

SCOpro

clinical environmental medicine



Radiation Health 2019 Get the Facts International Conference

"European network of doctors,
fundamentally educated in individualized
Clinical Environmental Medicine"



September 28th, 2019 London
P. Ohnsorge



Clinical Environmental Medicine

A discipline oriented on science and practice in complex systems

- **caring for individuals suffering from chronic and complex illnesses, especially those associated to the environment**
- **applying as well different tools from other medical subspecies, if useful and fitting into the concept**
- **continuously looking for scientifically evaluation of the newfound practical tools for diagnose, therapy and prevention under the idea of complex system thinking**

Radiation Health 2019

Get the Facts International Conference

**Two days we have discussed the topic
5 G and HEALTH: the Facts and the Risks.**

**The occurrence of various health consequences has been
presented in their controversial scientific positions**

**Effects were demonstrated mostly as linear- and / or
monocausality.**

Critical thoughts about science

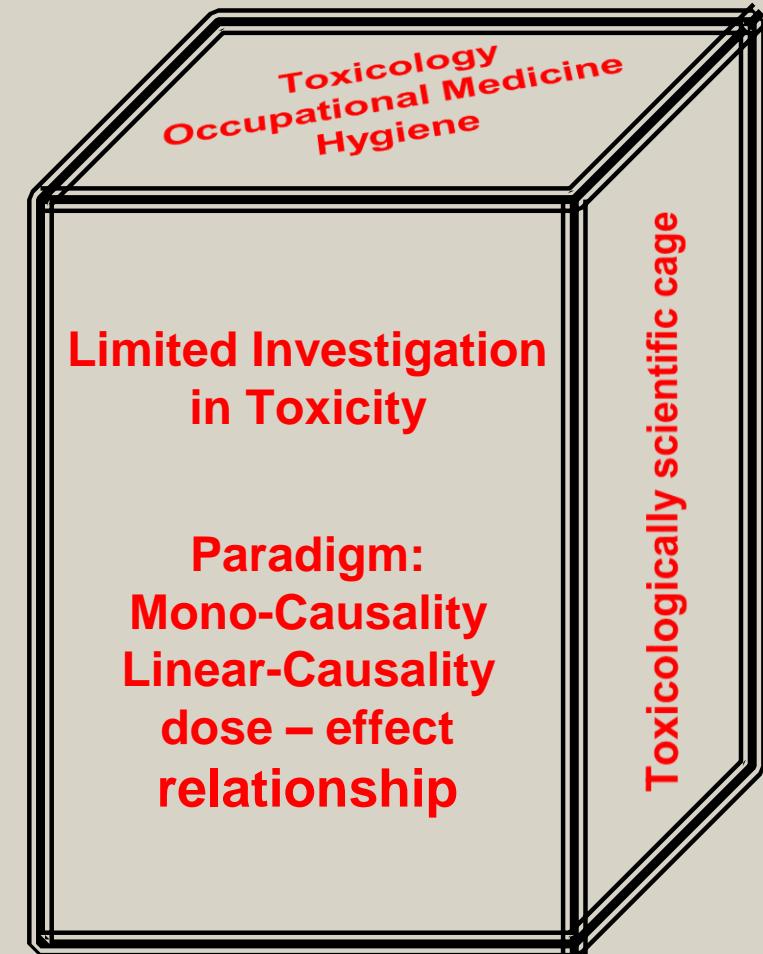
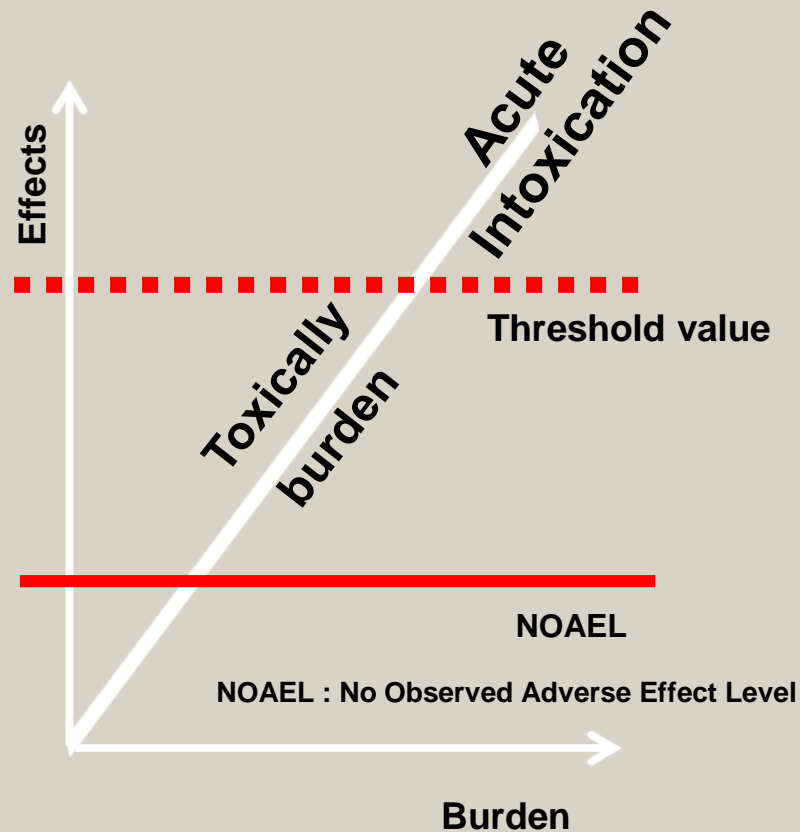
- **Can these representations explain the entity of the illness electro-hypersensitivity?**
- **Why could not generally accepted scientific evidence for these and other multisystem illnesses be established?**

Mainstream science has is still a reductionistic approach

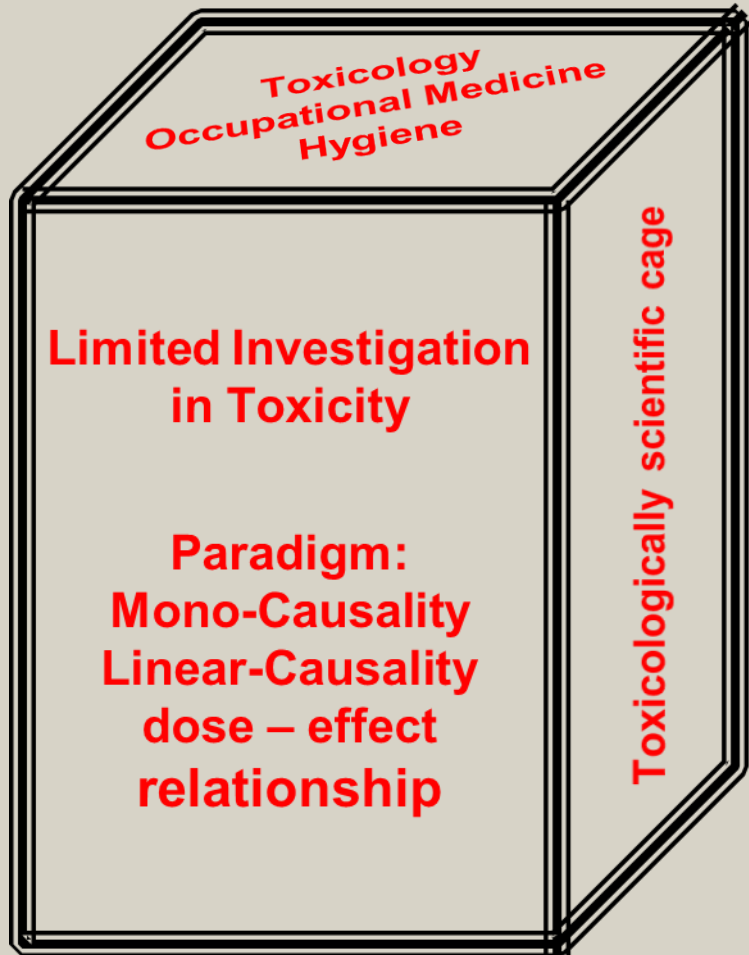
**Still following the dogmata of the International Commission
on Non-Ionizing Radiation Protection (ICNIRP)**

- **linear- and mono-causal approach**
- **a dose-effect relationship**
- **Concerning Clinical Environmental Medicine you should be skeptical to a reductionistic scientifically approach, which refers to Descartes**

Toxicology, Occupational Medicine and Hygiene claim the domain upon environmental medicine



Toxicology has only a limited scientific approach to identify environmental diseases correctly



- No awareness and no acceptance of health effects outside this cage
- missing assessment of effects of multiple load burdening
- not being aware of
 - long time – low dose burden
 - time / duration of burdening
 - accumulation, depot formation
 - mobilization effects
 - additive / multiplying effects
- disregarding
 - Neuro-Endocrine-Immune-System (NEIS)
 - individual susceptibility
 - current vulnerability

Struggle reductionism versus complex systems

- **Science is based always on a given paradigm.**
- **Paradigm means a generally accepted problem solution.**
- **Times of new expertise put everything into question, like we have seen in physics with Quantum mechanics already.**

Complexity

Clinical Environmental Medicine knows different stressors

➤ physically

- Electro – Magnetic Fields (EMF)
- Noise
- Radiation
- Heat – Coldness
- Excessive sport

➤ biologically

- Bacteria
- Borrelia
- Viruses
- Parasites
- Molds

➤ chemically – toxically

- Disinfectants
- Preservatives
 - Food
 - Cloth
 - Products woods, paintings (Antifouling)
- Biocides / Mycotoxins

➤ psycho-socially

- Partner,
- Parents - Children,
- Kindergarten, school,
- University
- Working place
- Recreation time

study of complex systems contradicts reductionism

- **In the past reductionism had strongly reflected a certain perspective on causality**
- **For the last few centuries, the Cartesian project in science has been to break matter down into ever smaller bits, in the pursuit of understanding.**
- **We are leaving now these centuries of Descartes dominated science**

study of complex systems contradicts Reductionism

- **Modern Science is calling old traditional science approaches in question**
- **linear- and mono-causal scientific approach turns out of date**
- **Scientific holism holds that the behavior of a system cannot be perfectly predicted, no matter how much data is available**

Y. Bar-Ya, GENERAL FEATURES OF COMPLEX SYSTEMS

- **The study of complex systems represents a new approach to science that investigates**
- **how relationships between parts give rise to the collective behaviors of a system and**
- **how the system interacts and forms relationships with its environment.**

<http://www.eolss.net/sample-chapters/c15/E1-29-01-00.pdf>

- **From biochemical reactions to global development, complexity has arisen as a unifying feature of our world.**
- **In this arena of complex systems, new approaches are central to advancing our understanding and capabilities.**
- **The field of complex systems cuts across all traditional disciplines of science, as well as engineering, medicine and management.**

Vol. I - General Features of Complex Systems - Y. Bar-Ya; <http://www.eolss.net/sample-chapters/c15/E1-29-01-00.pdf>

Critical thoughts about science

- **According to the philosopher Thomas Kuhn is the development of science characterized by a paradigm shift.**
- **Scientific theories do not change through evolution but revolution**
- **The research in complex systems is the new paradigm, a new revolutionary development in medical science of chronic illnesses.**

Current Environmentally Health Risk Assessment fails

Examples out of the last 50 years:

- Asbestos
- Tobacco smoke
- Wood preservatives, PCP, Lindane
- DDT, PCBs, HCB
- Formaldehyde
- Dental amalgam
- Softeners in
 - medical products
 - children's toys
 - packaging of food

Demographic development of the population

Excessive increase of the age pyramid will lead to:

→ increasingly chronic illnesses

- which can not be overcome by the general "end-of-pipe strategy" that only deals with symptoms and no complex burdening.

→ Exponentially increasing costs in health systems

→ Foreseeable break down of European health systems

What to do?

- **Change the scientific approach by shifting from Reductionism to Complex Systems**
- **By this, change the current Risk Assessment**
- **Train doctors in this complex thinking e.g. in Clinical environmental Medicine**
- **Establish a network of fundamentally educated doctors in order to disseminate expertise quickly**

Clinical Environmental Medicine

suffers the same fate as every new science

- **establishing slowly**
 - **developing against broad resistance**
 - **> 30 years of scientifically struggle**
- **initially afflicted by self-doubts**

Clinical Environmental Medicine

suffers the same fate as every new science

- **ongoing process of explanation and justification of practising towards**
 - **mainstream science and medicine**
 - **official medical association / council**
 - **insurance companies**
 - **court of justice**

Doctor's difficulties to care for patients beside Evidence Based Medicine (EBM)

- **diagnoses and therapies of patients with environmental associated illnesses were mostly dismissed as non-scientific and without proof of EBM.**
- **Without knowledge of the multisystem diseases and under the current scientific paradigm, scientific and medical mainstream**
 - **doctors could not find access to the complex processes of the diseases**
 - **so, the affected patients inevitably fell quickly under a psychosomatic or psychiatric suspected diagnosis**
 - **thus, doctor's medical responsibility for the patient rapidly switched to the Psychosomatic / Psychiatry, which gladly treated any patient.**

Aspiration for Evidence Based Medicine

The technique of EBM includes

- the systematic search for the relevant evidence in the medical literature for a specific clinical problem,
- the critical assessment of the validity of the evidence from a clinical epidemiological point of view,
- the evaluation of the size of the observed effect,
- as well as the usage of this evidence to the concrete patient by means of
 - clinical experience of the doctor and
 - perceptions of patients.

Level of evidence in EbM

1989 the U.S. Preventive Services Task Force (USPSTF):

- **Level I: Evidence obtained from at least one properly designed randomized controlled trial.**
- **Level II-1: Evidence obtained from well-designed controlled trials without randomization.**
- **Level II-2: Evidence obtained from well-designed cohort studies or case-control studies, preferably from more than one center or research group.**
- **Level II-3: Evidence obtained from multiple time series designs with or without the intervention. Dramatic results in uncontrolled trials might also be regarded as this type of evidence.**
- **Level III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.**

U.S. Preventive Services Task Force (August 1989). Guide to clinical preventive services: report of the U.S. Preventive Services Task Force. DIANE Publishing. pp. 24-. ISBN 978-1-56806-297-

Clinical Environmental Medicine

Evidence based Medicine **Level I**

- A therapy-study, which is
 - randomized,
 - prospective,
 - blinded, and
 - controlled

Evaluation of an approach to treat
toxically loaded persons:

A controlled therapeutically study

by

Dr. med. Peter Ohnsorge¹⁾
Prof. Dr. phil. Dipl.-Psych. Michael Hüppe²⁾

In order of the German Ministry of Health and Social Affairs

Reference Code: 122-1720/48

Hüppe M, Müller J, Schulze J, Wernze H, Ohnsorge P (2009): Treatment of patients burdened with lipophilic toxicants: A randomized controlled trial, Act Nerv Rediviva, 51(3-4);133-141

Clinical Environmental Medicine

Level III

- **German Guidelines for practising Clinical Environmental Medicine, 2011**
 - **Handlungsorientierte umweltmedizinische Praxisleitlinie,**
published by “Deutscher Berufsverband der Umweltmediziner e.V.“
www.dbu-online.de/fileadmin/redakteur/Sonstiges/Leitlinie_Langfassung_11_2011_Umweltmed.Praxis.pdf
- **EUROPAEM EMF Guideline 2016 internationally**
 - **EUROPAEM EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses**
Belyaev I, Dean A, Eger H, Hubmann G, Jandrisovits R, Kern M, Kundi M, Moshammer H, Lercher P, Müller K, Oberfeld G, Ohnsorge P, Pelzmann P, Scheingraber C, Thill R.
Rev Environ Health. 2016 Sep 1;31(3):363-97. doi: 10.1515/reveh-2016-0011.

Ongoing confrontation of doctors with the scientific and medical mainstream is

for both sides:

- energy consuming
- time consuming
- simply exhausting

Ongoing confrontation of doctors with the scientific and medical mainstream is

for the patients

- Inhuman
- prolonging ailments

for the health system

- additional health-costs

A single doctor is barely able to fight against the scientific mainstream alone

- **a network - regional, national, international - is urgently needed**
- **only a critical mass of doctors has political power**
- **Therefore, it makes sense to establish a European network**
 - **so that you have a sufficient number of like-minded and equally trained doctors in the boat.**

Training of Clinical Environmental Medicine

Should take place by lectures and as problem-based learning,

- **as a presence teaching / classroom teaching face-to-face**
- **as an online teaching (blended learning)**
- **practically oriented, with many case studies**

Training of Clinical Environmental Medicine

Should be equipped with

- a recognized, comprehensive curriculum
- Learning Quiz
- certification by **EUROPAEM*** or similar medical associations
(*European Academy for Environmental Medicine)

A well-established network is mostly seen as an accredited medical institution

With a network of such trained doctors one can

- try to take political influence on the national health system**
- start a positive scientific discourse with universities, medical schools and other medical associations**

start networking

- **Network of doctors**

- practising in **Clinical Environmental Medicine**

- **Scientists**

- open for complex system thinking

local – regional – national - international

We start a LinkedIn Group Clinical Environmental Medicine

- **platform, a chat forum,**
 - **for the knowledge exchange**
 - **for an open discussion**
 - **with interactive questions and answers about practice-oriented Clinical Environmental Medicine**

We start a LinkedIn Group Clinical Environmental Medicine

- **Areas of interest in the field of Clinical Environmental Medicine:**
 - **new scientific subject-related findings like**
 - **Diagnostics and therapy strategies**
 - **Reports on current and new environmental impacts (hotspots, regional, national and international)**
 - **new subject-related laboratory tests**
 - **interesting case reports, completed or not yet finished, with questions to the forum**

We start a LinkedIn Group Clinical Environmental Medicine

In case of interest

please contact me via

LinkedIn: Peter Ohnsorge, or

e-mail: mail@scopro.de

I will send you an invitation

Thank you for your attention

Dr. med. Peter Ohnsorge

**Auf der Schanz 104
D-97076 Wuerzburg**

Tel. +49 (0)931 – 470 869 24

M. +49 (0)171 – 127 127 0

Email: mail@scopro.de

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