## The tired patient

- B Sparks



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#### Curriculum vitae

In September 1987 Bruce Sparks became Professor and Head of the Department of Family Health at the University of the Witwatersrand. He came from a four-man group practice in Johannesburg and had been a part-time teacher in the Department of Medicine for some years. He is also the Secretary of the National Council of the Academy, a member of the College of Medicine of SA's Council and an examiner for the MFGP. His special interests are in family therapy, sexology, doctor-patient relationship and computer technology. Professor Sparks is married and they have 2 children.

KEYWORDS: Fatigue; Diagnosis; Incidence; Age factors; Sex factors

How do I know that my youth is all spent? Well, my 'Get up and go' has 'Got up and went'. But I really don't mind when I think with a grin, Of all the grand places my 'Get up' has bin.

ANON

#### Summary

This article discusses tiredness as a disease rather than a symptom in order to understand its presentation, diagnosis and management. In Part I some definitions and studies are given; age, sex and socio-economic factors are discussed as well as organic vs psychological tiredness.

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- · "Dr I need a tonic to keep me going"
- · "I'm so exhausted!"
- · "... shattered!"
- "I just want to sleep all day!"
- "I'm so tired I can't face anything"
- "I feel so drained and tired all the time!"
- "I could literally sleep for a week"
- · "All I need Doctor, is a 'good pick-me-up'!"
- · "I feel so weak and drained"
- · "I'm 'knackered' "

n the average family practice we are presented each day with this sort of complaint. One of the most difficult tasks in medicine is to diagnose a serious disease in its early undifferentiated stage, when an imprecise complaint such as tiredness is the only symptom.<sup>1</sup>

Fatigue is a commonly experienced symptom which may be a component of virtually any disease and may have a physical, psychological and mixed origin. It is possibly the most common, yet least understood, and most neglected symptom in general practice, and words such as "tiredness" or "fatigue" are not even mentioned in the indices of major textbooks of medicine. Also, very few studies have been done, especially in recent years. Our modern high tech medical world hardly considers a simple topic such as tiredness but the physician of the 1940s and '50s certainly were prepared to philosophise, and it is in these years that one finds the most publications. I have been forced to glean most of the statistical data from early papers.

The military problems of the first World War gave considerable impetus to the study of fatigue. The special interest lasted a few years and then died away. The second World War again thrust the problem of fatigue on the medical profession and on psychologists. Wide variations in the ability of military recruits to withstand the stress of special army tasks led to a frantic effort to improve the methods of selecting men. Phrases such as "battle fatigue", "combat fatigue" or "pilot fatigue", entered the dictionaries and it was realised that psychological factors were a predominant influence on the etiology of these conditions.

In this article I discuss tiredness as a "disease" rather than a "symptom" in order to understand its presentation, diagnosis and management.

#### Tiredness is a WHOLE symptom

#### Definition

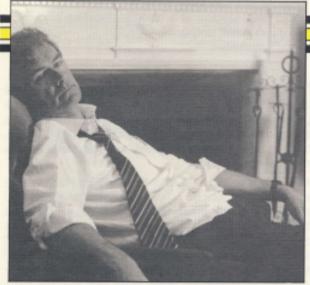
There is no precise, reliable, quantifiable definition of fatigue or tiredness which is clinically useful. This absence of an overall definition of tiredness pre-empts any scientific basis for measuring the condition, because logically, that which can not be defined can not be measured, and is not understood.<sup>2</sup> It has been loosely defined as 'a sense of weariness described variously as exhaustion, low vitality, ... often accompanied by a subjective sensation of weakness and strong desire to rest or sleep'. Others add a self-felt assessment of inadequacy and difficulty in concentration.

#### Incidence

The incidence in the general population is difficult to estimate, but we are certainly not seeing all instances of the symptom, as the majority are being managed by self-help, usually by the use of selfprescribed vitamin "tonics", or life-style manipulation, such as jogging or going to a "gym". According to Banks, only 1 in 456 symptom episodes of energy change will reach a doctor.

#### Location

Tiredness is a "whole" symptom much like the true "holistic" concept of JC Smuts. It is felt throughout the patient's body and is not confined to regions, anatomical structures or specific physiological functions, but rather it emanates from the natural whole of the human body and mind. It is the interrelationship of these two that governs the consciousness of tiredness.



# PATIENT PERFORMANCE PED NOT BE AFFECTED BY NTI-HYPERTENSIVE THERAPY

#### Age distribution

Fatigue occurs at any age but is relatively rare in children under 15 years, (2,3% of the patients with fatigue in the 1975 National Ambulatory Medical Care Survey). It is stated to be high in menopausal women and I have certainly found it to be a common symptom in young women.

People tend to think that lack of energy means lack of vitamins

#### Sex ratio

Female: male = 2:1

A study of forty-year-old Danes found that 40% of women and 25% of men felt "tired at present". It is thought that this may be due to the fact that women work harder at jobs with a less distinct endpoint in sight and fewer rewarded goals. Some conditions are also more prevalent or exclusive to women such as menopause and pregnancy. Possibly the ratio may be a manifestation of visiting patterns to doctors rather than differences in prevalence.

#### Socio-economic status and race

These do not appear to be risk factors, but no study has been done in RSA, and a transcultural study would certainly be an interesting and valuable exercise.

#### Classification

Several classifications for fatigue have been suggested, <sup>1, 6, 10, 11, 12, 13, 14</sup> but the simplest scheme uses an etiological axis of physical, psychological and a mixture of both.

I prefer using the following classification (Fig 1).

- physiological (normal)
- physical (organic) acute
- psychological

- chronic

Fig. 1

Physiological tiredness is 'that which can normally be expected in a mentally and physically healthy individual when an imbalance in exercise, rest or

### ON THE ROAD AGAIN

- Effective control on 1 tablet per day.
- Limited need to co-prescribe.
- Well accepted by most patients.



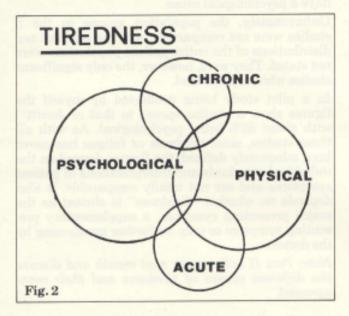
The practical alternative to a stepped care approach in hypertension.

Clopamide 5,0mg Reserpine 0,1mg Dihydroergocristine 0,5mg (as the Mesylate) Ref. No. H594 (Act 101/1985) Sandoz Products (Pty) Ltd. PO Box 371, Randburg, 2125.



diet exists, such as would occur with prolonged mental stress or pregnancy'. 10

I have attempted to illustrate this classification in a graphic model (Fig 2).



#### Organic vs psychological tiredness

A useful method of differentiating organic from psychological tiredness is illustrated in Table 1.

Table 1 - Tiredness - Organic versus Psychological factors 15 Organic Psychological Features Usually family Usually patient Presenting or friends complainant Anxious/depressed T11 Physical appearance /normal Primary deficit Ability >4 months or <2 months Duration recurrent Worse in after-Worse in morning/ Timing noon or evening whole day Fluctuating Progressive Course ? related to onset Stress related Onset of ailments Unaffected Relieved Effect of sleep or rest Worsens Relation to phys | Relieves symptoms symptoms activity Family and Stressful Supportive environment Specific and few Associated Nonspecific and multiple symptoms Often functional Usually organic Previous health problems

In organic disease the family or friends of the patient often contact the doctor due to their concern about his recent deteriorating health, stamina or appearance and they will be most supportive. In functional tiredness the patient who has a stressful family or work environment will present personally when experiencing a fatigue or lack of motivation of longer duration. The duration of psychological tiredness tends to be greater than 4 months while that of organic origin is usually shorter than 2 months. <sup>1, 14, 15</sup> (See Table 2).

Table 2 – Causes of fatigue related to duration for 141 patients with one diagnosis (Morrison JD 16)

	Causes of fatigue		
Duration of fatigue	Psychological (no of pts)	Physical (no of pts)	
less than 1 month	16	39	
One to four months	27	21	
More than four months	29	9	

Classically the person with psychological tiredness will complain of being tired when waking and often during the whole day, but feeling better after a game of squash or a session at the gym. She may also be feeling better in the evening. She also may have typical symptoms of depression (depressive sleep disturbance, irritability, lack of motivation, etc.). On questioning, the patient will be able to differentiate the primary defect as either one of lack of desire for activity or one of wishing to do exercise but finding progressive weakness and exhaustion during the activity.

I discuss Table 1 with the patients and it assists them to understand their condition. The table should be used as a guide to give the doctor and the patient some direction for further action. It should also be remembered there are often features of both types, as in the mixed form.

#### CAUSES OF TIREDNESS

#### Myths

#### Public's misconceptions

In the mind of the public lack of energy tends today to mean lack of vitamins. This idea is exploited by the manufacturers of vitamin products – especially around exam time and during the winter months. In fact, in one study vitamin deficiency was encountered in only 1 of the 300 cases. 12 The concept of vitamin deficiency as a cause of lack of energy has surpassed the previous notion when I was a child that constipation or "poor elimination", was to blame!

Cancer, too, is frequently feared by patients when chronic ill health of any kind appears but in fact is generally found in only 0,7% of cases of tiredness.<sup>12</sup> Cancer seldom produces weakness unless it is so far advanced that anaemia, and cachexia has resulted.

## "If no cause is obvious then the patient must have a psychological problem" – a myth?

#### What about doctors?

Doctors rate anaemia high on the list of conditions often treated for tiredness. Generally it is accepted that the Hb must fall by 30% before symptoms of tiredness are evident, ie in chronic slow anaemia. I must say that I have found quite a few tired women who have had ferritin levels below normal and who have so far been able to sustain normal haemoglobin levels, who have responded quite well to iron.

A diagnosis of "low blood pressure" is often made when BP readings are in fact normal. Any young women will have low BPs, and will answer in the affirmative when questioned about postural effects on rising, but I often wonder whether it is justifiable to label them as having low BP and put them on Effortil. I have often seen them later when they are fine but the BP hasn't risen a jot, and in fact may be lower.

One myth to be aware of is "if no cause is obvious then the patient must have a psychological problem" and be consigned to what has been described as the clinical rubbish basket of neurotic ill-health. If one asks any patient including healthy ones, and even GPs, about stress factors in their lives, one will usually find some. The fact is that they may not be responsible for the condition. Rather an evaluation for depression or anxiety should be made in all cases and not by default, in those with apparently normal exam and investigations.

#### What in fact are the causes of tiredness?

From Table 3, which is a composite analysis of figures from five studies, it is evident that about 55 to 60% of patients with tiredness were thought to have a psychological cause.

Unfortunately, the population groups in the 5 studies were not comparable, and the age and sex distributions of the entire patient populations were not stated. They were, however, the only significant studies which I could find.

In a pilot study being conducted by myself the figures show a similar spread to that of Jerritt<sup>17</sup> with about 60% being psychological. As with all these studies, since tiredness or fatigue has never been adequately defined, the figures depend on the individual standards and interpretations of patient symptoms and are not totally comparable. It also depends on whether "tiredness" is elicited as the major presenting symptom, a supplementary presenting symptom or only on further questioning by the doctor.

Note: Part II will appear next month and discuss the different causes of tiredness and their management.

#### References

- Valdini AF. Fatigue of Unknown Aetiology a Review. Fam Prac 1985; 2(1): 48-53.
- Eidelman D. Fatigue: Towards an analysis and a unified definition. Med Hypotheses 1980; 6: 517-26.
- Bartley SH. Fatigue, Mechanism and Management. Springfield: Charles C Thomas, 1965: 52.
- Banks MH, et al. Factors influencing demand for Primary Medical Care in women aged 20-44 years: A Preliminary Report. Int J Epid, 1975; 112: 60.
- Smuts JC. Holism and Evolution. 3rd ed. London: Macmillan, 1936; 1.
- Ffrench G. The Clinical Significance of Tiredness. Can Med Assoc J 1980; 82: 665-71.
- National Ambulatory Medical Care Survey: 1975
   Summary, Hyattsville, Md, National Centre for Health Statistics, 1978; 22-6.
- Norreland N, Holnagel H. Fatigue among 40 year olds. Ugeskr Laeger 1979; 141: 1425-9.
- Rhoads JM. Overwork. JAMA 1977; 237(24): 2615-8.

7	Table 3 - Causes of fatigue						
	Number of patients	Psychological %	Physical %	Mixed %	Physiological %	No diagnosis %	
Allan (1944)12	300	79,7	20,3	NR	NR	NR	
Jerritt (1981)17	300	59,1	39,6	NR	1,3	NR	
Morrison (1980)16	176	40,9	38,7	11,9	,6	7,9	
Katerndahl (1983)10	59	35,6	37,3	NR	11,9	15,2	
Ffrench (1960)6	105	26,7	71,4	NR	1,9	NR	
TOTAL	940	57,1	36,7	2,2	1,6	2,4	

NR = Not recorded

#### Tired patient =

- Katerndal DA. Fatigue of Uncertain Etiology. Fam Med Rev 1983; 8: 26-38.
- Friedman HH. Fatigue. In: Problem Orientated Medical Diagnosis. Boston: Little, Brown & Co, 1975: 709.
- Allan FN. The Differential Diagnosis of Weakness and Fatigue. N Eng J Med 1944; 231(12): 414-9.
- Muncie W. Chronic Fatigue. Psychosom Med 1941; 3(3): 277-85.
- Kaye PL. Fatigue: Pervasive Problem. NY State J Med 1980; Jul: 1225-9.
- Solberg LI. Lassitude, JAMA 1984; 251(24): 3272-6.
- Morrison JD. Fatigue as a presenting complaint in family practice. J Fam Pract 1980; 10: 795-801.
- Jarrett WA. Lethargy in General Practice. Practitioner 1981; 225: 731-7.
- Edit. Fatigue as an unwanted effect of drugs. Lancet 1980: 1285-6.
- Friedlander HS. Fatigue as a presenting symptom. Curr Therap Res 1962; 4: 441-9.

#### From the Journals

Effect of a rapid diagnostic method on prescribing patterns and ordering of throat cultures for Streptococcal Pharyngitis

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The sensitivity and specificity of a rapid identification test for group A B-hemolytic streptococcus and its impact on prescribing antibiotics and ordering throat cultures were evaluated in a primary care office setting. The calculated sensitivity, specificity, positive predictive value, and negative predictive value were 82 percent, 92 percent, 76 percent, and 94 percent, respectively. Throat cultures were ordered for 98 percent of patients with acute pharyngitis regardless of the method of testing available. After use of the rapid identification test within the office, a reduction was observed in physician prescribing of antibiotics before the throat culture results were known. Physicians were more likely to initiate antibiotics immediately when rapid test results for streptococcal infection were positive and provide patient education regarding symptomatic treatment when the results were negative. The rapid identification test is an acceptable alternative to the standard culture technique in the family practice office. The rapid test was apparently responsible for the observed reduction in antibiotic prescribing and should reduce unnecesary cost and antibiotic exposure in the ambulatory setting.

