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“Psycho”-Diagnoses as self-protection in professional insecurity

Introduction: Speculative etiological assumptions and blame are widespread in the case of medically unexplained symptoms, and particularly in the case of pain.

Materials and Methods: In the article, findings are presented that demonstrate a high inter- and intra-individual variance of pain and thus the “subjectivity” of pain experiences.

Discussion/Conclusion: The meaning of the treatment context is discussed as well as possible errors and “traps” in the treatment. A critical reflection of one’s own diagnostic and therapeutic routines is encouraged.

Keywords: patient-doctor relationship; placebo; nocebo; ICD-11; stigmatization; chronic pain

"No luminary can be sure that he knows everything – in medicine this has become well known." [27].

The luminary was in ancient times the leader of the choir in Greek tragedies. As an expert in a particular field, he is in modern times "setting the tone". In medical field this expression names an outstanding expert, mostly head of a clinic, who is often the "last resort" in particularly difficult cases [27]. As his opponent, a "special" type of patients, called the "luminary killer", was introduced to the scientific literature by Beck on pain [4]. The concept "luminary killer syndrome" should explain why treatments fail in some patients, why the relationship between them and the doctor is characterized by distrust instead of trust, and by hostility instead of empathy. The patients are characterized by the following 3 features:

- a diffuse pain symptomatology with a variety of examinations and invasive procedures
- the lack of a clear somatic diagnosis and thus a meaningful therapy,
- a pathological doctor-patient relationship.

"This disease refers to indeterminate and functional pain conditions in the abdomen, neck and back. The impossibility of attributing it to a clinically defined somatic disease leads to a multitude of diagnostic efforts that become more aggressive with increasing failure" [4].

This "aggressiveness" is also implied in the term itself. Beck chose it "to attract attention so that patients with this condition can be better understood" [4].

This psychodynamic concept was developed on the basis of a group of 20 patients (2 men, 18 women), who were all seen for an interview and 10 of whom were in psychotherapy. Further details and data are missing. Beck asserted that the cause of this suffering is narcissistic personality traits in all patients, which show up as fragile self-esteem combined with being easily offended and highly sensitive. He goes on to say, that all of them lacked basic trust and were unable to develop reliable human relationships. This is connected with another characteristic: the persistence of an exter-

nal ideal object. Finally, it is suspected, that the patients concerned idealize human relationships, and disappointment is thus predetermined [4].

Dissemination of the diagnosis "luminary killer": the stigmatization of patients with complex diseases

The terms "luminary" and "luminary killer", which have fallen somewhat out of fashion, were chosen for this article because they indicate an existing problem in a pointed but prototypical way in the treatment of patients with unclear symptoms. Originally conceived for patients with pain, the "luminary killer" has found its way into other areas of medical literature. The term has been and is used for craniomandibular dysfunctions [25], burning mouth syndrome [2], diarrhoea [26], in dermatology [22], ear, nose and throat medicine [12] and in fertility medicine [42]. These are all patients with special problems in diagnosis and therapy. It is difficult to distinguish between simulation, "doctor-shopping", aggravation of symptoms like pain and demonstrative illness behaviours [47].

All of these terms are concerned with attributing causes and, implicitly, blame: these are mental disorders of patients, often with manipulative tendencies. In this context of mistrust, explanations such as deception, lies or at least intentional motives are used to explain the clinician's own therapeutic failure.

According to Beck it is "a real psychosomatic suffering" [4]. Differential diagnostic problems exist with regard to other functional, psychosomatic, psychogenic and somatoform disorders. These are also assumed to be caused by a "real" mental illness. What these diagnoses have in common is that the cause lies primarily with the patient. The aim is to identify "difficult" patients as early as possible and to refer them to the most suitable treatment for them: psychotherapy. Patients usually do not accept this alternative to somatic treatment or only with considerable reservations.

Treatment-resistant facial pain has been a pioneering factor in the development of concepts for "psychologically induced pain". George

Engel's influential work, entitled "primary atypical facial neuralgia", deals exclusively with unclear facial pain. The case presentations and conclusions concern 19 female patients and one male patient. The subtitle is "A hysterical conversion symptom" [13]. Typologies, terms and diagnoses for patients with "medically unexplained" pain of different localizations have their roots in the 19th century concept of hysteria.

Technical terms and diagnoses develop in the scientific context and consensus of the time. They reflect the respective state of knowledge of professional but also social constructions of illness and health. They should not be evaluative, but in many cases, they are, which often only becomes clear in retrospect: "insanity", "moronism", "idiocy" were official diagnoses in scientific classifications for many years. Also "hysteria" – and the different variants of psychogenic disorders (conversion, psychogenic pain, somatoform disorders) derived from it – were and are conceptual snapshots of scientific ideas. From today's perspective, they are associated with negative evaluations and are now less and less accepted socially and scientifically [31]. For this reason, the term "somatoform" has been largely ignored in America [28]. In everyday clinical practice, there are terms based on this that can be the basis for insult claims. In informal collegial discussions, derogatory slang expressions are common. For one patient with pain after a dental implant, the cryptic diagnosis "HGM" was found on the dental referral form to a university clinic. When asked, it turned out to be an acronym for "Has Gone Mad". In fact, it was a case of malpractice that was only recognized by the advanced diagnostics after the referral. Obviously, pain is a burden for the practitioner as well, in some cases with professionalism and empathy being lost. A contribution by Goldman is appropriately titled "Patients with chronic pain must cope with chronic lack of understanding on the part of the practitioner" [19].

Possible causes of interaction problems

There are many problem areas in dentistry that offer considerable po-

tential for conflict. For the treatment of patients with prosthesis intolerance [17, 53], mouth and tongue pain [15], occlusal dysesthesia [23], bruxism [37] and craniomandibular dysfunctions [25], competencies far beyond dentistry are required. Professionalism in diagnostics and therapy requires – in addition to the necessary technical expertise – the competence to shape relationships, create trust and involve patients in decisions. Friendliness, compassion and interest are necessary prerequisites for this. Unfavourable are prejudices, negative evaluations and resulting derogatory behaviour towards patients, verbal and non-verbal. The equality of people on the basis of their origin, skin colour, ideological orientation, physical or mental limitations is regulated by constitutions and laws in most countries. Whether these "prohibitions of discrimination" also reflect everyday life and especially attitudes is a central research question in the social sciences that is not easy to answer empirically.

For example, no prejudices were found in an open survey of over 25,000 health care workers on attitudes toward people with disabilities. The test subjects then additionally processed the Implicit Association Test, which records "automated" evaluations that are not subject to conscious control. Even this "professional" group showed clear reservations and latent discrimination towards disability and disabled people [45].

In another study, physicians anonymously commented on the question: How high do they estimate the proportion of simulators among their patients with back pain? [24]. Half of the surgeons suspect less than one malingerer in 10 patients. Every 10th surgeon, however, assumes that half of his patients are simulators. A trusting relationship in treatment is unlikely in this initial situation, creating an iatrogenic interaction problem in this case, not reflecting a mental disorder on the patient's side. Appreciative communication with patients is not only an important factor for patient satisfaction. Patients experience less pain after an empathic and respectful conversation than pa-

tients who experience degradation [44].

However, a "pathological relationship", distrust and devaluation are not limited to the "doctor-patient" interaction. Numerous studies show the widespread stigmatization experienced by people with chronic pain [9]. Stigmatization is the devaluing and discrediting reaction to people who possess a certain characteristic that deviates from social norms. In this case, people who do not conform to the usual biomedical norm, and where the pain clearly has physical causes. Stigmatization affects far more than the patients' experience in the health care system. People with chronic pain are also viewed sceptically and negatively in the family, at work and in social contacts if "clear findings" are lacking and complaints do not – as "normally" expected – disappear over time.

Are "luminaries" the better pain diagnosticians and practitioners?

High expectations are placed on diagnostics and therapy performed by luminaries, they should be outstanding. Is many years of experience and ascribed high competence an advantage?

Pain is not directly measurable, but requires communication. People can take different paths to achieve this: verbal messages, gestures and facial expressions, aids such as visual analogue or numerical rating scales. How well doctors and patients agree in their assessment was checked in an emergency room [29]. For this purpose, the pain data of 200 patients (data from 0 = no pain to 10 = strongest imaginable pain) and external assessments by the treating physicians (also 0–10) were compared. In an ideal world, there should be no differences between the intensity data for ideal patients and ideal practitioners. The influence of "experience" and "gender" on discrepancies between self and external assessment was examined, i.e. the difference between patient data and expert rating. The doctors consistently estimated the pain intensity of their patients as lower than did the patients themselves. The difference was particularly

large among the "real luminaries", i.e. the experienced practitioners: Compared to newcomers, the "expert rating" is the furthest removed from the patients' experience. Surprising effects were also seen for the "gender" factor: Female doctors rated the pain of both men and women higher, i.e. closer to the patients rating than their male colleagues. "Experienced" male doctors were particularly far off the mark: they underestimated the pain intensity of female patients most significantly.

Who heals is right – or is in the clinical evidence pitfall

The reputation of luminaries is based primarily on their treatment competence. "He who heals is right" is an occasional justification for "eminence based" treatment successes. Surgical doctors in particular quickly gain a reputation as "luminaries". Specialization in one field, many years of professional socialization in hierarchically structured fields of work, and increasingly higher expectations of success have side effects. As one shoulder surgeon remarked: "Hardly any surgeon realizes how much their own perception can be deceptive. When you operate day after day and see that many patients feel better afterwards, you quickly think that this is because of you. That is why it is so important to conduct good studies. This is the only way to find out whether surgery really helps or not. Unfortunately, it is then often very difficult to transfer the study results into daily treatment practice. The doctors, but also the patients simply believe that the treatment, whose ineffectiveness has just been scientifically proven, is still effective" [21].

In the meantime, studies have been conducted on arthroscopic shoulder and knee surgery that have been shown to have no effect beyond that of a "sham operation" [3, 34, 41].

One possible explanation for the preservation of invasive procedures despite their dubious effectiveness is the "clinical evidence trap" in which the surgeon and patient get caught in "real life": While in studies medical interventions like drugs or procedures are tested "blinded" against placebo, both patient and surgeon go

into treatment in everyday clinical life with “open eyes” and high expectations. For patients, it takes place in an impressive setting, which in itself means a considerable placebo effect [5]. This is a favourable prerequisite for treatment success, although often due to nonspecific effects and less to the “elimination” of a suspected pathology.

In addition to the (at least initially) high expectations, the practitioners’ conviction of the effectiveness of their method plays an important role. A very complex study entitled “Socially transmitted placebo effect” showed for the first time “that the expectations of providers regarding the efficacy of a treatment can significantly influence the treatment results of patients” [8]. What was new about this study was that the practitioners themselves were initially “patients” of a very convincing placebo treatment with the following “legend”: the effect of an analgesic ointment was to be tested against a “placebo”. The practitioners experienced this effect themselves first. They were given heat stimuli. Under placebo conditions the temperature was 47 °. In order to simulate the effect of a real “drug” (in fact also a placebo), the temperature was lowered to 43 ° during its application. This clearly perceptible difference convinced the practitioners of the effect of the ointment. They then carried out this test themselves with patients under simulated “strict” conditions. Indications of differences between the two substances, the effectiveness or comments were prohibited by instructions. The “patients” were also exposed to pain stimuli under “real drug” or placebo conditions. However, the temperature in this case was always 47 ° and was therefore identical for both ointments applications. Although the “patients” had no experience of the effect themselves, a clear placebo effect was also observed in them. In this case, it was achieved exclusively through the non-verbally conveyed expectations of the practitioners.

Under “real” conditions and additional verbal communication, the “socially transmitted placebo-effect” might be considerably stronger. By

unconsciously shaping the patients’ expectations of success, the “success” of their own treatment method becomes repeatedly confirmed and will be continued

The increasing aggressiveness of therapies described by Beck, as well as repeated unsuccessful and increasingly drastic interventions, are also called cascades [33]. The “Failed Back Surgery” of orthopaedics for back pain corresponds to the excessive tooth extraction (“the pain is often in the last tooth not yet extracted”). The common motto is “if in doubt, cut it out”. Treatment options discussed for chronic facial pain were also aggressive. For example, in Engel’s classic study, electroshock and lobotomy are considered, although there is no evidence for these, as he himself notes [13]. If a clear somatic diagnosis is missing and yet invasive diagnostic and therapeutic procedures are repeatedly performed, is a pathological doctor-patient relationship not normal? However, expressions such as “something must happen now” come from desperate patients and practitioners alike. This is associated with the assumption that “if nothing else works, you can still operate” – a generally wrong assumption and the beginning of many disastrous cascades. In a recent review of burning mouth pain, it is “the unexpected failure of interventional therapies that ultimately leads to a correct diagnosis” [11].

Deciding when to perform interventional procedures, is particularly relevant for surgical disciplines: The British neurosurgeon Henry Marsh, himself a recognized outstanding expert in the field of brain surgery, states: “Neurosurgery is certainly not about steady hands. It is about what the doctor has in his head; it is about judgment. It takes 3 months to learn how an operation works. Three years to learn when to perform it. And 30 years to learn when not to do it” [30].

Mental disorders are no explanation for chronic pain

“Psychosomatic” as a residual category in the absence of somatic explanations is associated with high risks of over-, under- or inappropriate treatment. The “classic” psycho-

somatic disorders of the past are gastric ulcer/duodenal ulcer, bronchial asthma, rheumatoid arthritis, neurodermatitis, essential hypertension, hyperthyroidism as well as the inflammatory bowel diseases ulcerative colitis and Crohn’s disease. They are now regarded as physical diseases with psychological factors of influence. The assumed causation of “psyche” was wrong. For example, stomach ulcers are usually caused by the bacillus *Helicobacter pylori* and less by emotional stress. For Crohn’s disease, which in the German-speaking countries also was considered to belong to the “holy cows of psychosomatics” [1], the causes are now discussed on the basis of prospective long-term studies. They are actually related to childhood experiences: the amount of antibiotics that had to be taken during that time [36].

A central question concerns the specificity and causal relevance of mental disorders for the explanation of chronic pain. The traditional classifications have been developed through studies with patients in specialized institutions. They refer to patients who could not be treated satisfactorily in the usual care process, who were “left over” after several selection processes. The “publication bias” based on these studies gave the impression that patients with chronic pain are a homogeneous group with a high prevalence of mental disorders and great potential for conflict and problems in treatment.

Epidemiological studies, in which the frequency of mental disorders in people with chronic pain was recorded, clearly put these assumptions into perspective. In a worldwide study involving more than 85,000 people, a higher probability of anxiety and affective disorders was indeed found in people with chronic pain compared to the pain-free population. However, the frequency of diagnoses was mostly below 10 % [10]. No statements on causality can be deduced from this. Prospective studies show that these are bidirectional relationships: “A persistent pain disorder at the start of the disease predicted the occurrence of a mental disorder to the same extent as a mental disorder at the start of the disease predicted the later occurrence

of persistent pain" [20]. Pain can trigger and aggravate depression – and vice versa. It therefore makes sense to integrate both areas (with necessary differentiations and focal points) into treatments. Premature and sweeping psychological labels are used to exclude patients with pain problems. Even with unclear somatic findings in other medical fields, both this "functionalization" of "psychodiagnoses" and their reliability as etiological explanations are increasingly being questioned [38]. In any case, even with standardized interview procedures, the diagnosis of somatoform disorders has proven to be less reliable and poorly repeatable than diagnoses of anxiety disorders or affective disorders [51].

Personality disorders also do not seem to have a specific meaning for the aetiology of pain, as a study with the meaningful title "Patterns of normal personality structure among chronic pain patients" shows [46].

The "pain personality" [14], the migraine type [52], the pain as a variant of depression [7], and "atypical" neuralgia [18] are further examples of historically interesting but retrospectively speculative ideas that have done little to advance our understanding of pain and chronic pain. However, the stigmatization associated with them has contributed greatly to the lack of understanding of those affected [9, 50]. The reliability of diagnostic procedures in medicine and psychology has increased in many areas. The use of standardized interviews and questionnaires in psychological diagnostics has improved the quality of studies and led to the elimination of familiar but speculative "diagnoses". The increasing sensitivity to language, for its possible significance as a placebo and nocebo, has increased. Paternalistic communication, a common feature of "the luminary", is now obsolete, not least for legal reasons [39]. Especially in the case of complex health problems, equal communication is a prerequisite for successful treatment.

Subjectivity of pain as a result of contextual conditions

Our traditional concept of pain is based on an almost essential connec-

tion between somatic damage and pain – and it is misleading. "There is no direct connection between somatic pathology and the intensity of pain" [43]. Nociception is not pain. Only after and through processing in different areas of our brain do nociceptive signals become danger signals and thus pain [32]. Pain is subjective. Even under simple experimental conditions with standardized pain stimuli, the intensity of pain experienced is highly variable between individuals: More than 300 subjects were exposed to multiple short heat stimuli of 48 °. The intensity should be assessed on a scale from 0 (= no pain) to 100 (= strongest imaginable pain). The values of the test persons ranged – with an average value of 71.8 – almost over the entire spectrum of possible values [16]. If a standardized experimental condition already leads to a confusing variety of experience on the part of the persons concerned, a further increase in variance is inevitable in complex situations with social, biological and psychological influences. These additional factors lead to further increased variance within individuals across settings: people experience pain differently depending on the personal significance of situations, not in a standardized way. For example, pain caused by overstraining in sports is easily dismissed while the same person can hardly stand the pain of dental treatment.

Chronic pain is usually etiologically and therapeutically complex. Categorical classifications into "healthy" and "sick" are initially a useful decision algorithm for acute somatic problems. In chronic pain, these concepts seldom take effect and lead to considerable problems, as Patrick Wall, a physician and one of the most renowned pain researchers outlined: "The full power of the classical medical profession which is pathologically based has concluded that there is 'nothing wrong' in pathological terms with the great majority of chronic pain patients. Since this conclusion is unquestioned and since the only generally accepted alternative is that there must be a design fault in human mental processing" [48]. Pain and especially chronic pain are now understood as a biopsychosocial phenom-

enon. The decisive difference to diseases with causally clear pathogenic factors is the inter- and intraindividual variation of risk factors: the significance of somatic, psychological and social influences can rarely be considered in isolation. Statistically (and in reality), the focus is not on dichotomous but on dimensional relationships and models. The individual components (e.g. risk factors) only partially contribute to clarify variance. In addition, these are usually no pathological changes, but variations around the norm, which only leads to pain problems or chronification in combination and interaction with each other.

Bruxism in this sense is no longer understood as a disorder requiring treatment "in otherwise healthy people" [37]. Back pain is also "statistically normal" and can only to a small extent be attributed to structural pathology. Most patients have a completely healthy spine for their age, and anxiety disorders are also found in only a few. Nevertheless, the combination of (muscularly induced) back pain, the widespread fear of serious causes ("slipped disc") and social stress ("If I can't work, how will I manage?") can lead to diagnostic decisions, in which widespread secondary findings are interpreted as central, are operated on and become the actual problem. This concerns most medical specialties with interventional procedures. Alf Nachemson, a recognized expert in spinal column surgery, states: "Back pain is not only about the spine, it is also about the brain" [49].

Advances in genetics, brain research, and epidemiology have contributed to a growing understanding of the complexity of pain and its chronification and have laid the scientific foundation for the biopsychosocial model that is now widely accepted. This model was published in 1977 by Engel, who thereby fundamentally revised his concept of the "pain personality" published almost 20 years earlier. The view of pain requires a broader perspective: instead of an individual psychopathology, somatic and social aspects and their interactions are integrated. This made oversimplified characterizations of patients obsolete. For these reasons, too,

teams are better suited for diagnosis and treatment. Interdisciplinarity and multimodal procedures characterize current treatment options. This initial situation is hardly compatible with the role of "luminary".

When treating chronic pain, whether of the face, head, back or shoulders, to name a few sites, medical expertise, diagnostic and therapeutic competence is an important but usually not sufficient basic requirement. The active involvement of patients is increasingly seen as an essential factor for treatment success. For craniomandibular dysfunctions, the "splint" is only one treatment component. Self-observation and the application of muscle relaxation procedures are the patients' task, which is met all the more reliably the more trusting the relationship with the dentist is, and the more plausible and acceptable the instructions and information provided are. This development – involving patients as partners in therapy – is now found in almost all forms of chronic pain. Instead of devaluating and excluding patients with dubious diagnoses that are unacceptable to them, medical, psychological, physiotherapeutic and social influencing factors are treatment goals in interdisciplinary multimodal programs.

As a consequence of these developments, chronic pain is a separate diagnosis in the ICD-11 and no longer included in the chapter for mental disorders. The criterion "lack of somatic cause" is considered too unscientific and has no significance for the diagnosis. Somatic, psychological and social factors are self-evident components of this "new" concept. The differentiation into primary and secondary chronic pain is also new. This takes into account the different somatic initial conditions and treatment options. The diagnosis is largely descriptive, and speculative assumptions about aetiology are avoided. Psychogenic pain or somatoform pain disorder as a mental disorder categorically distinguishable from the norm is no longer included in the ICD-11. Instead of a categorical one, a dimensional concept is consistently implemented. It is a continuum of various factors that contribute to varying de-

grees and not categories that can be clearly separated diagnostically: "normal" versus "disturbed" or "healthy" versus "sick".

This change to dimensional rather than categorical concepts was also realized for personality disorders: with the exception of the borderline personality disorder, all other types of disorders have been grouped under the generic term "personality disorder". Depending on the degree of different personality traits, specific profiles result. The lack of stability of personality disorders over the life course is one of the reasons for this revision [6, 40]. And here, too, we find a classificatory continuum with varying degrees of severity: From norm variants to pronounced stress instead of healthy versus sick, normal versus disturbed.

Concluding remarks

Tensions and conflicts between patients and therapists are relationship problems. To understand the reasons, it is necessary to look at both sides. Patients who do not fit into the system, because of their unclear complaints, personality characteristics or incompatibility with particular therapists, are still labelled as disturbed [39]. In fact, they disrupt clinicians' familiar routines and cognitive schemata. This danger is particularly prevalent in dentistry. Time pressure is high and a clear orientation towards a treatment algorithm that focuses on the (very successful) treatment of acute pain becomes a dead end for patients with unclear symptoms. This dynamic of interaction problems between doctor and patient has been summarized by the spinal surgeon Nachemson: "it is becoming clear ... that ill-conceived diagnostic behaviour on the physician's part can lead to abnormal illness behaviour in patients, and this, in turn, may lead to abnormal treatment behaviour" [35].

Conflicts of Interest

The author declares that there is no conflict of interest within the meaning of the guidelines of the International Committee of Medical Journal Editors.

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