The Diagnosis is Cancer: Can Words Kill?

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Summary

The article depicts the medical, social and family situation of cancer patients, starting from the time when they first are told about the diagnosis. Different approaches to protect patients against unwholesome external influences are described. In particular, conditioning and deconditioning mechanisms will be discussed in detail. Mindfulness meditation (Vipassana) is comprehensively presented as a method for patients to protect themselves fundamentally and autonomously against harmful influences.

1. Introduction

Anxious and expectant, the patient sits opposite the doctor. The patient looks sick, tense and tired, as if he had not slept for days. He suspects that he has cancer. What will happen now? Pain? Disability? Special care until death? The doctor is clearly trying to search for the right words but cannot find them. He wants to help as well as he can, but he needs the patient's co-operation to succeed. He hopes that he will best achieve this aim with the "truth" as he perceives it.

"It is now absolutely clear that your tumour is malignant, which means you have cancer. Now that we have completed all the investigations, I regret to tell you that the illness has already reached an advanced stage, so that we will probably not be able to cure it. Now we must cut open your stomach and remove what we can. After that, aggressive chemotherapy, radiation therapy and your castration will be necessary. These measures are urgent, as otherwise you will die very soon." On hearing these words, the patient turns white, faints and dies of a heart attack.

This account is fictitious and describes an extreme case, even though it may not be unrealistic. Similar scenes certainly occur frequently in reality, even if less spectacularly. It would be a rare event, if the patient dies immediately as in our example, during the ongoing consultation. Usually hope and the will to live die first, to be followed by the clinical death of the patient after a shorter or longer period of suffering. It does not help if the doctor tries to water down or revise his statement after he has noticed its effect. The patient no longer believes him. The patient loses his trust in the doctor, which may goes as far as a denial of the doctor's competence.

What are actually the bare facts of the situation?

It is true that cancer is often an incurable illness. Cancer thus belongs to the group of chronic diseases which also includes rheumatism, dementia, arteriosclerosis and diabetes mellitus, among others. In mortality statistics, cancer is identified as the direct or indirect cause of death in 25 % of all cases. However, more than 60 % of all deaths are caused by cardiovascular diseases.

Why, in the case of cancer, is the diagnosis implying imminent deterioration and death, but not in the case of angina pectoris, a non-fatal heart attack or a stroke? It cannot be due to the disease of cancer itself. This cannot be the explanation, because it happens far too often, that cancer patients live to old age with their illness and die of other causes. Nevertheless, there are also dramatic cases in which the disease advances rapidly and cannot be stopped by any medical measures. Such cases are the exception rather than the rule. However, these dramatic developments are the ones which are selectively perceived by the general public, whereas the slower, milder forms are hardly noticed. Many apparently healthy people have already had cancer in the past, but few of their acquaintances would know or be aware of this. Sometimes even the former patient himself or herself forgets this part of his history.

Furthermore, not only are there the cases where the course of the illness itself is dramatic, but also those where the therapy for cancer (specifically chemotherapy or radiation therapy, less often operations) cause a deterioration in health which sometimes can hardly be distinguished from the effects of the disease itself. If then these aggressive therapies also fail to achieve cure, which is more the rule than the exception, the illness and the therapy combine in deteriorating the patient's state of health and mutually reinforce their fatality.

In this article, we intend to illuminate the emotional-psychological side of this situation systematically. Both the perspective of the patient and that of the people around him are to be taken into account. We will show that all actors can cope with the difficulties of communication in the face of cancer. To do this, we will draw on general tenets of psychology and psychotherapy. Beyond this, we will present helpful therapeutic methods.

2. The psychosocial situation

As mentioned above, it is primarily those patients with rapidly advancing cancer and/or an acute case of aggressively treated cancer whose condition affects those around them as a demonstration of illness, disability and deterioration, finally creating the impression that cancer is equivalent to death.

Hence, if the patient hears the diagnosis, "cancer", he often finds himself – in addition to his own prejudice against the disease – in a difficult psychosocial situation among his family, friends and acquaintances: Here, he is often perceived as bound to die from the beginning. The well-meant attempts to hide this view only make things worse, because naturally the person concerned is sensitive enough to be aware of the thoughts of the people closest to him, even if they are not verbalised. Thus, it often happens that his only choice is to accept the unspoken role of suffering "fatal illness" for his last days, weeks, years, - and in the worst case, even for decades. Inability to work, weakness due to therapy or the illness, frequent doctor's appointments – these all seem to be evidence for this unhappy role of being "fatally ill" both to those in contact with the patient and to the patient himself. Hardly any person is strong enough in this situation to free himself from such a role with his own resources.

A short-term improvement may be induced by news from the doctors that e.g. a strenuous course of therapy has been "completed" and that the illness has been adequately treated from a medical point of view. However, it is not rare for patients to have the feeling that this news only means that now not even the doctors have any further advice to offer. During the following period, at least the patient recovers from the serious side-effects of the courses of therapy, which allows him to hope that the disease has in fact been overcome.

How shattering the effect on a patient's psychological health is when a tumour reappears depends largely on the extent to which doctors and the patient himself have suggested that the disease was cured successfully. With the assessment of the recurrent disease possibly the doctor will know of a new, additional aspect which allows hope for cure. In general, this will be disappointed again after a certain time, and so on.

Thus, the patient is often subjected to an emotional roller-coaster ride between hope and disappointment, which reinforce and stabilise his family's and his own perception of being "doomed to death". At some point, the only question remaining is, "How much longer?". Omniscient doctors will also be able to answer this question – and often be far from the actual outcome.

3. What effect do words have?

The psychological situation of cancer patients described above makes it clear that generally the combined effect of lay perceptions of cancer, the actual suffering caused by the illness and its therapy, and the influence of doctors can be responsible for severely negatively affecting the patient at a time when he is still full of life and does not need to think about dying any more or any less than patients with angina pectoris, after a heart attack, with pneumonia, undergoing

dialysis treatment, or suffering from rheumatism or dementia.

However, specifically with respect to cancer patients, the wrong words or gestures can unnecessarily aggravate problems with the illness. In the particular situation of a cancer patient, well-intended doctor's expressions of sympathy such as "You will not get through the therapy without taking psychopharmaceuticals" and "Bad luck seems to follow you!", or terms such as "incurable", "far advanced", "dying" and "death" are often self-fulfilling prophecies.

The reason is that the course of the illness depends on the psychological disposition of the patient. Particularly due to work by the German sociologist Grossarth-Maticek it is now possible to quantify the influence of emotional components on the course of cancer. After major epidemiological studies with thousands of patients and healthy controls spanning more than 20 years, Grossarth-Maticek and colleagues determined that psychological factors affect the risk of cancer to a similar extent as physical risk factors including genetic predisposition: People with a favourable psychological profile are afflicted by cancer less often than patients with an unfavourable psychological profile. If members of the former group do get cancer nonetheless, they continue to live for longer than the psychologically disadvantaged patients. There may be a correlation with more physical exercise among those with a favourable psychological profile: It is known that sport activities can prevent relapses and prolong life expectancy better than any other single measure.

Among others Grossarth-Maticek and his colleagues (ref 1-3, 15,16 or recent Japanese research, ref. 13,14) showed that the course which the disease of cancer follows is particularly affected by the following psychosocial factors:

- generally depressive moods (reactive or endogenic)
- anxiety
- the feeling that external influences insurmountably restrict the person's thoughts and actions ("I do not live myself, I am being lived. Other people determine my life. My life is manipulated from outside.")
- experience of loss or frustration of all types
- lack of support, lack of reassurance and lack of positive feedback from the social environment, including the doctor-patient relationship. ("My life does not mean anything to the people around me. I am only a burden to others.")
- suppression of individual urges, desires, needs and attitudes to maintain a harmonious atmosphere. ("To keep the peace, I give in and don't insist on my own way.")

These risk factors have an effect on many features of the lives of cancer patients and are thus relevant to the course of the illness. Some concrete examples for the interference of cancer specific issues with above risk factors include:

- disappointed hopes of cure (aroused by the patient himself, by doctors or other trusted persons)
- incapacity to work, loss of job, lowering of social status due to restrictions imposed by the illness
- changing or non-existent (medical) close contacts, uncertain doctor-patient relationships that are characterised by crises in trust
- death of a beloved family member or friend, particularly if due to cancer
- unwanted divorce or other forms of separation from beloved persons
- the feeling of being "useless", "superfluous" or even "undesired", "harmful" or "burdening". Associated with this: loss of self-esteem even to the point of detesting or rejecting oneself
- anxiety (e.g. about dying, helplessness or the side-effects of therapy)

If the question from the title of this article is now posed, "Can words kill?", and these psychosocial risks are taken into account, we give the following answer:

Words and deeds of family members, friends, doctors and therapists which reinforce or favour

these risks can indeed shorten the life of the patient.

4. Can fatal words be avoided or neutralised?

At this point, we intend to reflect systematically on approaches to solve this problem.

What would be the ideal goal? The answer is simple: the patient should be enabled to live permanently in complete harmony with himself and the world around him.

What approaches could lead towards this goal? The patient and his social environment are usually too inexperienced and also too strongly subjectively predisposed to be successful if left on their own. The relevant complex of problems must initially be analysed very carefully and isolated, so that specific solutions can be developed and their chance of success can be estimated realistically. Only an experienced therapist could be effective in elucidating, offering help and preparing or demonstrating ways of adapting external and internal factors to achieve greater harmony and contentedness for the patient.

Anyway, in every real situation, internal and external factors interact with each other. For the sake of clarity, the **two fundamental approaches** are discussed which result from the aim of bringing the patient and his social environment into mutual harmony:

- adaptation by his social environment to the needs (desires, longings, characteristics and conceptions) of the patient
- adaptation by the patient to unchangeable conditions around him

4.1 Adaptation by the social environment

The first of these two possibilities appears initially to be the simpler and more obvious one. The external living circumstances, unhelpful types of behaviour and words by people in frequent contact with the patient, and certain relationships between the patient and those around him can certainly be adapted to a certain degree to the patient's requirements.

Although this approach appears to be so obvious, it can often turn out to be complicated, incomplete, even impossible to achieve in a specific case. All concerned soon become aware that it is impossible to "pack the patient in cotton wool" and continually protect him against the above discussed risks: Most of these risks are too serious, too well established and too incalculable for the patient's state of emotional health and powers of resistance.

Thus, as the social environment cannot permanently and adequately adapt to the needs of the patient, this approach is frequently bound to fail, even with the help of the best therapist. In addition, a further danger arises which is known from addiction psychology: If any of the patient's needs are in fact successfully met, this in itself can intensify the need in question, so that it finally becomes impossible to satisfy ("the more he has, the more he wants").

4.2 Adaptation by the patient

For the cases in which attempts to change external influences are unsuccessful the second of the two possibilities remains: The possibility of the adaptation by the patient to the external circumstances. At first, this appears to be the significantly more difficult approach, as it demands an inner psychological change by the patient himself, which may need to be more or less radical. However, as the patient’s efforts now become crucial, control over success or failure of these efforts is transferred to the patient. This offers the advantage for the patient that, in the best case, he becomes completely independent of external influences which he cannot control.

The disadvantage is the unfavourable starting position of the cancer patient with respect to the available resources, energy and strength for applying this approach. In practice, the following problems are encountered:

- The patient knows next to nothing about himself and about unconscious dangers and psychological entanglements.
- Often he does not acknowledge, even at an intellectual level, that it is necessary to be dealing himself with the connections between his psychological characteristics and his suffering. This knowledge however would be the decisive motivation for action to improve the situation.
- Even if he is aware of this connection, the patient can so greatly doubt the value and chance for success of the specific treatment method that he does not make any progress.
- The patient generally does not have the strength or peace of mind for self-reflection, in order to recognise and overcome these dangers and entanglements.
- The patient usually lives in surroundings which hinder rather than encourage such self-reflection.
- The patient is often - particularly if he is older - mentally inflexible. Needs, aversions, self-acceptance or self-ignorance are too thoroughly ingrained.

Nevertheless, when faced with death, the patient (with the help of those around him, including psychologists and doctors) may have no alternative but to set out along the stony path of adaptation, despite all of these problems. In the following, we aim to show some options that are available. Above all, the nature of deeply rooted modes of behaviour will be considered.

5. Psychotherapeutic approaches

Psychotherapeutic approaches aim to mitigate anomalies of behaviour and emotional suffering by applying emotional-psychological measures.

The approach taken in **psychoanalysis**, analytical psychotherapy probing the subconscious, is to come to terms with past experience by becoming conscious of and reflecting on it. To this purpose, access to the patient's subconscious mind is sought with the aim to bring forth the memories stored there and to uncover complexes of anxieties, hopes, rage, desire and annoyance. Among other methods, this is achieved by observing and interpreting dreams, and by working through the developing relationship between the therapist and the patient at an affective-emotional level. The main goal is not to avoid future difficulties but to know in a case of conflict "where it comes from" and to react otherwise than previously.

The therapy can take a great amount of time, as the patient's entire psychological structure is considered in detail. In addition, the specialists do not seem to agree about the specific risks and side effects of psychoanalytical therapy for cancer patients.

In **conversation therapy**, the patient is motivated to analyse his problems with himself and his surroundings in conversation with the therapist. In this case, explicit reference to the subconscious is not necessarily made. One form of conversation therapy is **autonomy training**, which was developed by Grossarth-Maticek and colleagues especially for cancer patients (ref. 1-3, 16,17): Problem zones are identified and with some effort ("training") by the patients, they often succeed in defining at least their inner life autonomously.

Behavioural therapy, which results in an adaptation of behaviour, is the simplest approach and the one which shows initial success most quickly. It is based on the assumption that behaviour - also harmful misbehaviour - has been learned and thus can be unlearned. Here, the patient does not need to take his psychological structure into account to any extent, but only certain types of behaviour which are predestined to be disharmonious. In the extended version, deviations are also treated on the basis of learning theories, e.g. with the technique of deconditioning described in the next section, which can act to break down deeply rooted types of behaviour or reaction.

6. Deconditioning and Vipassana Meditation

One method which combines the mentioned elements of the individual forms of therapy - an effect down into the subconscious, emphasis on the patient's autonomy and use of an efficient technique to modify harmful behaviour and avoid future difficulties - is presented by **Vipassana Meditation**.

Before we introduce Vipassana Meditation, we will elucidate the concepts of conditioning and deconditioning and their physiological background, as these concepts will prove to be helpful in understanding the method.

6.1 Conditioning and deconditioning

In psychology, **"conditioning"** means learning stimulus-reaction patterns: the body reacts in a certain way to a certain stimulus. Two types of conditioning are distinguished:

The classic form of learning via conditioning was described by I. Pavlov. He observed that after a learning phase, during which a bell rang simultaneously with feeding, test dogs already salivated when the bell rang alone, although they could not (yet) see the food. His interpretation of this observation was that frequent simultaneous presentation of the bell sound (neutral stimulus) and the food (unconditional stimulus, which activates a reflex reaction) created a connection between the two stimuli. This converted the previously **neutral stimulus** into a **conditional stimulus**, which alone can already cause the same reaction (salivation) as the unconditional stimulus (food) to which it was originally connected. In this way, a conditioned reaction to the bell sound was generated from the unconditioned, involuntary reaction (salivation) to the food.

The learning of more complex types of reaction than that described above is also called conditioning ("operand conditioning"). If the conditioning mechanism is to take effect at all, emotional tensions (**desires or aversions**) and instinctive unconditional reflexes must be present, which can be activated and resolved in conditioning. So-called amplifiers (positive reinforcement or punishment) during conditioning ensure that certain reactions and types of behaviour are favoured or discouraged. Which type of amplifier is suitable depends on the person whose behaviour mode is to be reinforced (e.g. fear of pain; promise of happiness).

Brain processes during conditioning

Neuroendocrinology describes the biochemical processes which occur during conditioning: the satisfaction of an emotional tension leads via a temporary release of hormones to changes in nerve cells: If an axon A has repeatedly or constantly fired to cell B, changes occur in both cells (axon A can grow, cell B can develop more dendrites and synapses, or a chemical modification can occur to both). The capacity of cell A to excite cell B increases. Thus, if an axon has already fired once to a cell, it will be able to stimulate this cell still better in future - the reflex is fixed. If not only A but also C fires simultaneously to B, the combination could even mean that an action potential is reached.

When described at the **"feelings" level**, the release of hormones corresponds to a pleasant and thus "addictive" experience. The changes to the nerve cells correspond to an (unconscious) memory and reinforce the conditioned behaviour by repeated induction of emotions. A new reflex, an unconscious manner of reaction and emotion, is formed, which is not subject to control by the free will of the conditioned person.

Now two effects can arise due to continuing experience with repeated identical stimuli, which weaken or reinforce the conditioned reactions: **"habituation"** (reduction in the reaction to a repeated stimulus which is not accompanied by changes in other stimuli) or **"sensitisation"** (after a strong stimulus, an organism reacts more strongly to a subsequent weaker stimulus, i.e. becomes "oversensitive").

Investigations on the neurones of sea snails *(aplysia)* have revealed that **habituation** means the

reduced release of transmitter substances by the presynaptic cell. By contrast, **sensitisation** is accompanied by an increased release: the strong stimulus causes serotonin to be released into the synaptic gap, extending the duration of action potentials and transmitter release. A nerve cell is effectively prevented from ceasing to fire.

The objects of the conditioning process - the emotional tensions (desires or aversions) themselves - are not absolute constants either, but can in turn be conditioned by learning processes and be heightened or bluntened. For example, even instinctive expressions of need such as hunger and thirst can be subject to major changes and modifications by unconscious processes. These processes can also be described with the concepts of sensitisation and habituation.

Examples:

A few examples may serve to illustrate the theoretical explanations above:

Sensitisation of aversion:

1. initial stimulus (I see a wasp and hear its buzzing)
2. arouses aversion (I do not particularly like this wasp; I have heard that wasps can sting)
3. realisation (the wasp stings, it is quite painful)
4. hormone release (stress hormones such as adrenaline are released, I become anxious, my blood pressure rises, I drive the wasp away in a panic and flee)
5. end of hormone release (the wasp has flown away, the pain dies down)
6. I have been conditioned (here concerning aversion: I must watch out in future, wasps are extremely unpleasant and dangerous insects)
7. conditional stimulus (I hear a wasp buzzing)
8. conditioned reaction (I become anxious, my blood pressure rises, even without the wasp stinging me).

Sensitisation of desire:

1. initial stimulus (e.g. television advertisement for ABC vanilla ice cream)
2. arouses desire (oh, vanilla ice cream would be nice! It not only tastes good; if I have one, I will also be a happy person and have fun - just as in the advertisement)
3. realisation (I buy myself some vanilla ice cream and eat it)
4. hormone release (endorphin is released: ah, that was delicious, I feel great)
5. end of hormone release (oh, that's the end of the ice cream; what a pity, now the fun is over)
6. I have been conditioned (here concerning desire: I must remember this, at the next opportunity I will buy more ice cream)
7. weaker conditional stimulus (I see the ice cream container in the supermarket without an advertisement)
8. equally strong conditioned reaction due to sensitisation (oh yes, some ABC vanilla ice cream, that would be just right now, I enjoyed it so much last time).

Our lives consist of reflex-type conditioned actions to a much greater extent than we normally realise. Compared to considered and conscious actions, reflexes have the great advantage that they reduce the load on our brain and occur very quickly with little delay (rapidly running away from the wasp, time-saving selection in the supermarket). However, they have the disadvantage that they hardly offer any leeway for adaptation to the prevailing situation. This is particularly problematic when reflexes also determine our emotional life. In contrast to actions which ensure bodily survival, there is namely no rational reason why our emotional lives should also be hedged in by unconscious reflexes and conditioned pressures.

Deconditioning:

The paragraphs above indicate that conditioning processes can be modified. If they are reversed, this is called **deconditioning** (extinction): learned behaviour (psychological or physiological reaction patterns) can be unlearned, if the conditional stimulus is repeatedly presented without the initial unconditional stimulus.

Taking the dog as an example, this would mean that the bell would ring many times without food being offered simultaneously. After several repetitions, the dog no longer salivates. A conditioned aversion can equally well be eliminated if the conditional stimulus repeatedly does not cause an unpleasant experience.

In general terms, the conditioning cycle can be terminated if the brief feelings of happiness or aversion and the associated hormone release which reinforce the reflex can be avoided.

In medicament-based therapy of psychological problems, this avoidance is achieved temporarily by employing psychopharmaceuticals such as sedatives like diazepam (Valium). However, the pharmaceutical effect weakens with time, so that gradually higher doses are needed for the same result. Thus, the pharmacological approach is promising only as a short-term solution for acute crises. It could well be that some conditioning is initially eliminated or weakened for the patient. However, he is at greater risk once the effect of the drug has subsided, because the same stimuli cause more hormones to be released than before the pharmaceutical treatment, so that conditioning can occur again at a faster rate.

The behavioural therapy mentioned in Section 4 has developed a more effective method of deconditioning. A special form of behaviour therapy, **confrontation therapy**, employs the phenomenon of habituation discussed above. The method is based on the patient remaining unaffected and relaxed while the conditional stimulus is presented (e.g. the buzzing of a wasp is heard in a relaxed context until it no longer causes anxiety reactions). Equanimity and relaxation are associated with a naturally reduced release of hormones and achieve a similar effect to the sedative drugs mentioned above, only without their harmful side effects. This method is applied particularly to cases of conditioned aversion or anxiety which require therapy. It results e.g. in a therapeutic success rate of 80 % among patients with a strong fear of dentists (dental phobia). Nevertheless, it can also be successful in counteracting strong desires and wishes.

In this context, methods such as autogenic training and certain visualisation techniques should also be mentioned, which connect emotional and physical relaxation with mental content.

These techniques concentrate on the treatment of one or a few major problems but do not fundamentally intend to eliminate the patient's tendency to create and reinforce disharmony between himself and his surroundings via conditioned reactions.

6.2 Vipassana Meditation

If the patient is generally capable of maintaining equilibrium, relaxation and tranquillity in his daily life, he will be able to establish a fundamental feeling of security and protection against harmful conditioning. After achieving this equanimity he may be able to replace reflex-type **reactions** to external stimuli by adequate **actions** optimally adapted to the prevailing situation.

How can a person develop this stable tranquillity, relaxation and equanimity, and maintain it in everyday life?

This question was already addressed 2500 years ago within the framework of Buddhist meditation techniques (ref. 17). The result is the Vipassana Meditation technique, which originated from yoga and has been passed on, effectively unchanged, for 2500 years.(ref. 4 - 6) The single historical aim is very pragmatic: to ensure happiness and avoid misery. In pursuing this aim the technique is devoted specifically to the problem of inappropriate (unwholesome) emotional reflexes described above and the tendency to establish such reflexes.

We recall: Emotional tensions (wishes, desires or aversions) are the vehicles used by external or internal stimuli to cause unconscious, reflex-type conditioning. Often the emotional tensions are uncontrollably reinforced each time the reflex occurs, so that they finally grow out of all

proportion to the initial cause. A condition arises in which desires or aversions do not correspond to what is perceived in the prevailing situation (internal or external), namely stress. This discrepancy between perception and expectation leads to over-reaction (stress responses; Buddhist "suffering").

The examination and comparison between the emotional tensions and the reality, which potentially may be completely contrary to them, occurs - abstractly speaking - between the mind and the physical sensations, because inner and outer reality can be experienced only via the senses (the wasp is seen and heard; the coolness and flavour of the vanilla ice cream is felt and tasted, etc.)

It is exactly this process which is made accessible to the consciousness by the traditional form of the **Vipassana technique** that is currently taught e.g. by S.N. Goenka (ref. 4 - 6, 17). First, a person's attention is concentrated on his breathing. Breathing represents the interface between outside and inside and between conscious and unconscious. The conscious observation of this function, which of itself occurs unconsciously, enables access to the unconscious. Observation of breathing trains the faculty to observe sensations acutely and objectively and the feelings which they provoke. Subsequently, in a process of "body sweeping", attention is directed to each and every sensation. These can be experienced as pleasant or unpleasant, and so easily form the basis for emotional conditioning.

While the memories stored in the body are aroused by this "body scan", strict attention is paid simultaneously to a stable, concentrated and tranquil underlying attitude. Equanimity in the face of the aroused feelings and being aware of their changeability and transience (pain subsides) cause experience and imprinting to be relativised and weakened. In effect, the process of physical overreaction to psychological stimuli (e.g. cramping muscles and cold sweats accompanying anxiety) is reversed.

The student of Vipassana should also observe certain ethical principles in daily life which encourage the development of inner tranquillity. In this aspect, the technique is similar to the deconditioning techniques mentioned above which are known from behavioural psychotherapy or as relaxation exercises. However, the Vipassana technique not only trains awareness of and thus finally protection against conditioning processes, it also **tames the conditioning process itself**. How does this happen? The answer appears to be unspectacular:

Observation and experience of the transience of sensations leads to recognition that emotional clinging to, striving after or mental defence against a pleasant or unpleasant sensation is simply inappropriate because of its transience.

In other words: The Vipassana technique leads to the deeply rooted conviction and experience that it is good for the soul to allow each moment in which sensations interact with emotional life to be experienced afresh and with equanimity, and to encounter each such moment consciously and individually. However, the ability to perceive and become aware of the prevailing sensations and interactions is the pre-condition for such conscious action.

Equable and tranquil does not at all imply indifference or transcendence. It means **accepting each new moment with exactly the same state of mind and then letting it go again**. Sentiments will still be encountered, feelings of happiness, wishes, desires and aversions. However, it will also be possible to remain conscious of them and thus meet them with sovereignty and eventually let them go again, in a way which is completely appropriate to each situation, thus not allowingconditioning mechanisms to take control. A person knows from experience: a moment from now, this sentiment in exactly this form and constellation will already be in the past. I can never catch it again. I prefer to keep my head free for the immediate present.

With time, many of the wishes, desires and aversions and the associated emotional conditioning are not only not further reinforced but are attenuated to the appropriate measure. This is **not** a matter of reflex-type deconditioning of originally conditioned processes, because the change is enabled and initiated by **conscious** experience.

The approach of Vipassana Meditation is not simple. For most people (particularly in Western industrialised countries) it is unfamiliar and new. Occupation with oneself is often discredited and ridiculed in Western society as "navel-gazing". This misses the fact that the external

"reality", which is held to be absolute, is perceived exclusively via this "navel" and thus exists only subjectively. This makes it worth bothering to study this window to "reality" more closely and possibly also to "clean" it.

Learning the Vipassana technique

The Vipassana technique is taught in a very efficient traditional manner for instance by S.N. Goenka. in special centres around the world. (see ref. 6) The ten-day courses demand sitting for about nine hours each day. Thus, these courses may not be suitable for patients who are physically weakened or suffer pain. For these patients and other people who were discouraged by the Buddhist terminology, Jon Kabat-Zinn and colleagues opened access to Vipassana about 25 years ago by developing the MBSR Programme ("Mindfulness-based stress reduction"), which employs the awareness training of Vipassana technique together with other elements. Jon Kabat-Zinn established the MBSR Programme at the "Stress reduction clinic" in Worcester, Massachusetts (ref. 7, 8). Nowadays MBSR courses are offered in about 300 clinics and health centres in the USA.

MBSR courses have also been offered in Germany for some years now (ref. 9).

6.3 Examples of the physiological and biochemical effects of meditation:

The processes which occur at the cell level during conditioning have been described above. Physiological correspondence is also found for the observed psychological changes resulting from meditation. It is possible to draw on the numerous investigations of people who practise Transcendental Meditation, who - at least as far as inner tranquillity is concerned – achieve comparable psychological results to those who apply Vipassana Meditation (quoted from ref. 10):

- In an investigation of 14 meditating and 16 control persons, more rapid physiological habituation of the GSR (galvanic skin reaction) to irregularly presented stress stimuli, a lower number of multiple GSR per stimulus and a lower number of spontaneous skin resistance fluctuations were observed for the meditating group. This was interpreted as an indication of more efficient neurological information processing and greater physiological stress stability.
- Stress releases the hormones CRF (corticotrophin releasing factor) and AVP (arginine vasopressin) from specialised nerve cells deep within the brain. These hormones activate the release of stress hormones (glucocorticoids), which prepare the body for defence. Experiments with rats demonstrated that when a stress-inducing stimulus was repeated, these cells change from producing the more strongly activating CRF to the weaker AVP, so that the reaction to stress gradually decreases (habituation). Analogously, the average fivefold increase on the original value of AVP secretion for people who practise meditation over long periods can be interpreted as a weakened reaction to stress.
- Various hormonal changes have been observed, including reduced cortisol levels in blood plasma and urine, reduced TSH values and raised dehydro-epiandrosterone-sulphate values (DHEA, DHS), particularly among those who have practised meditation for many months. They are interpreted by the authors as evidence for greater physiological stress stability (cortisol and TSH reduction) and retarding of the age-induced reduction in DHEA/DHS secretion in the adrenal gland cortex, as the DHS values corresponded to control persons who were about 5 - 10 years younger.

In a review article on meditation (ref. 11), numerous studies on the physiological effects of meditation are cited. Summarising the results, meditation beginners display physiological reactions which correspond to physical relaxation. People with longer experience of meditation (12 - 18 months) show more permanent hormonal and metabolic changes.

The positive effects of mindfulness meditation on health have also been proven for German patients with chronic physical, psychological or psychosomatic complaints (ref. 12). The effects were determined with standardised instruments. Moderate to large effects were found in the

reduction of psychological stress, as well as an improvement in well-being and the quality of life. In addition, the body-orientated approach proved to complement psychotherapy positively.

7. Can words kill?

Now we have reached the point where we can answer the question and summarise:

Words initially have no other effect than as sensations in a sensory organ (ear) of the patient. However, depending on how the patient has been conditioned in the course of his illness and his biography, these words are processed and felt within the context of involuntary reflexes (conditioning), and lead to further mental, emotional and physical reactions, in the worst case also to death. For some patients, very strong words may be necessary for this to happen; for sufficiently pre-conditioned patients, already inconspicuous gestures may take effect.

Only the patient himself can finally build up the most effective and comprehensive protection against his environment and its emotional influence. He can start by trying to avoid exposure to unwholesome external stimuli. Beyond that, the more he succeeds in a) deconstructing and eliminating his emotionally damaging conditioning and b) in also recognising and consciously experiencing its underlying mechanisms, the more sovereign, equable and tranquil he will be when confronted with words or other external influences. In this way, he can favourably influence the course of his illness and experience emotional cure.

The task of family members, friends, doctors and therapists should be to accompany and encourage this work. On the long term, this assistance to self-assistance can be more useful than external adaptation to the needs of the patient.

In principle, the path described can be followed by any person, sick or healthy, from any situation in life. Even small steps in this direction will bring corresponding success, although at the beginning of meditation, the person involved often does not yet have sufficient experience to recognise this.

Maybe this article will be a motivation to follow this path.

Literature:

1. "Krebsrisiken - Überlebenschancen; Wie Körper, Seele und soziale Umwelt zusammenwirken", Helm Sierlin, Ronald Grossarth-Maticek. Carl-Auer Systeme Verlag. 2. Auflage 2000. ISBN 3-89670-099-5
2. "Autonomietraining - Gesundheit und Problemlösung durch Anregung der Selbstregulation", Ronald Grossarth-Maticek, De Gruyter 2000, ISBN: 3-11-016881-2
3. "Systemische Epidemiologie und präventive Verhaltensmedizin chronischer Erkrankungen - Strategien zur Aufrechterhaltung der Gesundheit", Ronald Grossarth-Maticek, de Gruyter 1999, ISBN: 3-11-016518-X.
4. Art of Living: Vipassana Meditation As Taught by S N Goenka, Author: Hart, William and Goenka, S N, Wisdom, ISBN : 0060637242, EAN : 9780060637248
5. "Vipassana - Meditation; Die Praxis der Freiheit. Buddhistische Achtsamkeitsmeditation als Weg zum inneren Frieden", Arbor Verlag Freiamt im Schwarzwald (1999) ISBN 3-924195-46-3
6. Internet: www.dhamma.org
7. Internet: www.umassmed.edu/cfm/index.aspx
8. "Alles in Buddha", Hans Gruber, in: Psychologie heute, Juli 2001, S. 34 ff.
9. Internet: www.arbor-verlag.de/mbsr_adressliste.html, www.lehrhaupt.com
10. Internet: www.tm-independent.de/Transzendentale_Meditation/Forschung/Medizin/tm_und_medizin.htm
11. "Meditation: concepts, effects and uses in therapy", Alberto Perez de Albeniz, Int. Journal of Psychotherapy, vol.5, no.1, 2000, pp. 49-58

12. "Does Mindfulness Meditation Contribute to Health? Outcome Evaluation of a German Sample", Marcus Majumdar, Paul Grossmann, Barbara Dietz-Waschkowski, Susanne Kersig, Harald Walach, Journal of Alternative and Complementary Medicine, vol.8, no.6, 2002, pp. 719-730
13. Nagano J, Ichinose Y, Asoh H, Ikeda J, Ohshima A, Sudo N, Kubo C. A prospective Japanese study of the association between personality and the progression of lung cancer. Intern Med. 2006;45(2):57-63. Epub 2006 Feb 15.
14. The relationships of a rationality/antiemotionality personality scale to mortalities of cancer and cardiovascular disease in a community population in Japan. Hirokawa K, Nagata C, Takatsuka N, Shimizu H.. J Psychosom Res. 2004 Jan;56(1):103-11
15. The interaction between risk factors and self-regulation in the development of chronic diseases. Frentzel-Beyme R, Grossarth-Maticek R., Int J Hyg Environ Health. 2001 Oct;204(1):81-8. Review.
16. Interaction of psychosocial and physical risk factors in the causation of mammary cancer, and its prevention through psychological methods of treatment. Grossarth-Maticek R, Eysenck HJ, Boyle GJ, Heep J, Costa SD, Diel IJ. J Clin Psychol. 2000 Jan;56(1):33-50. Erratum in: J Clin Psychol 2000 Jun;56(6):829. Heeb J [corrected to Heep J].
17. The First Discourse of the Buddha, Rewata Dhamma, Foreword: Ajahn Sumedho, Wisdom publications, ISBN:0-86171-104-1; Website Wisdom publications

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Thorsten Ahlert
I have been working in the field of cancer therapy and cancer research for 20 years, treating many cancer patients with new and experimental therapies (immunotherapies). I have always been interested in the psychological aspects of cancer, and followed these up with my patients. I have also participated in Vipassana meditation courses and retreats. I have been practising Vipassana meditation for 26 years, for 1.5 - 2.5 hours daily.

Jutta Beier
Some years ago I got involved with Vipassana meditation and participated in several retreats. The Vipassana meditation technique makes use of the complementarity of soul and body. This was particularly interesting to me as a physicist, because I'm dealing with - inter alia - the relationship of mind and matter.

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