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Observations from a Psychotherapy Practice on Mobile Telecommunications and DECT Telephones

Revised and extended version

Introduction

This article is based on a first publication in the journal "Umwelt- Medizin- Gesellschaft" ("Environment- Medicine- Society") Volume 1, Year 2004, on a lecture given at the 1st Mobile Telecommunications Symposium in Bamberg on 29.1.05 and on an extended evaluation of the 65 cases underlying the first publication.

I have observed an increase in cases of serious illness which- in my opinion- can be attributed to the effects of high frequency radiation from the ubiquitous DECT telephones and base stations of mobile telecommunications transmitters. This issue is, however, often deliberately ignored by doctors, especially as they are under the influence of official professional organisations (e.g. in Hessen, there is approved training for doctors via the Information Centre for Telecommunications, one of the organisations run by the mobile telecommunications operators).

In October 2002, a group of doctors to which I too belong 'went public' for the first time. They addressed the general public as well as those who are responsible in the health care system and politics by launching the "Freiburg Appeal" [German = "Freiburger Appell"]. They pointed out the increase in cancers, heart attacks and strokes that are also occurring in young patients, as well as numerous other disorders that appear in the environment of DECT telephones and mobile telecommunications transmitters, and they demanded that politicians and industry take action.

I quote: – "In recent years, we have observed...a dramatic increase of serious and chronic illnesses, especially:

- Learning-, concentration- and behavioural disorders in children (e.g. hyperactivity)
- Derailment of blood pressure that is increasingly difficult to control with medication, cardiac arrhythmias, heart attacks and strokes in ever younger people
- Degenerative brain illnesses (e.g. Alzheimer's disease) and epilepsy
- Cancers such as leukaemia and brain tumours

An ever increasing occurrence of various disorders that are often interpreted as psychosomatic disorders, such as

- Headaches and migraine
- Chronic exhaustion

- Inner agitation
- Insomnia and daytime tiredness
- Tinnitus
- Susceptibility to infections
- Nerve and soft tissue pains that cannot be explained by usual causes.

We can no longer believe that this is purely coincidental because too often, we are observing a marked increase in the number of specific illnesses in areas or in housing exposed to telecommunications radiation. Too often, the illnesses – which have existed for months or even years - improve or disappear in a relative short time following the reduction or elimination of a radiation exposure in the patients´ environment. Furthermore, too often, the measurements carried out by building biologists confirm exceptionally high electromagnetic radiation intensity at the location of our observations."

Those who are responsible in politics and the health care system have mainly failed to respond. Only in the Deutsche Aerzteblatt (official journal of the German medical association – Bundesaerztekammer) did an article ask the incredulous question: How could so many different symptoms possibly be attributed to one common underlying mechanism? However, the response of doctors and others working in the health care system as well as the general public was very gratifying. So far, over 36,000 (thirty six thousand) signatures have been collected from Germany, Austria, Switzerland, Italy, and also from countries further away such as Canada and New Zealand.

I am a psychiatrist and a psychotherapist, with an emphasis on psychotherapy. I have been in the profession since 1972. Since 1993, I have been running my own practice in Leutkirch, a small town with 12,000 inhabitants. This article should encourage an increased awareness of new phenomena presenting in the patients of a normal medical practice. As a medical practitioner running my own practice, I cannot provide a fundamental discussion of the subject of telecommunications that will comply with all scientific criteria. I refer to the extensive research on this topic which unfortunately has not included an investigation of the dwelling or work places of ill people to date**.**
I describe my observations of 65 patients, who randomly consulted my practice, which is a one-person practice with a free lance administrator.

Very often, it is stated in discussions of possible health damage from mobile telecommunications, that 'so far nothing is proven'. Official publications repeat in a prayer-wheel like fashion that 'further research is necessary'. The latter is indeed quite sensible, but does that mean that one should not take precautions? The task of finding the mechanism of action is the work of researchers, not that of established doctors. But, in order to do so one must recognise that symptoms do arise. By the way, Dr. Warnke stated a possible mechanism of action (via NO-metabolism) at the Mobile Telecommunications Symposium in Bamberg.

Observation precedes explanation. Anybody familiar with science knows that whilst causal explanations often only have a short half-life, the underlying observations endure. I recall the well known anecdote about Newton who is believed to have discovered gravity when apples dropped from the tree in his garden. Or, Doctor Semmelweis, who, in Vienna during the 19th century, proved that puerperal fever during child birth could be prevented by hand washing – this was at a time when bacteria were not yet recognised as pathogens. He did not have any success with his colleagues, however, as he was ridiculed and ostracised and ended up in a psychiatric ward.

Early Observations and Considerations

I developed an interest in mobile telecommunications, because of the ill people who have consulted my practice, and because of similar illnesses which I encountered in my personal environment. At the end of 1996/1997, I still had no knowledge at all of mobile telecommunications. It was about this time when patients first came to my practice with patterns of illness that clearly differed from the previously well known ones. Until then, I had been used to treating people suffering from psychoses, addictions, anxiety, depression, compulsions, psychosomatic diseases and personality disorders. Suddenly, however, patients came who I considered to be physically ill.

In retrospect, I believe that during those initial years, most presenting patients suffered from a severe pre-existing weakness, such as metal or chemical toxicity or infections with Lyme Disease, viruses etc.. Now, a different group of patients is consulting my practice, and they don't seem to suffer from the same degree of pre-existing damage. They do not appear to be as ill as the first group. At that time , in 1997, I could make no sense of the pattern of illness. Within one year I had collected 18 cases. During my search for an explanation, I wrote to the state and local public health authority and telephoned the Robert Koch Institute in Berlin. The latter knew nothing about an increased number of specific illnesses. At that point, my prime suspicion still was that we were dealing with an epidemic caused by a new type of virus.

I was particularly amazed that these people, who I considered to be physically ill, were now coming to **me,** to a psychiatrist and psychotherapist. Consulting a psychiatrist or psychotherapist is generally considered embarrassing. However, these patients' degree of suffering was high enough to push them across the threshold of shame because they felt that something was not quite right in their heads. Many attributed the cause to psychological problems, but these are part of life. What the people were lacking, was the capacity to manage the problems and to overcome them.

Some of the patients' descriptions sounded very dramatic. They almost always reported sleep disorders, marked weakness, head, limb and joint pains, with or without fever, hair loss and, only after being asked, forgetfulness and parapraxis (an action failing inadvertently to complete a person´s intention)**.** The most conspicuous visual symptoms were a somewhat swollen face, sometimes featuring cushion-shaped swellings under the eyes, fixed beady eyes as they are typical of fever or hyperthyroidism, a reddened or pale-grey, strained looking face, as well as swellings on the hands, hand joints and less

frequently on the feet.

Psychologically, the patients appeared restless, depressive-anxious or aggressive-irritable. Routine laboratory tests, which were carried out by the family doctors, showed that some suffered from leukocytosis, an increase of the white blood cells, or slight increase of transaminases, that is to say, an increased level of specific liver enzymes. Initially, I considered this to be a consequence of a new kind of viral infection. Yet, this was not confirmed by the health authorities and the Robert Koch Institute. After collecting the first 18 cases further patients came to me with the same symptoms. Later several patients were diagnosed with chronic fatigue syndrome (CFS), fibromyalgia or multiple chemical sensitivity syndrome (MCS). In several others, there was a persistent Epstein Barr virus infection, the so-called glandular fever. However, it did not present in its classic form, but rather in its chronic form that often is not detected by the doctors.

It was not until 1999 that I became aware of the phenomenon of the mobile telecommunications after receiving reports about events which had occurred on farms situated in close vicinity of mobile phone base stations (cattle deaths, deformities, miscarriages). I subsequently contacted several farmers in Leutkirch who were having problems. Eventually, I also learned about the role of the cordless DECT phones in this context.

By now, I had already personally registered an increased number of the newly described illness pattern in specific areas of the town and I now associated these with the location of the mobile phone base stations. Furthermore, I asked the patients about DECT telephones in their homes and in their neighbourhood. Up until April 2003, I reviewed numerous cases with similar symptoms. 65 of these formed the basis of my publication, 28 were selected for a tabular presentation in the journal "Umwelt- Medizin- Gesellschaft" ("Environment- Medicine- Society").

Procedure

The criteria for the selection of these 65 cases were as follows:
Adults aged below 80 years, presence of a visible local mobile telecommunications base station and /or presence of a DECT telephone in their own home or in the neighbourhood. (Whether or not a DECT telephone was involved was ascertained using the operating instructions or by a discussion with the neighbour) It must be added that during 1997- 2000 DECT telephones were not yet as widely used as at the time of writing this paper in 2005.

Using the town plan of Leutkirch, I marked the location of the two mobile phone base stations in the city centre on the map. I also surveyed the transmitters in the other communities some of my patients lived in.
The largest proportion of the patients' homes is situated within a radius of 800 metres. The homes of two severe cases are 800 and 900 metres away, respectively, and are to be found in the overlapping areas of two transmitters. In a third case, a patient, who suffered from a severe MCS symptoms for many years, the house was situated 950- 1000 metres away. Initially, there were two base stations in the city, one on top of a tower block

on a hillside above a residential area. The other base station, a huge mast, is on an industrial site, with adjacent residential areas. The Old Town is situated somewhat further away and densely built up.

Interestingly, there were no cases with similar symptoms from the old town.[1][1] I also record two cases from Isny, one from Bad Wurzach and one from Waltenhofen.

A New Illness Pattern- Alarming Brain Disorders

Psychological abnormalities and varied physical complaints (so-called somatoform disorders) of unidentifiable origin are often interpreted by the general physicians as psychologically caused or psychosomatic.

There is indeed also the opposite case: a female patient of mine, who is a successful business woman, was told by her GP that she could not possibly suffer from fibromyalgia – I had suggested this as a probable diagnosis to her. I suspect, the GP viewed fibromyalgia as a psychological disorder and he simply could not imagine that someone who is so proficient and successful could become ill with it.

The decisive proof of a non-psychogenic cause is provided by the organic brain disorders of these patients and the physical weakness which is also observed in most cases. The patients do not spontaneously complain about it because of a sense of shame. When training young nurses, I have always stressed that they should pay attention to organic brain disorders in old people, which are primarily disruptions of the sense of orientation**.** One does not normally find such symptoms in the new type of patients. Instead, the symptoms found are amongst others:

- Memory loss
- Parapraxis**:** when carrying out routine tasks (e.g. putting butter into the bread bin, putting cigarettes into the refrigerator. One female patient wept heavily as she remarked that she had urinated on the lid of the WC-bowl)
- Difficulty finding words
- Concentration disorders

Typical statements are: “It’s driving me mad”, “It is all too much for me”, “I do not know myself any more”, “I’m always losing my temper”. This causes depression, even suicidal tendencies, aggressive-irritable mood or a mixture of both.

In individual cases, patients also behave manically, that is to say, very psyched-up with euphoric mood. I remember a female who just had been made redundant, jumping euphorically from one subject to another during our consultation. She spoke very quickly, she was dressed up to the nines and and wore heavy make-up. Her home was in the immediate proximity of a transmitter. I believe that this phenomenon often exists but the relationship is not generally recognised. For example, the young mobile phone users

1 Nowadays, there are more base stations to be found in the town, e.g. UMTS (G3) in the Old town on a roof and at the top of the huge mast.

who keep talking, gesticulating, screwing their eyes and are completely oblivious to their environment as long as they have the phone glued to their ear. Perhaps, it is even considered desirable by some to be on such a high.

The physical symptoms are of an intensity that has not been known to date:

- Headaches,
- Hypertonic derailment of the blood pressure, which can hardly be controlled by medication, cardiac arrythmias,
- Pain in muscles and joints,
- Chronic fatigue and tiredness,
- Circulatory disorders,
- Thrombosis and infarction.(One patient had a central venous thrombosis of the eye, that is to say, he became blind in the eye.)
- Furthermore: Sudden hearing loss, tinnitus, dizziness,
- Hormonal disorders:

  Via one father and one mother, I learned about two children suffering from growth hormone disorder, the boy also had diabetes and epileptic attacks. Irregularities of the hormone that regulates urine excretion (antidiuretic hormone, ADH) occurred in two young men**.** Thyroid hormone levels become altered, as well as the sex hormones. Patients have to be examined because of abdominal cysts, some of them so large that they have to be surgically removed.

In the first publication, I presented my cases in the form of a table. Sex, age, start date of my treatment and, for patients who had been seeing me before the onset of their symptoms, the beginning of the specific symptoms was recorded. Questions were asked about exposure to metal or chemicals (the amalgam exposure could be simply determined by looking in the mouth), about earlier and present psychological stress, about DECT telephone and general electrosmog from equipment such as computers etc., about illnesses in the surrounding area, about mobile telecommunications transmitters near the workplace. I estimated the distance of the home from the transmitter using the town plan.

Results

The data are not always complete because they have been obtained retrospectively from the medical records and the original case taking had not been done with a scientific study in mind. Therefore, the given numbers are not scientifically robust.
Moreover, it must be considered that my observations feature a selection of patients who coincidentally consulted my psychotherapy practice and not that of other colleagues.

Age: between 21 and 79 years, mean: 42.9 years. The largest proportion of cases is thus middle-aged between 30 and 55 years. Ratio men to women: 15:50, viz. 1:3.

Age distribution of patients: s. Table 1

Table 1

Age [Years]	No. of Cases
21 – 25	2
26 – 30	8
31 – 35	8
36 – 40	12
41 – 45	10
46 – 50	10
51 – 55	8
56 – 60	4
61 – 65	1
66 – 70	0
71 – 75	1
76 – 80	1

The **pre-existing psychological conditions** or stresses, as far as they could be established, are very variable, ranging from anorexia to heart and anxiety neurosis, depression, compulsions, hyperactivitity, neurodermitis, psychoses, traumatisation caused by imprisonment in the former German Democratic Republic [GDR], learning difficulties, foreign origin lacking German language skills, amongst others.

It is easier to categorise the **pre-existing somatic conditions**:

- A metal exposure was stated or observed 44 times (67.7 %), tooth fillings using amalgam or gold, metal prosthesis, metal jewellery, piercings), in 19 cases it was not asked about, in two cases it was expressly denied.

- Chemical exposure 8x ,
- Alcohol and drugs 6x
- Mould in the home 1x
- Radiofrequency exposure:
  - Mobile telecommunications 49x
  - DECT telephone only (no base station in vicinity): 16x
  - Double exposure from mobile telecommunications and DECT existed in 7 cases, in 2 cases it was questionable,
  - In 5 patients from 1997/98, DECT was not asked about, 35 later patients stated they were not exposed to it,
- Additional exposure from electronic and electric equipment:
  - Computer 7x
  - Radio alarm clock 3x
  - High tension power lines 2x

- Neon tubes 1x
- Fire brigade telecommunications 1x
- Taxi radio communications 1x
- Only the global statement that the workplace is very highly exposed 1x

Multiple entries were possible. In 6 cases no particular exposure was stated, in 19 cases the data are missing.

The **distances** from mobile phone base stations and the number of cases : s. Table 2

Table 2 (The distances given are approximations.)

Distances from the mobile phone base stations [metres]	No. of Cases
Up to 10	3
10 to 100	8
100 to 200	4
200 to 300	9
300 to 400	3
400 to 500	7
500 to 600	9
600 to 700	2
700 to 800	0
800 to 900	3
900 to 1000	1

Since the radiation spreads irregularly, the distance from the mobile phone transmitters can only constitute a rough measure for the exposure. Actual exposure will vary, e.g. at a distance of 50 metres, it will depend on whether the residence lies in the main beam, which may partly be the case in homes on higher floors in tower blocks facing the transmitter, or whether it concerns a basement home. At 600 metres distance, e.g., it will depend on whether the residence is situated in the densely built-up Old Town or situated on a hillside above it.

As a general rule, the **presenting symptoms** vary a lot: There are the typical physical symptoms I described earlier such as the swelling of the face and perhaps of the limbs, the shining eyes, the organic brain disorders and the almost ubiquitous sleep disorders.

However, there are often other symptoms which are subjectively more important to the patient. In two cases, my notes state: many changing symptoms. Concerning the main symptoms, there are multiple entries, headaches are so frequently stated that I have only mentioned them if the patient particularly stressed their occurrence.

Physical symptoms: in decreasing frequency (please note that the data are not complete)

• Inflammation of the jaw bone 16x (24.6 %!) (arising during the duration of the therapy, usually the dentist extracted several teeth, 1x a root-treatment was carried out),
• Weakness, exhaustion, tiredness 12x, as distinct from, in the degree of severity, CFS (Chronic Fatigue Syndrome) 5x
•Cardiac arrhythmias, Hypertension: 9x
• Headaches (explicitly stated) 7x
• MCS (Multiple Chemical Sensitivity) 3x
• Spine problems
• Abdominal complaints, nausea 3x [2]
• Thrombosis 3x, one in the eye, one in haemorrhoids and one in the leg.
• Fibromyalgia 2x ,
• Joint pains 2x
• Rash 2x
• Hair loss 2x
• Incontinence 2x (in a 52 year old woman and a 61 year old woman), perhaps caused by the swelling of the tissues,
• Stroke 2x (in a 79 year old woman and in a 41 year old woman, the latter with open foramen ovale (hole in the wall between the upper chambers of the heart), who immediately suffered a recurrence following discharge from hospital into the home environment, this time with paralysis on the other side (under 2 transmitters and DECT),
• Toxic Parkinson syndrome 1x (in a 52 year old woman),
• Fever 1x ,
• Inflammations: recurrent arthritis 1x (in the woman with toxic Parkinson's syndrome)
• Abscesses 1x
• Recurrent inflammation of the gall bladder and life threatening pancreatitis following gall bladder operation 1x (during the course of the psychotherapy)
• Infectious illnesses: Tests were not routinely carried out for infectious diseases, in individual cases the family doctor carried out the relevant tests at my request. One case of Lyme Disease was already previously known. In several patients, increased titres of the Epstein Barr Virus were found, two carried Lyme Disease, in one case a Borna Virus illness was verified.
• Uncontrollable diabetes mellitus (whilst well controlled at the hospital, it immediately derailed again at home) 1x
• Outbreak of a dementia illness 1x
• Gynaecological problems:
  • Ovarian cysts 2x
  • Menstrual disorders are often not stated as they so frequent they are considered the norm
  • Premature labour pains and pre-eklampsia 1x (in the same woman),

2 The symptoms of gastroesophageal reflux disease, which is very much on the increase, are now becoming a significant part of the overall picture.

- Miscarriage 1x .

Let me stress: In a general medical practice, it would not be unusual to encounter these complaints and symptoms, but for a psychotherapy practice, the increased number of patients complaining about these symptoms is a novelty.
I have never before witnessed the outbreak of so many serious symptoms to this extent during on-going therapy.

Psychological symptoms:

- Depression, crying 19x
- Anxieties, panic attacks, phobias 9x
- Hypomania 3x
- Manic-depressive illness, the onset of which coincided with the start of exposure from DECT 1x
- [3]

Illnesses occurring in the vicinity are often reported spontaneously – mostly they concern family members living in the same home or neighbours living in the same apartment block or in the same street. The question referring to illnesses occurring in the vicinity was answered positively 37 times. It should be noted that they are not referring to "minor ailments", but rather to serious illnesses such as asthma, stroke, rheumatoid arthritis, delusional jealousy, suicide attempt, alteration of the growth hormone level (in two children, see above), of the anti-diuretic hormone (night-time enuresis in two young men in one family, who lived approx. 10 metres away from the mobile phone transmitter), severe acne in 3 young people.
Due to the financial cost, measurements of the exposure from the mobile phone transmitter were only carried out 3 times. The building biologist who conducted the measurements considered them unacceptably high. However, I was never given the exact data.

Following my advice, the DECT telephones were turned off at least temporarily or at night in 6 cases (out of 16 DECT cases, 37 %), leading to an improvement in 5 cases. The symptoms of two cases improved by moving away from the area exposed by the mobile phone base station into the Old Town and a new built estate respectively. Relief could also be noticed with temporary removal from the source of exposure by going on holiday (in the case of the patient with Borna virus). In one case the symptoms were reduced as a result of removal of dental amalgam and metal detoxification.

Case studies
By way of illustration I present several case studies:

* A man presenting a very intense form of the clinical picture, with swollen face,

3 In the meantime, two female patients- outside of the group of 65 cases – presented with clearly paranoid symptoms under high frequency exposure.

bulging eyes, sinus infection: He had two DECT telephones and six computers in his office which he also slept in. In addition, he suffered from extreme weakness. As a cyclist, he used to cycle up to 200 kilometres per day. Now, he found that his muscles suddenly became stiff when he sat on the cycle. I diagnosed amalgam toxicity, which according to my observations, is usually aggravated by high frequency exposure. However, he did not want to accept that the DECT telephone might be the cause of his symptoms. He said: "Oh, if I do not have one, then the neighbour will have one**".** His wife and children also felt unwell and very hectic. She moaned: "I cannot stand it any longer with this man!" He voiced: "Some day, I am going to murder somebody!" [4]

* An elderly patient immediately became better after she had turned off her DECT-telephone.

* Quite a bad case: A 34 year old man, infected with Borna Virus, had headaches, depression and became very aggressive, in fact, he screamed at me. He finally also developed tinnitus, cardiac arrhythmias and repeatedly collapsed on the toilet during the night. On holiday, he felt much better. The wife was likewise very hectic and exhausted. Recently, I met the husband in the street, he had lost a lot of weight, with very shiny eyes. The wife had separated from him.

* A female patient with chronic fatigue syndrome, an illness that was still unknown to me in 1997. The patient described, how she could no longer walk, not even for ten minutes, and had severe tinnitus. The husband had suffered for half a year from chronic polyarthritis in his hands.

* A 39 year old employee of a telecommunications company suffered from anxieties and cardiac arrythmias, when she drove to work in the morning. She was convinced that it was psychological. On further questioning, I found out that the anxiety only occurred when she drove into the courtyard of the firm where she worked, which had several mobile telecommunications transmitters on its roof. She stated that she felt particularly bad during meetings with 10 of her colleagues sitting near her with their mobile phones and DECT telephones switched on: She felt like running out of the room screaming. She wore metal jewellery on her ears, neck, hand and foot joints, which undoubtedly contributed to the of her symptoms.

* A 49 year old female patient with a delusional depression and back complaints, probably in terms of fibromyalgia, reported that both her adolescent sons had wet the bed in one particular night. In her delusion she believed that it was her fault as she had tested her TENS equipment on the boys which had been prescribed by her orthopaedist. her children suffered from **s**acne, the daughter in addition from menstrual disorders and hair loss.

4 Actually, this patient was normally a "nice guy", ready to help others, and his remark shows the degree of his emotional uproar

* A 28 year old Turkish patient regularly presented with conspicuous restless leg movements, grimaces and impetuous gestures during her psychotherapy sessions. Restless leg syndrome is another one of those recently much more frequently described illnesses, the cause of which is unclear. Then, one day, she sat there smiling friendly and quietly. As she was talking I found out that her mobile phone was faulty and she therefore was unable to telephone with her boyfriend for hours at night as she normally did (she had placed the mobile phone near to herself in bed). During the following two appointments she was similarly quiet. When she was given a new mobile phone**,** the nervous symptoms reappeared.

Finally, I would also like to mention the traumatised asylum seekers, who were accommodated in a residential home at approx. 500 metres from the transmitter. They presented the well known symptoms in an extreme form. Before the roll-out of the mobile telecommunications, I also treated foreigners and traumatised people, but they never presented symptoms of that kind.
I dare to presume that many of the so-called post-traumatic stress disorders are caused by high frequency exposure.

For Discussion

As a psychotherapist, I am used to closely observe my patients, therefore, even such a discrete symptom as “glassy” eyes does not escape me. This phenomenon is well known with fever and with hyperthyroidism. It may be caused by a toxic irritation of the thermal regulation centre in the hypothalamus.

It is noticeable that many patients needed to have tooth extractions carried out because of “suppuration”. This was probably caused by a chronic anaerobic inflammation of the jaw bone. It is more than just a coincidence that two thirds of all cases suffer from exposure to metal in the body and a high percentage of these also suffer from some kind of chemical exposure. I had to specifically ask for these exposures to be declared, as they are not usually spontaneously self-declared by the patients.

Why do these patterns of illness evade the established family doctors so frequently and why are they rated as being psychologically caused? It is correct that the patients present psychological symptoms, but they are caused by abnormal physiological changes in the brain functions. Often, for example, logorrhoea is present, a torrent of words that can hardly be stopped.

Laboratory results are often not helpful as a means of detection. Furthermore, many doctors lack the time to show an interest in the numerous symptoms and most patients do not mention them spontaneously; indeed they themselves see no relationship e. g. between headaches, ischialgia and depression with weepiness. Symptoms considered in isolation bring no gain in knowledge, only the overview of all symptoms makes the extent of the

damage clear. The fatigue is sometimes already noticeable in patients after 20 minutes of a therapeutic session. What this means for the patients' capacity to work is obvious.

In order to rebut the argument often presented by the telecommunications operators that fear of the transmitters can actually cause symptoms, I'd like to stress that most of my patients did not consider the high frequency exposure to be a cause of their complaints and even refused to remove the DECT phones from their homes.

There are now many serious studies of health damage due to mobile telecommunications in animals and humans. The investigations of the Bamberg medical doctor, Dr. Waldmann-Selsam, show a clear correlation between the frequency and severity of the symptoms and elevated high frequency measurements. Even with an exposure of 10 microwatts per square metre symptoms occur. It is accepted that a time factor is also involved here: The longer the exposure lasts the more frequently symptoms occur. First of all, vulnerable people (who are often blamed for their condition) become ill, later on, others, too.

I summarise:

On the basis of a collection of 65 cases from a psychotherapy practice, the relationship between a specific novel clinical picture and the exposure from mobile telecommunications and DECT telephones is demonstrated, using an interview and the assessment of the living situation according to town map. The exposures will increase further by the further extension of the mobile telecommunications networks. Unfortunately, at the present time (in 2005) the roll-out of the mobile networks and the spread of the DECT telephones are so far advanced that hardly anyone can be considered to be unexposed.

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Bibliography: available at the author