



Fatigue – Symptom or Diagnosis?

by Sandra Mitic, Gen Re, Cologne

The symptom of fatigue is one of the top five most frequently presented health complaints in primary care. Current evidence indicates that fatigue is the main or secondary reason for consultations in general practitioner practices in 10% to 20% of cases.¹ Fatigue is a non-specific but important symptom due to its association with possible physical, psychological and social problems of affected people. People experiencing fatigue consider medical help when they feel that their extreme tiredness cannot be adequately explained (e.g. by physical exertion or lack of sleep) or when individual compensation methods are exhausted and impairment in their daily life seems no longer acceptable.²

Definition and types

The subjective perception of fatigue is very broad. There are various terms in this context, such as sleepiness, lack of energy, exhaustion, tiredness, early fatigability, drowsiness and more. The ICD-10-CM classification provides different codes for symptoms of fatigue, such as R53 (malaise and fatigue); F48.0 (neurasthenia); G93.3 (post-viral fatigue syndrome); and R54 (senile asthenia).³

There is no uniform and internationally valid definition for fatigue. A common technical definition is that fatigue is a symptom that cannot be relieved by the usual strategies of restoring energy and that impairs the ability to carry out usual daily activities in variable severity degrees.⁴ People experiencing fatigue symptoms tend to report a lack of energy, feeling weak or being too tired to participate in family, work or leisure activities.⁵

Fatigue is mostly defined in duration as recent (<1 month), prolonged (1 to 6 months) and chronic (>6 months).⁶ Fatigue may appear as an associated symptom due to different somatic disorders such as multiple sclerosis or cancer. When unexplained, chronic fatigue can be considered either as a syndrome or as idiopathic. A syndrome is characterised by severe, disabling fatigue and other symptoms, including musculoskeletal pain, sleep disturbance, impaired concentration and headaches without a definable organic cause. Idiopathic chronic fatigue is defined as the absence of other symptoms.⁷

The American National Academy has recommended the renaming of, and the changing of criteria for, chronic fatigue syndrome (CFS) to systemic exertion

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About This Newsletter

Risk Insights is a technical publication produced by Gen Re for life and health insurance executives worldwide. Articles focus on actuarial, underwriting, claims, medical and risk management issues. Products receiving emphasis include life, health, disability income, long term care and critical illness insurance.

intolerance disease (SEID). It is defined as fatigue lasting for at least six months, including a range of accompanying symptoms such as increased tiredness after exertion, sleep disturbance, muscle and joint pain, head and neck pain, cognitive impairment, and orthostatic disturbances. The new SEID case definition also requires substantial reductions or impairments in the ability to perform pre-illness activities, the presence of unrefreshing sleep, post-exertional malaise, and either cognitive impairment or orthostatic intolerance with restriction of everyday activities not attributable to any other specific disease.⁸

Causes

Fatigue, as a discrete symptom, is important because of its association with underlying morbidity.⁹ Tiredness is usually self-limiting and easily explained by obvious circumstances, but sometimes it occurs in the context of defined organic diseases, such as cancer, anaemia, diabetes, hypothyroidism or neurological disease, e.g. multiple sclerosis. It also occurs with various mental disorders such as depression, anxiety disorders, and functional somatic conditions such as irritable bowel syndrome, fibromyalgia, and psychosocial stress.¹⁰

In a systematic review of studies which investigated the underlying causes of tiredness in primary care, the most common differential diagnosis was depression (18.5%), followed by serious somatic diseases (3.1%), anaemia (2.8%), and malignancies (0.6%).¹¹

Fatigue may be exacerbated by drug side-effects in cytostatically active drugs (e.g. mitoxantrone) or cytokine mediators (e.g. interferons) used in treatment of cancer or neurological diseases. Other substances are benzodiazepines, antidepressants, neuroleptics, antihistamines, antihypertensive drugs, opioid drugs and alcohol.¹²

The aetiology, course, and optimal treatment of CFS are still unclear.¹³

Epidemiology

The true prevalence of fatigue is difficult to measure. According to the German Guideline of Fatigue, the international prevalence of patients with unexplained fatigue persisting for at least one month varies between 2% and 15%. After one year, the symptoms persisted in 20% to 33% of all cases.¹⁴

Other epidemiological studies show even higher numbers with a wide range of manifestations ranging from mild fatigue complaints up to CFS with severe disabilities. Prevalence rates vary between 4% and 45%. This tenfold range in prevalence is likely due to the different settings or the different methods used to assess the symptom of fatigue.¹⁵

Fatigue in adult patients attending general practice is associated with psychological distress in 75% of patients, and 9% in case of physical illness. 40% of patients still have symptoms six months later and 26% of patients suffering with persistent fatigue for more than six months meet the criteria for CFS.¹⁶

Fatigue is also one of the most prevalent and distressing long-term effects of cancer treatment, significantly affecting patients' quality of life. According to the American Society of Clinical Oncology, the majority of cancer patients will experience some level of fatigue during their course of treatment. Approximately 30% of patients will endure persistent symptoms of fatigue for several years after treatment.¹⁷

Multiple sclerosis is the most common neurological disease that causes disability in young adults. With an estimated prevalence of up to 83%, fatigue is one of the most common symptoms in multiple sclerosis patients and exerts the greatest impact on patients' quality of life. It represents one of the most pressing clinical problems in the management of multiple sclerosis.¹⁸

Diagnostics

When people with symptoms of fatigue seek medical treatment, health providers are challenged in their investigation skills to deliver appropriate care. However, the delivery of care can vary due to differences in practice behaviours, provider characteristics, patient-provider relationship or the perceived burden of the symptom by the provider and the patient.¹⁹

Health professionals must decide on the nature and extent of diagnostic measures. Somatic investigations often show negative results and do not seem to clarify the underlying cause.²⁰ Nevertheless, any kind of new, severe and everyday life-restricting form of fatigue should be investigated, and a somatic cause should first be ruled out.



In the case of primary unexplained fatigue, various aspects should be recorded in the medical history: pre-existing conditions; sleep; body weight history; tobacco use; cardiac; respiratory; gastrointestinal; urogenital; central nervous system function; intake of medication and psychotropic substances; social; family; occupational situation; chemical or noise exposure; similar symptoms in the private/occupational environment; snoring; and sleep deprivation.²¹

If no somatic cause can be identified, various qualitative components need to be considered in diagnosis and possible treatment of fatigue:²²

- Emotional aspects (listlessness, lack of motivation, close association with sadness or depressed mood, reduced affective vibrancy)
- Cognitive aspects (reduced mental activity or performance)
- Behavioural aspects (“performance bend”)
- Physical aspects (e.g. muscular weakness)

Therapeutic approach

Disease-specific treatment should be given if such a treatment is possible and indicated, e.g. antidepressant therapy and the treatment of anaemia, heart failure, diabetes mellitus, neurological diseases, sleep disturbances, and pain. If fatigue is idiopathic, the clinical approach should contain observation for somatic and psychological causes, with regular follow-up.²³ The treating physician should counsel the patient empathetically and communicate openly, so that the patient can be motivated to change his or her behaviour in order to modify unmanageable physical and psychosocial challenges.

Problem-oriented cognitive behaviour therapy is useful in some cases. Psychoeducative measures are useful to inform the patient about the disease process and the

appropriate way of dealing with it by assuming personal responsibility and strengthening patient resources for dealing with challenges in everyday life.²⁴

Fatigue in the context of life insurance

Chronic fatigue plays an essential role in the insurance medical context of various disability products. It can be found as a concomitant symptom of severe underlying diseases causing disability as well as

in mental disorders. But fatigue is often the determining reason for a reduction in performance in the professional context, and is the decisive obstacle to returning to, or maintaining, professional activity. It is therefore advisable to pay attention to this symptom, which is often presented as rather insignificant at the stage of risk assessment but very significant at the stage of claims assessment.

In medical underwriting

In risk assessment, underwriters are faced with the decision of how much relevance one should attach to the symptom of fatigue when it is found as a symptom without further diagnosis, or as an incidental finding in medical reports of applicants.

In medical underwriting of disability products, it is therefore particularly important to look for a possible context for fatigue, such as pre-existing conditions or intake of medication and psychotropic substances. In case of doubt, it is recommended to pursue things further by questionnaire or by asking the attending physician about type, diagnostic procedures, and course of the symptoms.

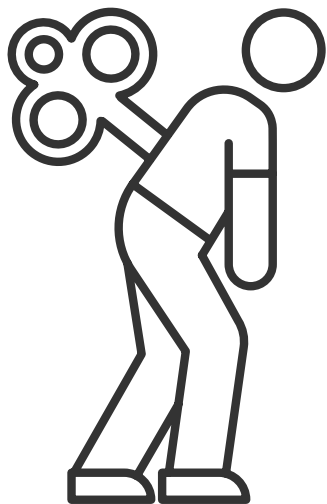
Applicants with an unremarkable history and physical examination, and normal basic laboratory test results, are highly unlikely to be suffering from anaemia, cancer, thyroid dysfunction, or other somatic diseases as the cause of their fatigue.

In claims assessment

Claims submitted with a subjective symptom of fatigue can often be caused by a wide spectrum of diagnoses. Thus, it's important every claim be evaluated on its own unique set of circumstances. Assessing disability claims containing fatigue as a major symptom and obstacle for return to work requires a solid understanding of its impact, if any, on the performance of one's occupation. This is especially true in cases where a serious underlying disease is absent, or when it remains in a stable and satisfactory condition that is not actually a limitation for work.

At initial glance, fatigue appears immeasurable but there are ways to approach complaints of acute and chronic fatigue. Objectification may be achieved through a plausibility check of complaints with current and previous findings, analogous to the assessment of chronic pain. This involves checking whether anamnestic statements are consistent in themselves, e.g. if impairment is present in an occupational and in a private context, or if the information is consistent with reports from previous examiners.

There are also self-assessment questionnaires available that relate how fatigue interferes with certain activities and rate



its severity. For example, the Fatigue Severity Scale (FSS) and the Modified Fatigue Impact Scale (MFIS) are tools designed to verify if test answers correspond to the reported limitations caused by fatigue. These activity pattern tools can offer claims assessors insight to how a patient might be progressing based on their daily activity level. Self-assessment questionnaires, however, fundamentally carry the danger of a potential influence of the respondent on the answers (e.g. three factors typically influence suggestibility: situational factors, usual and/or current states, and personality traits).

Neuropsychological tests (complete with validity testing) are more objective methods for understanding the complexities often involved with fatigue-based claims as they are less suggestible than self-assessment questionnaires. Therefore, the combination of self-assessment tests and neuropsychological tests may result in a more objective assessment.

About the Author

Dr. Sandra Mitic is the Chief Medical Officer for Life/Health Client Services, based in Cologne. She is a specialized visceral and gastroenterological surgeon and has worked as a Medical Consultant in various hospitals in Germany. She also holds a master's degree in Public Health. Before joining Gen Re, she worked as a Medical Consultant in the private health insurance sector in Germany and the Federal

Office of Civil Protection and Disaster Assistance. At Gen Re, she advises in the areas of risk and claims assessment and supports further development of risk assessment manuals and insurance products.

Tel. +49 221 9738 912
sandra.mitic@genre.com



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General Reinsurance AG
Theodor-Heuss-Ring 11
50668 Cologne, Germany
Tel. +49 221 9738 0
Fax +49 221 9738 494

Editor:
Andres Webersinke, webersin@genre.com

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