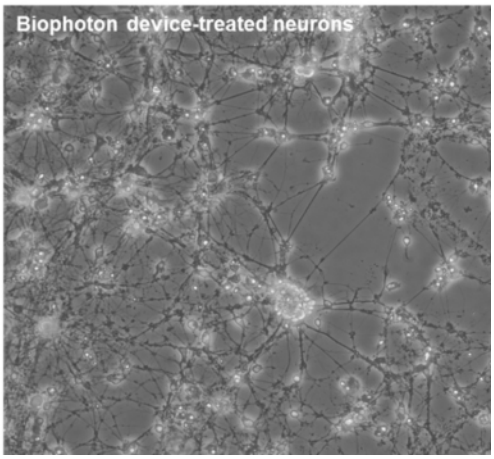
Results

Survey

In answer to the lead research question – if neuronal growth and survival would be affected by Biophoton device treatment – there was found a significant increase in neuronal growth and synaptic interactions between neurons.



Control (untreated) neurons



Program N5 normal culture medium treated only

After 10 days. Magnification = 100 x and visible area = 1.8 mm2. Culture area = 190 mm2 = 20.000 neurons in total. On average 2000 neurons were within the visibility area.

Discussion & Conclusions

Interpretation of Results

The key question in this study was if treatment with the Biophoton device would have any effect on neurons in culture.

We found that there was a significant increase in possible neuronal interactions as was shown by an increase in the number of synaptic contacts between treated neurons as compared to the untreated control neurons (see above pictures). The fact that Biophoton device treatment showed such a strong impact on the neurons could be due to the fact that neurons are highly communicating cells.

Self-Critical Remarks

One of the limitations of this study was the fact that the neuronal cultures used were so-called single cell cultures, that is, no presence of other cells which are normally present in the brain. This can influence the effects of Biophoton device treatments. For future studies it is therefore of importance to grow neurons in co-culture with these other cells.

Suggestions for Further Research

What happens on the protein level, more specific, the expression of proteins involved in neuronal survival & synapse formation.

References

[1] Bischof M.; Das Licht in unseren Zellen 2001

[2] Popp F.A., Life interview for Science and Spirituality television station on YouTube, 2008, especially last 8 minutes. [Video is no longer available]

BIOPHOTON THERAPY AND QUALITY OF LIFE OF CHILDREN WITH CHRONIC COMPLAINTS

Authors: Ellen Pet-Reatsch, Wim Pet, Netherlands
Supervisor: Chris Endler, Austria

The purpose of the presented research is to investigate the influence of Biophoton Therapy with 'Biophoton Therapy Device by J. Boswinkel' on chronic complaints among children and adolescents. The main focus of the study lies with the effect on the frequency of occurrence of chronic complaints among children and adolescents and the possible improvement of their quality of life.

To differentiate between incidental complaints and chronic complaints, and to define, in the first four criteria, what is meant in this study as a "chronic complaint among children", we will use the following inclusion criteria:

6) The complaint occurs with children and adolescents up to and including 18 years of age.
7) The complaint interferes with the child's normal daily routine(s).
8) The complaint can be self-identified and is not (per se) based on a medical diagnosis.
9) The complaint occurs frequently, i.e. daily or at least several times a week. The complaint has lasted for three months or a longer period of time already.
10) During the research period, the child or adolescent is not using any drugs and/or is not under treatment of any other therapist or medical doctor.

Biophoton Therapy, as applied in this research, consists of personalised treatment that is determined by measurement with the 'Biophoton Therapy Device by J. Boswinkel', where after the actual treatment is also given through the 'Biophoton Therapy Device by J. Boswinkel'. There is not any physically tangible treatment, such as drugs, herbs or any other substances.

Biophotons and 'Biophoton Therapy Device by J. Boswinkel'

Biophotons are weak emissions of light radiated from the cells of all living things. A photon is a single particle of light. Plants, animals and humans have an intensity of their emission from some hundreds up to one thousand photons per second per cm^2 and an almost continuous spectrum within the optical range of at least 200-800 nm. All organisms, including plants, constantly produce photons as part of their vital activities. The light of the photon is too faint to be seen by the naked eye. The weakness of its light can be compared to candlelight seen at a distance of 20 km. Photons have been detected and verified without doubt by using a photomultiplier. Since they originate from living cells, we call them Biophotons. The study field of Biophotons: Biophotonics, is part of Life Sciences, according to the International Institute of Biophysics, Neuss, Germany.

This research uses the 'Biophoton Therapy Device by J. Boswinkel' as a medium to transfer information. According to the manufacturer this device operates on the following principles:

- Each cell emits Biophotons and they provoke up to 100.000 chemical reactions per second.
- Every living cell emits its own characteristic light pattern.
- When a cell is healthy, it emits coherent light and when a cell is diseased, it emits chaotic light.
- Every biochemical reaction is preceded by an electromagnetic signal, the Biophoton, that 'steers' the chemistry of the cell with certain information.
- When the steering signal within the cell is inadequate, then the biochemistry does not work properly and the cell will show certain symptoms of disturbance.
- The 'Biophoton Therapy Device by J. Boswinkel' corrects the steering signal, which in turn corrects the biochemistry in the cells.

Research Methods / Execution of this Study

The research is set up as an open, not controlled, not randomised, observational study and was carried out among a group of 20 children and adolescents who suffered from chronic complaints.

Before the beginning of the treatments, a questionnaire is filled out by the parents to establish the frequency of occurrence of the chronic complaints the child is suffering from. The Biophoton Therapy treatments all take place in the first two weeks of a thirteen-week period. At the end of the thirteen-week period, thus after a minimum of eleven weeks after the last treatment, the same questionnaire is filled out to assess the frequency of occurrence of the complaints of the individual.

The complaints on the questionnaires are grouped in categories related to specific body-parts, organs and bodily systems. These categories are: "Sleeping problems", "Energy problems", "Bowel/abdomen problems", "Ear, nose and throat problems" and "Skin problems". The questionnaire provides room for comments and includes a blank category named "Other problems" to report any other complaints that were not included in the list.

On the questionnaire, the possible answers to the frequency of occurrence of the complaints are: "never", "sometimes", "regularly", "often" and "always". Complaints that are only experienced "sometimes" are interpreted as complaints that occur on an irregular basis and thus as incidental complaints.

The frequency of the experienced chronic complaints is also used as a measure for the quality of life. This can be inferred because "complaints" refer to those symptoms that affect the quality of life in a negative way, otherwise the symptoms would not be conceived as "complaints" by the parents and children or adolescents.

Quality of Life

From a total of 20 children and adolescents whose questionnaires are analysed, a total of 133 complaints met the outlined inclusion criteria. The reasons for exclusion are that the complaint did not occur frequently enough to be called a chronic complaint or that the self-reported complaints, under "Other problems", are no complaints in the strict sense, but, for example, the name of a disease.

All of the results follow from the comparison of the questionnaires that are filled out before the treatments and the questionnaires gathered thirteen weeks after the first treatment.

As can be seen in Table 1, the group of 20 children and adolescents, of which 40% are female and 60% are male, began the treatment with an average of 6.7 chronic complaints per individual. The average age of the group is 9.5 years old and they received an average of 2.55 treatments per individual.

Of all 133 chronic complaints, 92.5% of the chronic complaints are resolved. This means that after treatment the complaint did not occur anymore, or, in some cases, not frequently enough to count as a chronic complaint according to the criteria of a chronic complaint as used in this study.

Of the chronic complaints that are not entirely resolved, the majority did improve in the sense that the complaint occurred less frequent than before the treatment. Of all chronic complaints, 97.0% improved in their frequency of occurrence.

Table 1. *Demographics of the total group consisting of 20 children*

Total number of treated chronic complaints	133
Average number of chronic complaints per child	6.7
Average age of total group	9.5
Percentage of female	40.0%
Percentage of male	60.0%
Percentage of chronic complaints improved	97.0%
Percentage of chronic complaints resolved	92.5%

Of the 133 chronic complaints that existed before treatment, 10 complaints persisted after treatment. That amounts to an average of 0.5 chronic complaints per individual after treatment. Of the 10 persisting complaints, 6 did improve in their frequency of occurrence.

In *Figure 1*, an overview is presented of all the answers that are filled out about the complaints of the cooperating children and adolescents.

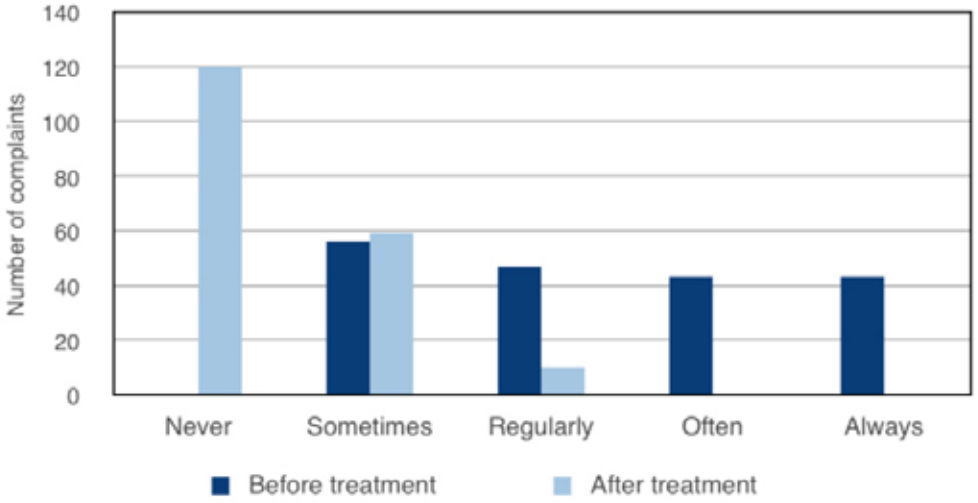


Figure 1. *Frequency of occurrence of all complaints before and after Biophoton Therapy*

The number of chronic complaints per category before Biophoton Therapy, and the percentages of chronic complaints that are resolved after Biophoton Therapy can be seen in Table 2.

Table 2. *Percentages of chronic complaints resolved*

	Occurring chronic complaints	Percentage resolved
Sleeping problems	18	100.0%
Energy problems	26	88.5%
Bowel/abdomen problems	18	100.0%
Ear, nose and throat problems	25	88.0%
Skin problems	15	93.3%
Other problems	31	90.3%
Total of problems	133	92.5

Conclusion

The results of this observational study show that Biophoton Therapy given with the 'Biophoton Therapy Device by J. Boswinkel' decreases the frequency of chronic complaints among children and adolescents. Because the vast majority of complaints did not occur anymore and the remainder of the complaints decreased in frequency of occurrence, inevitably this improved the quality of life of the children and adolescents that were treated.

Literature

1) Hatzmann J (2009): Consequences of care, about parents of children with a chronic disease. Thesis, University of Amsterdam, the Netherlands 2009.

2) Key JD, Brown RT, Marsh LD, Spratt EG, Recknor JC (2001): Depressive symptoms in adolescents with a chronic illness. Children's Health Care 2001 Dec;30(4):283-292.

3) Mokkink LB, van der Lee JH, Grootenhuis MA, Offringa M, van Praag BMS, Heymans HSA (2006): Omvang en gevolgen van chronische aandoeningen bij kinderen. Emma Kinderziekenhuis AMC, Amsterdam.

4) Mokkink LB, van der Lee JH, Grootenhuis MA, Offringa M, Heymans HS: Dutch National Consensus Committee Chronic Diseases and Health Conditions in Childhood. Defining chronic diseases and health conditions in childhood (0-18 years of age): national consensus in the Netherlands. Eur J Pediatr 2008 Dec;167(12):1441-7.Epub 2008 Mar 14.

5) Van der Lee JH, Mokkink LB, Grootenhuis MA, Heymans HS, Offringa M: Definitions and measurement of chronic health conditions in childhood: a systemic review. JAMA 2007 Jun 27;297(24):2741-51.

6) Popp FA (1999), About the Coherence of Biophotons, International Institute of Biophysics, published in: "Macroscopic Quantum Coherence", Proceedings of an International Conference on the Boston University, edited by Boston University and MIT, World Scientific 1999.

7) Bischof M (2001), Biophotonen: Das Licht in unseren Zellen, Frankfurt, Verlag: Zweitausendeins; Auflage: 12 (1995), ISBN-10: 3861500957, ISBN-13: 978-3861500957.

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Researcher Dietrich Vastenburg was born and raised in the Netherlands. In early 2006 he first 'discovered' the Biophoton therapy by Johan Boswinkel. He was fascinated immediately by this new approach to find the cause of health problems and resolve them in a natural and effective way. Excited by this new 'discovery' for him, he enrolled several months later in the Biophoton education programme and became a Biontologist himself. In 2008 he graduated with a BSc Diploma in "Theory and Application of Biophoton Therapy". After his graduation Dietrich Vastenburg moved to Zürich, Switzerland where he started his practice in Biophoton Coherence Therapy. That same year he started his study in "Complementary and Integrated Health Science" at the Interuniversity College for Health and Development in

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