Leisure Sickness

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"Leisure sickness": A pilot-study on its prevalence, phenomenology, and background

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Abstract

Aim: To obtain a first insight into the prevalence, phenomenology, and background of "leisure sickness", i.e., the condition that people develop symptoms of sickness during the weekends and/or during vacations.

Method: In order to obtain an estimate of its prevalence, a representative Dutch sample, consisting of 1128 men and 765 women, was asked to indicate to what extent they recognized themselves in our description of weekend and vacation sickness. For the investigation of the phenomenology and background of this condition and the characteristics of the patients suffering from it, questionnaire data were collected in new samples consisting of 114 cases and 56 controls. Questions referred to the symptoms, onset, duration, appreciation of weekend and vacation activities, and appraisal of work and workload.

Results: In the case of male respondents, 3.6% and 3.2% recognized themselves in the descriptions of the weekend and the vacation syndrome, respectively. For women, these percentages were 2.7% and 3.2%, respectively. Most frequently reported symptoms were headache/migraine, fatigue, muscular pains, and nausea. In addition, viral infections (flue-like, common cold) were often reported in relation to vacations. Cases generally suffered from leisure sickness for over 10 years and the onset was associated with stressful conditions. They attributed their condition to difficulties with the transition from work to non-work, to stress associated with travel and vacation, as well as work load and personality characteristics. There appeared to be no important group differences in appreciation of weekend and leisure activities or lifestyle, during days off. Most striking differences were found with respect to experienced workload, sense of responsibility, and inability to relax.

Conclusion: Leisure sickness is a relatively common condition. Specific lifestyle factors or leisure activities seem to be less relevant. Concerning risk factors, the data rather point to high workload and person characteristics, namely, an inability to adapt to the non-working situation, a high need for achievement, and a high sense of responsibility with respect to work. Future studies should be designed for testing specific hypotheses concerning the underlying mechanisms and evaluating the effectiveness of psychological or physical activity interventions.

Introduction

Leisure and vacation are generally associated with feelings of relaxation and well-being (Baum, 1999). The prescription of rest for people, who feel overstrained or complain of a high workload, is generally regarded as good clinical practice. However, there is also anecdotal evidence suggesting that some people develop symptoms and feel ill, in particular during weekends and vacations. Surprisingly, until now, the scientific literature failed to spend any systematic attention to this phenomenon. Only occasionally, reference is made to this phenomenon. For example, McEwen and Stellar (1993) did this, when discussing the concept allostasis and its relevance for understanding biological stress responses and their relationship to disease. To the best of our knowledge, there have only been a few studies focusing specifically on weekend migraine and ischemic stroke in young women (Couturier et al., 1992; 1997; Haapaniemi et al., 1996; Hering et al., 1992). However, until now more systematic knowledge and insight into the possible underlying mechanisms is lacking, except for some specific speculation regarding weekend migraine, which has been associated with a decrease in caffeine intake and with the so-called "let-up" phenomenon (Blau, 1987; Couturier et al., 1992; 1997).

Therefore, the aim of the present study was to obtain information concerning the most basic questions about this syndrome, which may be best described in terms of relatively frequent feelings of feeling ill during weekends and vacations, whereas on working days only seldom such symptoms are experienced. The focus was on the following issues: What is the prevalence of this syndrome? Are there any associations with demographic variables? How does this condition manifest itself? Is its onset associated with specific events and are there any facilitating factors? Do people suffering from this condition differ in certain aspects from healthy controls? With this study we hope to obtain a first understanding of this phenomenon and its background and to generate specific hypotheses that may be tested in systematic future research.

Methods

In order to obtain an estimate of the prevalence of weekend and vacation sickness, we collected data in a representative Dutch sample consisting of 1128 men (M = 46.4 years, SD = 15.4) and 765 women (M = 42.2 years, SD = 14.7) in the age range from 16 to 87. In terms of education, 41.6 % was lower educated, 42.3 % has a medium level of education, and 16.1 % could be classified as higher educated. The participants were asked to indicate to what extent they recognized themselves in the presented descriptions of someone who seldom feels ill during working days, but relatively often during weekends and/or vacations.

Participants in the second, in-depth study were volunteers who reacted announcements, which were placed in two Dutch magazines. This resulted in 114 respondents (45 men; 69 women), who, based on our description, considered themselves as prototypical cases. Further data were collected from 56 controls (24 men; 32 women). The age range of the participants was 17-76 years, with a mean of 43.9. The majority was married or had a steady relationship (75%), 18.2% were single, and 7.1% widowed or divorced. There were no significant differences between cases and controls in these respects.

Based on careful reading of the scarce literature, pilot-interviews with some of the cases, and our own speculations about the background of this syndrome and its putative mechanisms, we developed a questionnaire addressing the nature of the symptoms, the onset of the condition, the attributions of the cases, lifestyle characteristics as well as experience and appraisal of work and leisure. This questionnaire was sent by mail to the respondents, who could complete it at home and return it in post-free envelopes.

The statistical analysis applied to compare the cases and controls was the chi-square test. A significance level of $p < .05$ was adopted.

Results

In order to obtain adequate estimates of the prevalence of leisure sickness, we counted in our representative sample the answer categories “rather” and “very much” to descriptions

of this condition. This yielded prevalence estimates of 3.6% and 3.2% among men for, respectively, the weekend and vacation syndrome. The corresponding figures for women were 2.7% and 3.2%. The overlap between both conditions was 39% for men as well as women. There were no significant differences between cases and controls in marital status. In addition, educational level was not significantly different between both groups. However, it appeared that in the vacation sickness group, but not in the weekend sickness group, younger people (< 26 years) were overrepresented.

Also in the case-control study, there were no demographic differences between both groups. The results further revealed that there was a striking correspondence in the kind of symptoms that were reported for both conditions, although common cold/ flu-like symptoms took an important position only in the list of vacation symptoms (see Table 1).

Most cases (65.2%) indicated to suffer from leisure sickness during weekends as well as vacation periods. During weekends, symptoms developed mostly at the day after the last workday (i.e., Saturday; 50.0%) and, in case of vacation sickness, during the first week (56.6%). For most cases (85.5%), similar symptoms are experienced over and again. Therefore, this condition can best be qualified as chronic-intermittent; it existed on average for over 10 years. The mean age of the onset of these problems was 26.7 years.

Respondents often linked the onset of the syndrome to certain life events (e.g., marriage, the birth of first child, a change of job, relational problems), with the more general statement of "a stressful or busy period in life" (38%) standing out. "Changes at work/reorganization" (14%) and "first job" (12%) were two eliciting factors that were reported relatively often.

The vacation syndrome was mainly attributed to problems with the transition from work to vacation (45.8%) and stress associated with holidays and traveling (45.7%). The weekend syndrome was not felt to be caused by weekend stress but rather by difficulties related to the transition from work to non-work (45.6%), job stress or a heavy workload (36.8%), and personality characteristics, in particular perfectionism, subassertiveness and a high sense of responsibility with respect to work (28.1%).

Comparisons of appreciation of leisure activities and changes in (health) behaviors during weekend and vacation and failed to yield a clear pattern of differences between cases and controls. As far as differences were found, most discrepancies were

opposite to expectations. Cases appear to live more regular lives (in terms of alcohol intake and having regular meals) during leisure time than controls, although the cases reported to drink more coffee during the weekends, while the controls indicated less differences in coffee consumption between working days and days off. With respect to weekend activities, hobbies were appreciated less by the control group than by the cases. On the one hand, no differences in the appreciation of other weekend activities (including shopping, family visits, bringing children to sports activities) were found. On the other hand, cases did perceive their leisure time as busier than controls. No significant differences were found in appreciation of work.

The mean workweek totaled 35.4 hours for paid work (cases: 37.7; controls: 31.9 hours) and 10.6 hours per week for household chores (cases: 9.5; controls: 12.9), resulting in a not significantly different average total workweek of 47.2 hours for the cases and 44.6 hours for the control group.

The most striking differences between cases and controls were found with respect to self-reported job stress and inability to relax. The items that yielded significant group differences (see Table 2) mainly focused on workload, disability to relax, and inability to cope efficiently with stress. No significant group contrasts were found with respect to ambition, perceived importance of a career, and flexibility/rigidity. Questions relating to job-involvement also failed to reveal any significant discrepancies between cases and controls.

Of the 20 subjects who claimed to have been recovered from leisure sickness, 85% were able to mention a specific life change or episode that was held responsible for its disappearance. The most frequently reported explanation was "change of job" (55.0%). Another reason that was mentioned very often was "a change in attitude towards work and life in general" (25.0%), implying that work was no longer regarded as the most important thing in life, that they were inclined to "put the important aspects of life into perspective", and that they were "paying more attention to signals from the body" (e.g., taking a rest when needed). Three respondents could not provide any possible explanation for their recovery.

Discussion

The current presented studies can be considered as a first, more systematic, attempt to obtain insight into the prevalence and background of leisure sickness. Most notable findings concern the striking similarity in prevalence of weekend and vacation sickness among men and women. Pains, aches and fatigue were the predominant symptoms, while in particular during vacations, viral infections also seem to be rather common. The data further suggest that this syndrome may be best defined as a chronic-intermittent condition, presumably connected to the way people perceive their work and their sense of responsibility with respect to work.

Lifestyle issues did not really seem very relevant, although previous research (Couturier et al., 1992; 1997) has emphasized a possible role for caffeine intake, which indeed was the only variable that yielded a significant difference between cases and controls. Surprisingly, however, the present cases reported to drink more coffee than the controls, whereas in these previous publications, a causal role was attributed to caffeine withdrawal.

Another striking result was the difference in attributions for the two subtypes of leisure sickness. Whereas specific holiday and travel factors were also held responsible for the development of symptoms, no specific weekend activities were mentioned as possibly causally related to the weekend syndrome. However, there was a major correspondence in the role of problems with the transition from work to non-work.

Considering hypothetical causal factors for leisure sickness, we could draw up the following list of possibilities: (i) the symptoms are caused by exposure in the home environment to neurotoxic substances (related to hobbies like gardening, painting, etc.). Exposure to neurotoxic substances, like volatile solvents and pesticides in the home environment is a factor, that should not be overlooked in general practice. We did not pay attention to it in the present study, but the literature makes clear that it makes sense to control for this factor in future studies (Dumont, 1989; Roueche, 1988; Weiss, 1992); (ii) the syndrome is associated with major differences in lifestyle including sleeping, coffee and alcohol intake, etc.; This second explanation was examined in our study, but failed to yield any clear results. If anything, the findings suggested that the cases had a more

regular life pattern during days off than the controls, although it is important to note that we did find differences in coffee consumption, which were, however, opposite to expectations; (iii) when under acute stress, the body has greater rather than lower resistance against disease. This is at least the clear result of several recent studies focussing on the changes in the immune system during acute and chronic stress (Dhabhar and McEwen, 1996; 1997; Spencer et al., 2000); (iv) symptoms may result from problems with the psychophysiological transition from work stress to relaxation, in some cases resulting in overactivity of the parasympathetic system. The second theoretical possibility is based on McEwen and Stellar's (1993) discussion of the concepts of stress and allostasis. The idea behind this concept is that the body, when under pressure, produces a counterforce to establish homeostasis. If the pressure is taken away, the counterforce also has to to be removed, because otherwise again a disturbed balance will ensue, paving the way for the development of symptoms. In the literature on headache, a similar mechanism has been proposed, referred to as the "let-up phenomenon" (Blau, 1987). In order to be able to evaluate the relevance of this hypothesis, we recommend psychobiological studies with (a) alternations between stimulation/effort and relaxation in order to be able to detect a possible lack in flexibility of the physiological system to follow external demands and (b) assaying stress hormones at fixed time points during the course of a working day and a day off; (v) cases develop their symptoms because they have a low appreciation of leisure activities and typical weekend household chores and experience stress, when having to do these activities and tasks (Baruch et al., 1987; Dennerstein, 1995). We did address this issue very specifically in the present study, but failed to find any evidence supporting the view that cases disliked the typical weekend activities more than the controls; (vi) the illness behavior of the cases at days off is positively reinforced by their social environment, providing them certain positive, secondary gains (Fishbain, 1995). Unfortunately, we did not ask explicitly how the social environment reacted to their symptoms and illness behavior or to what extent their sickness prevented them from participating in certain, maybe less appreciated, activities; (vii) the decrease in workload during a day off may make cases more sensitive of bodily processes, which they interpret as physical symptoms, than on a working day. This explanation is based on the work of Pennebaker (1982; 1994), who has demonstrated that

underlying symptom reporting are perceptual processes which are in competition with input from other, external receptors. The idea is that a high external input level makes it less likely that proprioceptive information will be perceived; in other words, people perceive more likely symptoms in a quiet not to say boring environment than in a hectic work environment. This might be an interesting hypothesis in order to explain the more vague symptoms, but it does not seem to make sense for more objective health problems like migraine and viral diseases; and, finally, (viii) cases have the power to "postpone" (un) consciously their illness to a more appropriate time, in a sense comparable to the postponement of death until any personally important event has happened (Anson and Anson, 2001; Phillips and Feldman, 1973; Phillips and King, 1988; Phillips and Smith, 1990). If there is a kernel of truth in this hypothesis, it is tempting to predict that people suffering from leisure sickness have greater control over their bodily processes, which could be tested in biofeedback studies.

Our study also yielded some information about the kind of person that might especially be vulnerable for this condition. The picture emerges of individuals with a high workload, who might be perfectionists and have a high sense of responsibility with respect to their work. A similar personality profile has sometimes also been described for chronic fatigue syndrome patients (Blenkiron et al., 1999; White and Schweitzer, 2000; Wood and Wessely, 1999). Rest and relaxation might be associated with feelings of guilt, which may prevent them from real enjoying their days off. Alternatively, it may also make sense to explore the temperaments of the individuals suffering from this condition. Here, Pavlov 's constructs might be particularly of interest (Pavlov, 1951/1952; Strelau et al., 1999). This author discerns between "strength of excitation", reflecting the functional capacity of the nervous system, "strength of inhibition" which concerns learned and acquired inhibitions representing the ability to stop or delay certain behavior when needed and to refrain from particular behaviors and reactions. Most relevant, however, might be the Pavlovian "mobility" construct, which manifests itself in the ability to give priority to one impulse before the other, excitation before inhibition, and conversely. High-scorers on mobility adapt quickly to new surroundings and pass easily from one activity to another. Low-scorers show less flexibility in response to changing situations.

A characteristic item of the Pavlovian Temperament Survey is "After work I can let myself go right into my free time activities" (Strelau et al., 1999).

The typical symptoms of leisure sickness show a remarkable resemblance to other "modern" illnesses, including chronic fatigue syndrome, multiple chemical sensitivity, burnout, sick-building syndrome, etc. (Barsky and Borus, 1999; Hyams, 1998; Wessely, 1999). This raises the question, whether there is any association with these syndromes, but our findings do not seem to support the view that this "part-time variant of these functional somatic syndromes" is kind of a prodromal phase. Cases suffer on average over ten years from this health problem and may recover "spontaneously".

We are aware that the present investigation has some major limitations. First, we relied in a retrospective study on mere self-reports with all its inherent weaknesses. In addition, as already argued, we did not address all possible relevant factors in our questionnaire. One can also argue whether it makes sense to pool all these cases, suffering from very different symptoms. Rather one could argue that one should focus on specific clusters of symptoms and study their determinants and psychosocial aspects separately. Moreover, the validity of the used questionnaire is not known. Future studies should examine this group with well-validated measures, like instruments for workaholism (Spence and Robbins, 1992). Finally, there is the problem of case-definition (Hyams, 1998). Because of lack of information, we were not able to come up with an objective and clear description of formal characteristics that define cases. A final issue to be addressed is whether the present findings concenr a typical Dutch problem, or whether studies in other (Western) countries would yield similar findings.

In conclusion, we feel that the present study has yielded some intriguing results that invite to further research, with adequate attention to both the cultural dimension as well as psychobiological measures and other aspects that were not taken into account in the current study.

Clinical relevance

We feel that physicians have to take patients who present with leisure sickness serious. It affects their well being negatively. People cannot enjoy their leisure time and, as some

participants spontaneously reported, it also may put the relationship with their partner under strain, who perceives an association between her/his company and the experience of symptoms. As the best approach for these patients, we would recommend first excluding the possibility of exposure to (neuro)toxic substances, probably associated with hobbies and activities around the house and garden. In addition, it should be established whether the patient shows a significant change in coffee intake and sleep pattern. Finally, an assessment should be made of the individual's workload and attitudes towards his/her job and ability to relax. If this latter assessment yields some positive findings, the person may be referred to a psychologist for an intervention aimed at cognitive restructuring (e.g., Rational Emotive Therapy (RET; Ellis et al, 2000) or learning stress-management and relaxation (Lehrer and Woolfolk, 1993; Malkinson et al., 1997). Alternatively, one maybe could expect positive effects of exercising at the end of the last working day in order to facilitate the adaptive physiological processes accompanying the transition from work to the non-working situation. Future studies should focus on the effectiveness of these interventions.

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Table 1a. Frequencies of most reported weekend symptoms

Symptoms WEEKEND	Men	Women	Total
Headache/migraine	71.8	64.7	**67.7**
Fatigue	20.5	45.1	**34.4**
Muscular pains	12.8	33.3	**24.4**
General pains	2.6	31.4	**18.9**
Lack of energy	17.9	17.6	**17.8**
Nausea	15.4	19.6	**17.8**
Back problems	15.3	7.8	**11.1**
Vomiting/qualms	12.8	9.8	**11.1**

Table 1b. Frequencies of most reported vacation symptoms

Symptoms VACATION	Men	Women	Total
Headache/migraine	60.7	51.6	**54.4**
Influenza(like symptoms)/common cold	46.4	50.0	**48.9**
Fatigue	17.9	32.3	**27.8**
Muscular pains	28.6	25.8	**26.7**
Nausea	14.3	22.6	**20.0**
Lack of energy	25.0	12.9	**16.7**
General pains	3.6	19.4	**14.4**

Table 2.1

Significant items of the Attitude and Perceptions Questionnaire for Leisure Sickness

Work load and preoccupation with work

I never have a moment's peace ↑ *****

I can't cope with my work and obligations anymore ↑ *****

When I come home from my work, a lot of chores need to be done ↑ **

My work causes a lot of stress ↑ **

When I finished my work I feel exhausted ↑ **

I have a busy life ↑ ***

I have enough energy to do what I want ↓ *

I think I really need a vacation ↑ *****

Inability to relax

Just doing nothing is a waste of time ↑ **

When I am on vacation, I totally settle down ↓ **

I can't sit down and just do nothing ↑ *

I think others are more capable of handling stress than I am ↑ **

When I have vacation, I really have to prepare myself ↑ *****

When I am on vacation, I can't forget my work ↑ *****

When I have some time off, I feel guilty, because I'm not working ↑ ****

When I have a day off, I have no problems with putting my work out of my mind ↓ ****

I can relax easily ↑ ****

When I have some time off, I think about my work ↑ ***

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Note. Table contains only the items that were significantly differently answered by cases and controls.

↑ cases agree more with this item than controls. ↓ cases agree less with this item than controls.

*p < .10 **p < .05 ***p < .01 **** p < .005 ***** p < .001