Neurasthenia -
A Technical Report from The World Psychiatric Association Group of Experts

June 2002

This project was supported by an unrestricted educational grant from Pfizer (Asia)

This Technical Report on The Syndrome of Neurasthenia is the product of various meetings of psychiatrists from Asia and elsewhere. Professor Sartorius, during his term as President of WPA, was the chief motivator for this project. The content is the responsibility of the Chairman of the Group of Experts.

I thank colleagues who have contributed to this Report which reflects the clinical expertise expressed in consensus meetings.

With increasing interest and research in the understanding of the syndrome, I hope that this Technical Report will become obsolete and be replaced by a more evidenced-based version.

Edmond Chiu
Chairman of The WPA Group of Experts in Neurathenia
June 2002

Contents

Preface

Consensus of experts about an issue of importance is welcome at any time. It is indispensable when objective data are lacking and action is necessary. Such is the case of Neurasthenia: data that exist indicate that the diagnosis of Neurasthenia is made frequently, that the condition is accompanied by disability and that it does not respond to many of the treatments offered by general health care workers. There is disagreement about the nosological status of the syndrome. While some consider that it only occurs in the framework of another disorder – for example depression – others point to studies in which the syndrome appeared in the absence of other significant indications of an illness that would explain its presence. Disagreement also exists about the course of the disorder; some believe that the course is chronic and the disorder will disable the individual suffering from it while others assert that the syndrome – if it exists at all – does not last long and will not result in impairments. The stability of the clinical picture of Neurasthenia is also debated. Some researchers state that the symptoms defining the disorder (as well as their severity) change over time while others aver that the syndrome is stable. The relationship between the neurasthenic syndrome and the chronic fatigue syndrome (CFS) is also contested. While many consider that both terms refer to the same condition (perhaps forms differing in the severity of the disorder and the relative prominence of fatigue) others ascribe the CFS to a variety of specific organic causes and vigorously deny any connection between the two.

The International Classification of Diseases in its 10th Revision (ICD-10) provides a category for Neurasthenia and so do several national classifications. There are slight differences among the definitions of categories used in these classifications, mainly in the importance given to specific symptoms composing the syndrome. The category in the ICD-10 has been provided so as to facilitate the accumulation of data about Neurasthenia: once information about the use of the category in mental health and other health services is available it should be easier to decide where to place the disorder and how to best define it. The availability of a special category should also facilitate the accumulation of data about the effectiveness of treatments for the condition and improve the communication among experts about research findings and their implications.

Meanwhile, however, people in different parts of the world continue to come to health services with complaints typical of the syndrome of Neurasthenia and ask for help. If we are to help them it is of essential importance to record the description of their

problems and the response to treatment that they are were offered. This will allow the distinction of Neurasthenia occurring in the context of other disorders from that occurring on its own and thus improve our understanding of the problem of medical practice. Results of more rigorous scientific investigations of the condition and of its effective management will also be easier to interpret of well organised information about reflecting clinical experience is available.

Recording of experience and scientific debate about the strategies for the management of Neurasthenia depends on the collaboration among experts in many countries and on their agreement on terms and on the extent of current knowledge. It is for this reason that I believe that the work of Professor Edmond Chiu and the group of experts who have worked on production of the WPA Consensus Statement on the Syndrome of Neurasthenia is of major importance. The widespread use of this statement will help us to understand each other better and to learn more about the disorder and its treatment: which in turn will enable the response of health services to the problem of Neurasthenia to be more effective. It is therefore a great pleasure for me to thank Professor Chiu and the members of the group that worked with him on the production of this draft statement for their effort and to express the hope that we shall soon know enough about Neurasthenia to provide better help to the many who suffer from it.

Professor Norman Sartorius
Past President
World Psychiatric Association
Geneva

Commentary

From the President of the World Psychiatric Association

The World Psychiatric Association should be more involved in the development of position papers as the one produce by the Task Force on Neurasthenia. The job done is outstanding and paves the way for further documents produced from the same international perspective and methodology.

Until recently the WPA had no scientific sections on specific disorders, and today there are only a few of them. Still, the number of symposia and other session in major meetings of the Association on disorders is remarkably low. It seem that the international psychiatric community is more concerned on the impact of other disciplines or methods in our field (be it neuroscience or neuroimaging, or psychosocial sciences) or the development of concrete areas to delve in our knowledge (i.e. biological psychiatry, social psychiatry). In spite of this I strongly believe in the need to give priority to a strategy focusing on diseases. It is true that in the last 20 years DSM and ICD have been able to produce a common language of psychiatry and the then interrater reliability of psychiatric diseases reach the levels of other medical specialties. But, modern nosology relies mainly on the symptoms present, because those are easy to grasp, and other criteria, such as underlying structural or functional abnormalities, or the repercussion of external agents, which are the primary criteria for nosology of other specialties, can not be commonly applied to psychiatric diseases.

A nosology based on symptoms produces a simple language, easy to understand and to use, but tells nothing about the diseases themselves. Consequently, it does not allow, per se, to do research on the basic abnormal psychological phenomena involved and in their biological correlations. At the end, it leads to a sense of frustration, which appears more and more often in discussions at scientific meetings.

Depressive episode is a clear cut diagnosis in ICD-10. In the ICD-10 field trails the interrater reliability reaches a Kappa index of 0,77. So far, so good. But, what is a depression? According to DSM-III it is an affective disorder. In ICD-10 and in DSM-IV is it a mood disorders (with affective in brackets).

Panic disorder is an anxiety disorder among others. In the DSM-III Spanish and French translation it is an anguish disorder. In the Task Force of ICD-10, the issue of maintaining the term neurosis

was discussed. An alternative proposed was emotional disorder, which was turned down soon.

Nosology needs a clear cut definition of what are affects and emotions, what are their differences, what are their relation to mood states, and what are the differences between anxiety and anguish, or is the relationship to the fear of phobias. This last seems simple to answer: fears and phobia, are related to specific situations and objects. Yes, but Freud wrote about *Todesangst*, lit. anxiety from death instead of *Todesfurcht*, fear of death, correctly indeed because he was referring to the anxiety which manifests itself in the fear of death.

This gibberish hidden by the scientific accuracy of nosology need to be made more explicit. The case of neurasthenia is particularly striking. Neurasthenia is a diagnosis not accepted in DSM-III and latter versions of the American Psychiatric Association classification but it is quite a common diagnosis in many parts of the world. There is a trend in many non-western countries from the diagnosis of neurasthenia to the one of depression, and a considerable overlap may be present too. Transcultural aspects are therefore essential to the notion of neurasthenia. The diagnosis became popular in European countries during the Industrial Revolution, reflecting a notion of a failure in the human machine. *Nervous breakdown* is still a popular expression today in many countries. It has been claimed that along the 19th century the concepts of neurasthenia and of premenstrual syndromes were medicalized (King, 1989) implying that negative views on a woman's condition may have created clinical diagnosis where only negative attitudes towards human nature were present. To suffer from "nerves" was related in the 19th century to social roles and class ideologies (Davis et al., 1989). The concept of neurasthenia was born with a high cultural load, and consequently, of different kinds and intensity of stigma. This includes gender neurasthenia is much common in women or country, sex – neurasthenia is due to masturbation or abnormal sex practices, and this is explicit in the description of Daht and Schenkin.

Neurasthenia manifests a lack of compliance of the neurasthenic person with the ideal of the society, where he, specially she, lives, is expressed in the term vexatiousness, a characteristic of the Shenkni disease, included by the WPA Task Force as a characteristic of the syndrome of neurasthenia. This can be interpreted as a consequence of the perception that a proper male in the US cannot be prone to neurasthenia breakdowns. This reminds me of two anecdotes. Once, a patient, Carmelite sister, a Catholic religious order extremely ascetic, obviously depressed, denied her condition because “a daughter of Saint Theresa is never

sad". During a trip to China, psychiatric colleagues considered depression an extremely rare disease because after ending with the Cultural Revolution, no Chinese person could feel depressed. In Eastern countries depression is perceived as a mental disease, and bears a higher degree of stigma than neurasthenia, which is perceived as a disease of the "nerves". This has lead to the notion that neurasthenia is more common in oriental population than in occidental ones. The WPA Document clearly indicates that this is not the case. The prevalence in European countries is higher than in China (7.4 to 10.5 vs 2), it is also high in Chile (10.5). Nevertheless the fact that neurasthenia is better accepted than depression in Eastern countries makes physicians to adapt a double diagnosis strategy: they tell the patients that they suffer from neurasthenia, but they write in their record the diagnosis of depression, as it is the ground for the prescription of an antidepressant.

The psychoanalytic and psychodynamic approach to psychiatric disorders were responsible for the substitution of the word neurasthenia for neurosis in western countries. Freud himself was very critical to the notion of neurasthenia (Solms, 1989) but such theories did not have such an impact in other cultures where psychodynamics would, in any case, be quite different. Therefore, the notion of a nervous exhaustion survived better. In Japan, Morita described in the early 20's a specific type of neurotic disorders, the shinkeishitsu ('constitutional neurasthenia'), and a famous therapy very different from the psychodynamic western approach. (Russel, 1989). Morita therapy and Naikan therapy have deep seated roots in Buddhist tradition (Suzuki, 1989).

Today, neurasthenia is a frequent diagnosis in countries going through an industrial revolution themselves (i.e. China). According to Peng (1990), even nowadays, neurasthenia is the most common of neurosis in China, reaching 50% of all the diagnosis of neuroses. This implies that DSM-III and similar criteria could only be applied in China after an important educational process. Recent changes in this country will not automatically go in the direction of reducing the diagnosis of neurasthenia as it is much related to the process of industrialisation and it is very common in workers with occupational hazards (up to 27-35%, Wang, 1989). In modern Hong Kong, neurasthenia serves the important function of destigmatizing psychiatric disorders (Cheung, 1989). In Taiwan, younger generation of physicians within both general and neuropsychiatric practice on the whole, reject neurasthenia as a diagnosis term. However, one third of neuropsychiatrists and 40% of general practitioners use this term in their practice in order to improve the treatment and to establish a good communication and rapport with their patients they

treat; most of them however, do not use the term in their formal diagnosis (Rin and Huang, 1989).

Few studies have focused on transcultural diagnosis of neurotic disorders. The one carried out by Tseng et al. (1986) videotapes and short case record summaries of six Chinese patients were shown to psychiatrists in Beijing, Tokyo and Honolulu. Diagnostic disagreements occurred in cases with symptoms of decline in mental function, which were overwhelmingly diagnosed as neurasthenia by Chinese clinicians and cases of situational stress, which were diagnosed as adjustment reaction by US clinicians. More recently, Zang (1989) selected 40 patients who were diagnosed as suffering from neurasthenia by two Chinese psychiatrists to be re-diagnosed using ICD-9 (using the CATEGO computerised system based on PSE findings) and DSM-III (based on findings of the Diagnostic Interview Schedule) criteria. He found that the distribution of the re-diagnosis is widely disposed from mild character disorders to severe affective disorder; that most of the patients are re-diagnosed as having an anxiety or depressive disorder; that the majority of diagnosis belong to the field of neurosis except of diagnosis DIS/DSM-III approach; that there is a group of patients not able to be re-diagnosed, in other words, they could be considered as primary neurasthenia. Furthermore, the patients tend to over-report their suffering or symptoms, which result in a discrepancy of findings between objective assessment and self-regaining. Other authors have focused on the different kinds of asthenic disorders. According to Sokoslovskaia (1989), two types of the syndrome of asthenia can be distinguished: one of a conversion nature, and another one of psychovegetative nature. The latter one, consisting in the presence of pain, sleep disturbances and other somatic symptoms may correspond to some form of depressive disorders.

Neurasthenia is accepted to be a symptom of chronic intoxication, often linked to occupational hazards and stressing working conditions, and as such, it has received great attention in Scandinavian and also in other countries (Lang, 1986; Stornstein and Stabell, 1986; Flodin et al, 1989; Van Vliet et al, 1989; Orbaek and Nise, 1989; Lindberg and Lindberg, 1989). Often, it is linked to the stress of occupation, i.e. in sailors (Nitka, 1986; Voloshina, 1989), to the need to process high amounts of information ("information neurosis", Chkivishvili and Somundzian, 1987), to a post-traumatic stress disorder (Jakubik, 1988) or to the effects of migration (Kohn et al., 1989).

Fatigue and neurasthenia are also symptoms of brain disorders such as cerebrovascular disorders (Burtsev and Molokov, 1986) and it has been associated pernicious anaemia (Magiera, 1986), to the exposure to high altitude (Ryn, 1988) and brain injuries (Morozow, 1987). In

Eastern European countries, the term pseudoneurasthenia is mainly used for those cases secondary to cerebrovascular disorders, but on primary autochthonous neurasthenia is accepted too (Gorchakova, 1988; Grasser,1989). Fatigue is the core symptom of neurasthenia, it is a symptom ill defined and studied (Berrios, 1990). But to try to reduce the problem of neurasthenia to the diagnosis of the symptom is bound to error, because the symptom itself has different origins. The creation of "fatigue clinics" following the model of pain, sleep and other "clinics" to cover a social need or just to have a share of a market is certainly not to be welcomed.

Neurasthenia is a common symptom of influenza and other viral disorders. Recently, a "new disease" associated to the "virus of the year" (Holland, 1988) has gained great attention. Namely, a chronic mononucleosis infection has been made responsible for a syndrome present mainly in middle age executives in the USA, presenting symptoms of fatigue, muscle aches and other ill defined symptoms (Strauss, 1988) attributed to chronic mononucleosis or chronic infection with the Epstein-Barr virus, also called myalgic encephalomyelitis (Richmond, 1989). The stigma of psychiatric disorders is the ground for the proliferation of novel, fashionable disorders (i.e. food allergies that cause psychological symptoms, post-infections neuromyasthenia, candidiasis hypersensitivity, severe premenstrual syndrome (Stewart, 1990) and others. Recently, the supposed chronic fatigue syndrome related to chronic viral infection has been considered as an affective disorder (Greenberg, 1990), although the problem is still unclear. Abbey and Garfinkel (1990) have described and integrate behavioural and biological approach to the chronic fatigue syndrome, but they have also stressed that among many inconsistencies in the description of the syndrome the high prevalence of major depressive episodes stands out. The same applies for the so called myalgic encephalomyelitis (Wessely, 1990).

The stigma of neurasthenia leads to its denial: it is a chronic fatigue syndrome due to a viral infection, labour related disorder (as the neurasthenia described in Norwegian sailors), a masked depression, a consequence of trauma and others.

The difficulty in accepting the notion and the diagnosis of neurasthenia is due to the fact that it is not difficult to know where it belongs. Depression is a disturbance of the mood, anxiety is an emotion, delusion is a disturbance of the meaning given to experience and so on. But neurasthenia, what is it? In ICD-10 it is grouped among the disturbances of psychological functions together with somatomorph disorders, hypochondria, conversion disorders and dysmorphophobia. What do these disorders have in common? Maybe nothing more than the fact that their symptoms overwhelmingly are somatic and that few psychological

disturbances are present in them, with the exception of a negative attitude towards the possibility of the body to perform well.

To perform well is first of all to perform in silence. The experience of the normal body is silent: perception arises when an illness is present or the functions surpass physiological limits. The person with neurasthenia, on the contrary, constantly perceive the fatigue of the body. Second, the body is a source of energy and trust, able to be adapted to the environment. The patient with neurasthenia fears not to be able to perform, accompanied by feelings of irritability and excitability. The WPA Task Force includes the first as an emotional symptoms and the second as a cognitive one. I am not sure if this is the right approach. It was the physiologist Haller who in the XVIII Century described this two major activities of the nervous tissue and their differences. Excitability appears as a response to external stimuli, while irritability is present without them. In this context, it is worth mentioning the “irritable weakness” described during the last century, which corresponds to the neurasthenic syndrome.

The real question is whether after considering alternative diagnosis all of the neurasthenic patients, it could be placed in other diagnostic categories, as DSM-III forces to do, or if there is a remaining group of patients showing "idiopathic chronic fatigue" (Van Amberg, 1990), perhaps of a primary nature. Several factors make this dilemma difficult, among them, some of a cultural nature.

In any case, the notion of neurasthenia is as confusing today as it was a century ago. Some cases could be re-diagnosed as suffering from a masked depression disorder and benefit from proper treatment. In some of them, the presence of alexithymic features, or of cultural factors in which the level of depression-anxiety-guilty feelings is of a different nature from what is common in western countries, may be the reason for the "masking" of the disorder. Other cases, belonging to the pseudo-neurasthenia category, are clearly secondary to other disorders, mainly brain affections. But it is also possible that primary cases of neurasthenia do exist, in which the symptoms of fatigue are not secondary to any disorder. Nevertheless, the lack of proper measuring instrument (Berrios, 1990) makes the answer to this question almost impossible today. To make things even more complicated, the term psychasthenia is still widely used in France, but with a precise meaning, namely the character traits of the obsessive personality according to Janet (1903), which has some concordance with sensitive personality of Kretschner (Loas and Samuel-Lajeunesse, 1989).

Literature

Abbey and Garfinkel (1990) Canadian Journal of Psychiatry.

Berrios, G.E. (1990) Feelings of fatigue and psychopathology: a conceptual history. Compr. Psychiatry. **31**, 140-51.

Burtsev, EM., Molokov, DD. (1986) Diagnostika i sanatornoe lechenie nachal'nykh proiavlenii nedostatochnosti krovosnabzhaneiia golovnogo mozga. [Diagnosis and sanatorium treatment of the initial manifestations of inadequate blood supply to the brain]. Zh. Nevropatol. Psikhiatr. **86,** 1305-1310.

Cheung, F.M. (1989) The indigenization of neurasthenia in Hong Kong. Cult. Med. Psychiatry **13**, 227-241.

Chkhikvishvili, T.S., Somundzian, A.A. (1987) The clinical picture of information neurosis. Act Nerv Super (Praha). **29**, 109-111.

Davis, D.L. (1989) Georg Beard and Lydia Pinkham: gender, class, and nerves in late 19th. century America. Health Care Women Int. **10**, 93-114.

Flodin, U., Ekberg, K. and Andersson, L. (1989) Neuropsychiatric effects of low exposure to styrene. Br. J. Ind. Med. **46**, 805-808.

Gorchakova, L.N. (1988) Vialotekushchaia shizofreniia s preobladaniem astenicheskikh rasstroistv. [Torpid schizophrenia with a predominance of asthenic disorders]. Zh Nevropatol Psikhiatr. **88**, 76-82.

Grassler, W. (1989) Zur Differentialdiagnose des sog. vorzeitigen Leistungsversagens oder der vorzeitigen Alterung. [Differential diagnosis of so-called premature performance failure or premature aging]. Z. Gesamte Inn. Med. **44**, 370-373.

Greenberg, D.B. (1990) Neurasthenia in the 1980s: chronic mononucleosis, chronic fatigue syndrome, and anxiety and depressive disorders. Psychosomatics **31**, 129-137.

Holland, R.G. (1988) "Virus of the year"? [letter] Can Med Assoc J. 1988. **139**, 198-199.
Jakubik A. (1988) Leczenie astenii poobozowej. [Treatment of post-concentration camp asthenia]. Przegl. Lek. **45**, 21-24.

Janet, P. (1903) Les Obsessions et la Psycasthénie. Alcan, Paris.

King, C.R. (1989) Parallels between neurasthenia and premenstrual syndrome. Women Health **15**, 1-23.

Kohn, R., Flaherty, J.A. and Levav, I. (1989) Somatic symptoms among older Soviet immigrants: an exploratory study. Int. J. Soc. Psychiatry **35**, 350-360.

Lang, Y.Y. (1986) [Observations on the effects of exposure to methyl methacrylate on workers' health] Chung Hua Yu Fang I Hsueh Tsa Chih. **20**, 344-347.

Lindberg, N. and Lindberg, E. (1988) Painter's syndrome. Am. J. Ind. Med. **13**, 519-520.

Loas, G. and Samuel-Lajeunesse, P.B. (1989) Personnalites psychasthenique de P. Janet et sensitive d'E. Krestchmer: deux entites distinctes?. Ann. Med. Psychol. (Paris) **147**, 825-829.

Magiera, P. (1986) Przypadek zaburzen neurastenicznych i psychotycznych w przebiegu niedokrwistosci zosliwej. [A case of neurasthenic and psychotic disorders in pernicious anemia]. Pol. Tyg. Lek. **41**, 249-250.

Morozov, A.M. (1987) Psikhoterapiia nevrastenopodobnykh rasstroistv v otdalennom periode cherpno-mozgovoi travmy. [Psychotherapy of neurasthenia-like disorders in the late period of craniocerebral injuries]. Vrach. Delo. 101-102.

Nitka, J. (1986) Incidence of neuroses and neurotic syndromes in seamen and workers ashore with gastric and duodenal ulcer. Bull. Inst. Marit. Trop. Med. Gdynia. **37**, 165-173.

Orbaek, P. and Nise, G. (1989) Neurasthenic complaints and psychometric function of toluene-exposed rotogravure printers. Am. J. Ind. Med. **16**, 67-77.

Peng, C. (1990) [A comparative study of the clinical features of neurosis in urban and rural areas] Chung Hua Shen Ching Ching Shen Ko Tsa Chih. **23**, 6-8.

Richmond, C. (1989) Myalgic encephalomyelitis, Princess Aurora, and the wandering womb. B.M.J. **298**, 1295-1296.

Rin H. and Huang M.G. (1989) Neurasthenia as nosological dilemma. Cult. Med. Psychiatry **13**, 215-226.

Russell, JG. (1989) Anxiety disorders in Japan: a review of the Japanese literature on shinkeishitsu and taijinkyofusho. Cult. Med. Psychiatry **13**, 391-403.

Ryn, Z. (1989) Psychopathology in mountaineering. Mental disturbances under high-altitude stress. Int. J. Sports Med. **9**, 163-169.

Sokolovskaia, L.V. Tipologiia astenicheskikh sostoianii (reaktsii, fazy) pri psikhopatiiakh. [Classification of asthenic conditions (reactions, phases) in psychopathy]. Zh. Nevropatol. Psikhiatr. **89**, 110-114.

Solms M. (1989) Three Previously Untranslated Reviews by Freud from the Neue Freie Presse. Int. J. Psychoanal. **70**, 397-400.

Stewart, D.E. (1990) The changing faces of somatization. Psychosomatics **31**, 153-158.

Storstein J. and Stabell K. (1986) Lsemiddelskader. Yrkesmedisinsk og neuropsykologisk underskelse av lsemiddeleksponerte arbeidstakere i en hyttalerfabrikk. [Toxic effects of solvents. An occupational medical and neuropsychological study of workers exposed to solvents in a loudspeaker factory]. Tidsskr. Nor. Laegeforen **106**, 1132-1135.

Straus, S.E. (1988) The chronic mononucleosis syndrome. A. J. Infect. Dis. **157**, 405-412.

Suzuki, T. (1989) The concept of neurasthenia and its treatment in Japan. Cult. Med. Psychiatry **13**, 187-202.

Tseng WS. Di X. Ebata K. Hsu J. Yuhua C. (1986) Diagnostic pattern for neuroses in China, Japan, and the United States. Am. J. Psychiatry. **146**, 1010-1014.

Van Amberg, R.J. (1990) Idiopathic chronic fatigue. A primary disorder. N. J. Med. **87**, 319-324.

Van Vliet, C., Swaen, G.M., Meijers, J.M., Slangen, J., De Boorder, T. and Sturmans, F. (1989) Prenarcotic and neuraesthenic symptoms among Dutch workers exposed to organic solvents. Br. J. Ind. Med. **46**, 586-590.

Voloshina, V.M. (1989) Astenicheskie rasstroistva u moriakov v period dlite'lnykh reisov.
[Asthenic disorders in sailors during long sea voyages]. Zh. Nevropatol. Psikhiatr. **89**, 60-65.

Wang, H.L. (1989) [Preliminary investigation of neurasthenic syndrome induced by occupational hazards] Chung Hua Shen Ching Ching Shen Ko Tsa Chih. **22**, 278-281, 317-318.

Wessely, S. (1990) Old wine in new bottles: neurasthenia and 'ME'. Psychol. Med. **20**, 35-53.

Zhang, M.Y.: The diagnosis and phenomenology of neurasthenia. A Shanghai study. Cult. Med. Psychiatry **13**, 147-161.

Prof. Juan J.López-Ibor
President, World Psychiatric Association
Chairman of the Department of Psychiatry, Complutense University of Madrid.

Introduction

Neurasthenia syndrome presents a significant public health issue:

- The syndrome of Neurasthenia occurs in all countries in which studies were done (Table 1).

Table 1: Prevalence of current ICD-10 psychological disorders and Neurasthenia in different countries

Center	Overall frequency of Psychological Disorders (%)	Estimated Prevalence of Neurasthenia (F48.0) (%)
Ankara (Turkey)	17.6	4.1
Athens (Greece)	22.1	4.6
Bangalore (India)	23.9	2.7
Berlin (Germany)	25.2	7.4
Mainz (Germany)	30.6	7.7
Groningen (Netherlands)	29.0	10.5
Ibadan (Nigeria)	10.4	1.1
Manchester (UK)	26.2	9.7
Nagasaki (Japan)	14.8	3.4
Paris (France)	31.2	9.3
Rio De Janeiro (Brazil)	38	4.5
Santiago (Chile)	53.5	10.5
Seattle (USA)	20.4	2.1
Shanghai (China)	9.7	2.0
Verona (Italy)	12.4	2.1
*Los Angeles (USA)	-	6.4

From Ustun TB, Sartorius, N (1995) Mental Illness in General Health Care. An International Study. Chichester:Wiley

*Zheng YP, Lin KM, Takeuch D, Kurasak KS, Wang YX, Cheung F (1997) An epidemiological study of Neurasthenia in Chinese-Americans in Los Angeles. Comprehensive Psychiatry, 381(5): 249-259.

- It is important to note that Neurasthenia syndrome is frequently seen (though not always recognised as such) both in economically advantaged and less advantaged countries.
  Although the diagnostic category of Neurasthenia is currently out of favour among psychiatrists in certain countries, the condition occurs universally. While its form might show differences from culture to culture it has been shown to lead to significant disability and suffering.
- As our knowledge of clinical experience in primary care psychiatry increases, the Neurasthenia syndrome emerges as a persistent and significant clinical problem.

The tenth revision of the International Classification of Diseases (ICD-10) contains a provision for Neurasthenia. The definition provided in the clinical Descriptions and Diagnostic Guidelines for this category should be complemented by instructions that would make it easier to code in this category all the terms of the Neurasthenia syndrome, possibly with subdivisions for different types of Neurasthenia.

In the future, arrangements should be made to allow the recording of the presence of the neurasthenic syndrome occurring within and independently from other syndromes, which is currently not possible because of the hierarchical arrangement of the ICD-10.

- Current hierarchical classification systems tend to obscure and exclude Neurasthenia, both in itself and when co-morbid with other mental disorders.

In many communities, patients and their families view the concept of Neurasthenia as a non-stigmatized or destigmatizing disease entity.

- Accordingly, some doctors also use the term in communication with their patients.

The objective of this document is to present the consensus of experts about form, course and nature of Neurasthenia syndrome.

Clinical features of Neurasthenia syndrome

The syndrome of Neurasthenia syndrome contains symptoms and complaints that can be grouped in five domains.

- The symptoms making up the syndrome of Neurasthenia vary from patient-to-patient, and may fluctuate over time in an individual patient. The symptoms of Neurasthenia may also change under the influence of environmental changes in the patient's life.
- The Neurasthenia syndrome may occur alone or be present in the course of other mental disorders such as depression or schizophrenia.
- The list of symptoms given below includes most commonly reported symptoms and should be used in drafting the amendments of the ICD-10 and its research criteria for Chapter F. A list of culture-specific terms related to the concept of Neurasthenia is given in glossary of different presentations of Neurasthenia/Fatigue Syndromes. The Appendix describes some culture-related Neurasthenia-like syndromes.

Cognitive domain

Symptoms and complaints include:

- mental 'excitability'
- excessive worry
- inability to concentrate
- inability to sustain intellectual and cognitive activity
- complaints about poor memory
- inefficient, ineffective or unproductive thinking
- unrealistically poor assessment of one's life conditions and own value or appearance

Emotional domain

Some common symptoms include:

- 'irritability'
- dysphoria
- emotional tension
- anhedonia
- 'vexatiousness'
- annoyance

Somatic domain[1]

- headache and other pain (usually predominates)
- non-specific aches and pains
- excessive sensitivity to noise and other sensory stimuli
- intolerance of environmental temperature change (especially cold)
- general physical weakness
- dyspepsia and other gastro-intenstinal problems
- dizziness
- palpitations
- sexual dysfunction

Energy domain[2]

- 'Fatigability' (rapid and excessive tiredness following even minimal physical or mental exertion)
- General physical weakness and fatigue
- Lack of energy

Sleep domain

Symptoms and complaints commonly include:

- Insomnia, including all forms of poor sleep
- sense of sleep failing to refresh
- interrupted sleep
- frequent disturbing dreams

[1] In describing their somatic experiences the patients may be using formulations characteristic for their culture

[2] These symptoms should not be directly attributable to a current organic disease process, although they may follow an episode of physical illness

Commentary on associated factors

Pre-disposing factors

- Exposure to toxins
- Malnutrition
- Vital infections

have been said to result in the appearance of the neurasthenia syndrome. While anecdotal reports on this matter are numerous there is no firm evidence about the relation between physical disease and the occurrence of Neurasthenia.

Personality factors

- Clinical observations suggest that certain personality types (e.g., *Shinkeishitsu* personality in Japan) or personality traits may pre-dispose individuals to the Neurasthenia syndrome. However, these are not necessarily present in all sufferers, nor do these characteristics predict the development of the Neurasthenia syndrome.

Belief systems, explanatory models and Social factors

- Culturally embedded belief systems may influence the development of Neurasthenia syndrome.
- Each community's medical orientation, tradition and system of health care may influence the patient's choice of practitioners of different disciplines, which indicates the need to use their experience and involve them in educational programmes concerning Neurasthenia.

Co-morbidity

The presence of physical illness frequently complicates the diagnosis of Neurasthenia.

- Neurasthenia may appear in conjunction with physical conditions, leading to significantly increased disability and extension of the recovery period.

Issues requiring clarification

Etiology and classification
The relationship between physical illness, stressful events, personality traits and Neurasthenia is unclear. The relationship between the Neurasthenia and chronic fatigue syndromes is also uncertain. While some consider chronic fatigue as a special form of Neurasthenia, mainly marked by excessive fatigue and fatigability as a main syndrome, others claim that the two conditions are nosologically different.

The frequent occurrence of the Neurasthenia syndrome in the context of a variety of somatic and mental disorders raises the question whether Neurasthenia is an independent condition, co-morbid with other illnesses or part of them. The existence of the "pure Neurasthenia syndrome", i.e., of the Neurasthenia syndrome in the absence of other syndromes, speaks for the former possibility. To clarify the issue it will be important to recommend that the presence of a Neurasthenia syndrome should be recorded as well as the condition that was co-morbid with it.

Aetiology
A variety of factors predisposing for or precipitating Neurasthenia have been suggested. These include personality traits, physical disease and intoxication as well as excessive effort. There is insufficient evidence about the role of these factors in the occurrence of Neurasthenia or in its course.

Disability
Neurasthenia has often been considered to be a "sub-threshold" or minor psychiatric disorder by some classification systems. While this may be the result of insufficient overt psychological symptoms to meet criteria for anxiety or depression, it should not be taken to indicate a disorder with little associated disability. Data from the recent Australian National Survey of Mental Health and Well-Being indicates the very high rate of disability due to prolonged forms of the disorder. In that survey neurasthenia was one of the most disabling non-psychotic conditions.

Natural History
The natural course of such disorders has been poorly explored. Classification systems which pre-select for very chronic forms of the disorder (or analogous chronic fatigue states) seen in treatment settings, will tend to demonstrate very high rates of chronicity and limited recovery. Less severe forms may be associated with less disability and more spontaneous improvement. Such disorders often have their onset in adolescence and early adult years. Studies in primary care suggest that the more pure forms of the disorder

tend to retain their form over time and do not necessarily predispose to other more overt psychological forms of mental disorder longitudinally. By contrast, mixed forms of the disorder are associated with ongoing risk to mixed anxiety and depressive syndromes. Some of the mixed forms seen in adolescence may also constitute early forms of bipolar affective disorder. Such disorders are more frequent in patients with other medical conditions, which may constitute risk factors longitudinally.

Relationship with Other Diagnoses

Neurasthenia syndrome may be co-morbid with a range of mental and physical disorders. The following diagram represents a possible relationship pattern.

Mental Disorders					
Depression	**Anxiety**	**Others**	**Physical Disorders**		
				NS	**CFS**
~50-60%	~20%	~10%	~10%	~20%	

Treatment

While there are few formal treatment studies of neurasthenia there is increasing evidence from formal studies in analogous chronic fatigue states to begin to inform treatment decisions. In the management of patients with chronic fatigue, and other similar states such as fibromyalgia (chronic musculoskeletal pain syndromes), a variety of psychotropic and non-pharmacological strategies have emerged. It has been clear in all trials, however, that the response rate to good non-specific clinical care is high. That is, patients should be told that good medical and psychological assessment and the provision of a coherent illness model are essential to long-term functioning.

The more robust findings are for physical rehabilitation and cognitive-behavioural strategies. These approaches are based largely on similar paradigms as those used to manage chronic pain. They encourage managed return to physical and social activity and re-consideration of thoughts or behaviours, which may have perpetuated avoidance of these activities. Controlled trials have indicated that intensive strategies may result in considerable long-term functional gains. The other major behavioural strategy currently is correction of dysfunctional sleep-wake cycles, which are common in these patients. This approach is based on a neurobiological model which suggests that whatever the precipitant to the disorder (e.g. medical illness, depressive episode) that ongoing fatigue, sleep disorder and other neuropsychiatric symptoms are really a consequence of chronic circadian rhythm dysfunction.

Psychotropic medications have been less useful than for conventional mood or anxiety disorders. Neurasthenia without concurrent mood or anxiety components does not appear to respond well to conventional antidepressant medications. Some support has been found for the use of monoamine oxidase inhibitors or low dose tricyclic antidepressants. Other experimental work with the new reversible inhibitors of monoamine oxidase A and the serotonin receptor antagonist has suggested that newer antidepressant agents (particularly those with more noradrenergic and/or dopaminergic activity) may be worthy of formal exploration.

Prognosis

The prognosis of Neurasthenia syndrome appears to vary significantly from patient-to-patient. In general however Neurasthenia is associated with significant disability. More research including long-term follow-up studies of patients with Neurasthenia syndrome is needed to elucidate factors influencing the course and prognosis of Neurasthenia.

Research directions

- In order to carry out appropriate quantitative research, the development of valid, reliable and culturally appropriate instruments for use in the assessment and diagnosis of the syndrome and for the evaluation of changes of the symptoms over time and under the influence of treatment is required.

Once these instruments are available epidemiological surveys and systematic evaluation of treatment and of the impact of Neurasthenia on the quality of life and service utilization should be investigated.

Ethnographic studies of Neurasthenia syndrome and its long-term course will help to delineate the syndrome and its relationship to socio-cultural factors.

Education and training

The understanding of Neurasthenia by health care providers should be improved, through education and provision of information. Important areas for education include the following:

Recognition

- Educational programmes to promote recognition of Neurasthenia in clinical practice in both primary care and specialist practice.
- Improved recognition of Neurasthenia by primary care health workers (e.g. general practitioners) will help avoid costly, unnecessary and potentially damaging investigations.

Management strategies

- While no specific treatment is currently available, primary health care providers should have skills for managing symptoms and for dealing with problems that contribute to the severity of the condition.
- Educational programmes for general practitioners and psychiatrists that will provide such skills should be developed.

Policy Development

- Policy makers should be provided with information about the public health implications and consequences of Neurasthenia syndrome.
- This will promote the rational development of public health policy for health and welfare system.

Conclusions

Contrary to some current beliefs and recent reports, Neurasthenia syndrome is a common problem occurring in all parts of the world. The syndrome has significant negative consequences for individuals and to society and is therefore a public health problem of major importance requiring improved recognition, understanding, research and education.

Glossary of Different Presentations of Neurasthenia/Fatigue Syndromes

Chronic Fatigue Syndrome

Chronic Fatigue Syndrome (CFS), also known as myalgic encephalomyelitis (ME) or Chronic Fatigue and Immune Dysfunction Syndrome (CFIDS) is a popular label in the English speaking world and Scandinavia. The essential features are profound physical and mental fatigability after minimal effort usually accompanied by many other symptoms, such as muscle pain, sleep disorder, mood disturbance, headache and many others. It is often assumed that symptoms are the result of either infective, allergic or immunological processes, and many sufferers vehemently reject any psychosocial explanations for symptoms. Rest is frequently assumed to be helpful in management, but the prognosis in specialist centres is poor. Psychiatrists are rarely consulted by patients, with most care coming from the general medical sector.

There are overlaps between CFS and other poly-symptomatic conditions, such as fibromyalgia and multiple chemical sensitivity. Historical evidence suggests considerable overlap and continuity between modern CFS as seen in the English speaking world and the original descriptions of neurasthenia popular at the end of the 19th century in Europe and North America (but not with the later psychiatric descriptions of neurasthenia from the early 20th century).

The Centre for Disease Control (CDC) has produced a case definition for CFS. Estimates of the prevalence of people fulfilling this criteria vary – but it probably has a prevalence of between 0.2 and 0.5% in the absence of comorbid psychiatric disorders. However, it is important not to equate self-diagnosed/labelled CFS/ME/CFIDS with the operationally defined condition, since the two concepts have only a partial overlap.

Chronic fatigue as a symptom is far commoner, and is often given the label by doctors in English speaking countries of “tired all the time” (TATT). The relation between TATT and CFS is disputed.

Fannao

Fannao (“vexatiousness”) is common in Chinese patients with Neurasthenia. It may be regarded as a mixed cognitive and mood symptom, characterized by conscious subjective feelings of being worried and distressed with conflicting thoughts and unfulfilled

desires. It may or may not manifest as overt irritability, and may to an extent be concealed for the sake of preserving social harmony in a Chinese society. It is not a Chinese culture-specific symptom, and is certainly experienced by Western patients with depressive and anxiety disorders. It is not essential for the diagnosis of Neurasthenia, but has been emphasized by Chinese psychiatrists in order to distinguish Neurasthenia from depressive and anxiety disorders.

Increased Mental Excitability

An unpleasant mental state during which the patient thinks much more than usual or more than considered necessary. The contents of thought are mostly associations and recollections of little significance or of practical use. It eventually results in mental fatigue and decreased mental efficiency. The state occurs frequently and lasts more than half an hour when the patient is engaged in mental activity such as reading or when resting. Increased mental fatigability associated with increased mental excitability is one of the characteristic symptoms of Neurasthenia. It differs from hypomania in the absence of elated mood and increased psychomotor activity. A neurasthenic patient may appear quiet and restful to an objective observer, yet the thinking about miscellaneous things incessantly and would complain that "the brain cannot be idle" or "it does not allow me to rest even for a minute". It differs from obsessive state in the absence of persistent repetition of the same idea or a group of relevant ideas.

Lemah-saraf ("nervous weakness")

Is an escape provision for unexplained complaint of weakness, nervousness (and anxiety). The description of the symptoms is almost the same as "lesu-darah" except that the stress is more on the psychological aspects. The label "lemah-saraf" is also more acceptable (pleasing) for the patient or the family, rather than using a more stigmatized label of mental disorder. They differ from those of General Anxiety Disorders in that the patients did not really express the anxiety as the main subjective complaints.

Lesu-darah ("feeble blood")

A chronic complaint of general weakness sometimes accompanied by difficulty in concentration, feeling depressed (not necessarily depressive mood), and loss of interest and initiative. The term "lesu-darah" is not a traditional name for such specific ill-health condition. It seems to be invented by medical practitioners to "give an acceptable diagnostic label" for pleasing the patient, the family, or the practitioner himself, after having difficulties in finding the cause or diagnosis of the medical condition. Even though it seems to be an escape provision, the term was then

readily accepted by lay-people. It might comply with the right description of Neurasthenia.

Masuk-angin

Nothing comparable if translated into English: “getting or caught wind inside”. It is a very common condition characterized by not feeling well, headaches, tired (sometimes also of weakness), muscle tenseness and muscle-aches. Sometimes anxiety, insomnia, depression and hypochondriac symptoms may also be present, but is not characteristic of the condition. This condition usually follows a busy or exhausting day, a long journey or a wrong position in travelling.

It was usually relieved by rubbing (scraping) some part of the body, and if the respective body area became dark red, it was assumed that the “diagnosis” of “masuk-angin” is justified. Only if the condition became a kind of habitual occurrence, it might be considered comparatively as Neurasthenia.

Shenjing shuairuo

In the early years of the 20th century, the term Neurasthenia was transmitted into China, where it was translated as shenjing shuairuo. Shen is emblematic of vitality, the capacity of the mind to form ideas, and the desire of the personality to live life. Jing originally refers to the meridians or channels, which carry qi (“vital energy”) and xue (“blood”) through the body. Conceptually, shen and jing are treated by Chinese people as one term (shenjing) that means “nerve” or “nervous system”. When shenjing becomes shuai (degenerate) and ruo (weak) following undue nervous excitement, a variety of psychic and somatic symptoms may reasonably ensue.

Appendix

Culture-Related Neurasthenia-like Syndromes
Beyond common or "typical" Neurasthenia, several culture-related specific syndromes that resemble Neurasthenia have been reported in different societies. Following are some examples:

Brain-Fag Syndrome
A relatively well-known example is brain-fag syndrome, reported by the Canadian psychiatrist Prince (1960). According to Prince, while he was working in Nigeria, Africa, he noticed that many young patients, mostly students, visited the clinic with somatic complaints – most of pain or a burning sensation in the head and neck. The student-patients also complained that they had problems concentrating and were unable to read, grasp what they are reading, or recall what they had just read. Prince described the patients as primarily students in secondary school or the university, or teachers or government clerks who were studying in their spare time to raise their educational levels. The patients generally attributed their illnesses to fatigue of the brain due to excessive mental work. Prince suggested the term "brain fag" to describe the condition, characterized with subjective complaints of intellectual impairment, (visual) sensory impairment, and somatic complaints.

Dhat Syndrome
Slightly similar to Chinese *shenkui* is the *dhat* syndrome (spermatorrhea,) a concern of Indian people. According to Indian psychiatrists Bhatia and Malik (1991), the word *dhat* derives from the Sanskrit word *Dhatu,* which refers to the elixir that constitutes the body. Of the seven types of *Dhatus* described, semen is considered the most important. In the Indian system of medicine, *Ayurveda,* it is suggested that disturbances in the *Dhatus* result in an increased susceptibility to physical and mental disease.

The syndrome refers to a clinical condition in which the patient is morbidly preoccupied with and severely concerned about the excessive loss of semen from an "improper way of leaking," such as nocturnal emissions, masturbation, or leaking through urination. The underlying anxiety is based on the cultural belief that excessive semen loss with result in illness. The patients are predominantly young males, who present vague, multiple somatic symptoms, such as fatigue, weakness, anxiety, and loss of appetite, as well as feelings of guilt about having indulged in sexual actions, such as masturbation or prostitution. Some also complaint of sexual dysfunction (impotence or premature ejaculation). The patient attributes the passing of semen in the urine to his excessive indulgence in masturbation or other, socially defined, improper sexual activities (Bhatia and Malik, 1991).

According to Bhatia and Malik (1991), the syndrome is also widespread in Nepal, Sri Lanka, where it is referred to as *prameha* disease, Bangladesh, and Pakistan. Whether called *dhat* syndrome in India, *prameha* syndrome in Sri Lanka, or *shenkui* syndrome in China, there is a common characteristic among these syndromes, namely, the pathology of each is due to the folk belief the excessive loss of semen will result in illness. The cultural belief that conservation of vitality is very important and loss of semen is harmful to the health becomes cultregenic stress and contributes to the formation of semen-loss anxiety.

The concept of conserving semen as the main resource of vitality is not specific to Asian cultures. Nocturnal emissions were also considered symptoms of excessive venery in European society during the 19th century. However, as pointed out by Malhotra and Wig (1975), Asian cultures condemn all types of sexual orgasms, because they involve semen loss, and are therefore "dangerous". In contrast, the Judeo-Christian cultures of the 18th and 19th centuries in Europe considered most types of sexual activities outside marriage to be "sinful".

Kidney Deficiency Syndrome (*Shenkui*)

Paralleling the Western nosology of neurasthenia, Chinese traditional medicine uses the medical term *shenkui* (kidney deficiency syndrome) to describe a similar clinical condition. Typically, the condition was presented by young people who complained of dizziness, poor concentration, impairment of memory function, general fatigue, back soreness (or lumbago), "weakness" of the legs, and so on. It was interpreted by Chinese medicine as a weakness of the kidneys (deficiency of kidney function) (Wen, 1995). According to Chinese traditional medical concepts, corresponding to the five visceral organs, namely, the liver, heart, spleen, lung and kidney. These five organs, in turn, deal with five emotions, each in correspondence -–that is, anger, joy, worry, sorrow and fear (Tseng, 1973). The *kidney*, beyond excretion, symbolically includes the function of sex. Based on this medical concept, excessive masturbation or improper sexual activity is considered one of the contributing factors for developing the disorder of *shenkui.* As an extension of this traditional knowledge, in Taiwan, young people who visit modern physicians may request a urinary examination, concerned that their urine looks turbid. Leaking of semen through the urine is one of their concerns. Abstinence from sex and avoidance of masturbation are often advised by the traditional physician. Special remedies for treating *shenkui* are still often seen in medical advertisements in daily newspapers in Taiwan.

Recommended reading list

Angst J, Koch R (1991) Neurasthenia in young adults. In: Gastpar M, Kielholz P, eds. Problems of psychiatry in general practice. Lewiston NY:Hogrefe & Huber publishers.

Bhatia, MS & Malik SC (1989) Dhat syndrome – a useful diagnostic entity in Indian culture. British Journal of Psychiatry, 13 (2), 227-241.

Cheung FM (1989) The indigenization of Neurasthenia in Hong Kong. Culture, Medicine and Psychiatry, 13(2), 227-241.

Chinese medical Association and Nanjing Medical University (1995) Chinese Classification of Mental Disorders, second edition, revised (CCMD-2-R). Nanjing:Dong Nan University Press (in Chinese).

Chong, Mian-Yoon (1986) Neurasthenia – a study of symptom configuration. The Kaohsiung Journal of Medical Sciences, 2, 5, 295-303.

Chung RC, Singer MK. (1995) Interpretation of symptom presentation and distress: a Southeast Asian refugee example. Journal of Nervous and Mental Disease, 183:639-648.

Costa e Silva JA (1990) Neurasthenia: History of a Concept. Psychological Disorders in General Medical Settings, Eds. N. Sartorius, D. Goldberg, G. de Girolamo, J. Costa e Silva, Y. Lecrubier and U. Wittchen. Hogrefe & Huber Publishers:Toronto.

Deale A, Chalder T, Marks I, Wessely S. (1997) Cognitive behaviour therapy for chronic fatigue syndrome: a randomized controlled trial. Am J Psychiatry, 154:408-414

Goldenberg DK, Felson DT, Dinerman H (1986) A randomized, controlled trial of Amitriptyline and naproxen in the treatment of patients with fibromyalgia. Arthritis Rheum, 29:1371-1377.

Henderson S, Andrews G, Hall W (2000) Australia's mental health: an overview of the general population survey. Aust NZJ Psychiatry, 34:197-205.

Hickie I, Koschera A, Hadzi-Pavlovic D, Bennett B, Lloyd A (1999) The temporal stability and comorbidity of prolonged fatigue: a longitudinal study in primary care. Psychol. Med.,29:855-861.

Hickie IB, Wilson AJ, Wright JM, Bennett BK, Wakefield D, Lloyd AR (2000) A randomized, double-blind, placebo-controlled trial of Moclobemide in patients with chronic fatigue syndrome. J. Clin. Psychiatry (in press).

Kleinman A. (1982) Neurasthenia and depression: a study of somatization and culture in China. Cult. Med. Psychiatry 6, 117-190

Lee S (1994) the vicissitudes of Neurasthenia in Chinese societies: where will it go from the ICD-10? Transcultural Psychiatric Research Review, 31, 153-172

Lee S (1994) Neurasthenia and Chinese psychiatry in the 1990s (editorial). Journal of Psychosomatic Research, 38, 487-491.

Lee S & Wong KC (1995) rethinking Neurasthenia: the illness concepts of shenjing shuairuo among Chinese undergraduates in Hong Kong. Culture, medicine & Psychiatry 19, 91-111.

Lee S (1996) cultures in psychiatric nosology; the CCMD-2-R and international classification of mental disorders. Culture, Medicine & Psychiatry, 20, 421-472.

Lee S (1997) A Chinese perspective of somatoform disorders (editorial). Journal of Psychosomatic Research, 43, 115-119.

Lee S (1998) Estranged bodies, simulated harmony, and misplaced cultures: Neurasthenia in contemporary Chinese Society. Psychosomatic Medicine, 60, 448-457.

Lin TY (1989) Neurasthenia revisited: its place in modern psychiatry. Culture, Medicine & Psychiatry, 13:105-129.

Malhotra HK & Wig NN (1975) Dhat syndrome: a culture-bound sex neurosis of the Orient. Archives of Sexual Behavior, 4 (5), 519-528.

Merikangas K, Angst J (1994) Neurasthenia in a longitudinal cohort study of young adults. Psychological Medicine, 24(4), 1013-1024.

Mezzich JE, Lee S & Otero A (1999) Psychiatric diagnosis: university and regional adaptations. In: Comprehensive Textbook of Psychiatry, seventh edition, eds. HI Kaplan & BJ Saddock. Williams & Wilkins.

Moldofsky H (1993) Fibromyalgia, sleep disorder and chronic fatigue syndrome. Ciba Found Symp, 173:262-271.

Mori W & Kitanishi K (1984) Morita-shinkeishitsu to DSM-III (Morita nervous temperament disorders and DSM-III). Rinsho-seishinigaku (Clinical Psychiatry), 13(2), 203-213.

Munakata T (1989) the socio-cultural significance of the diagnostic label "Neurasthenia" in Japan's mental health care system. Culture, Medicine and Psychiatry, 13(2), 203-213.

Prince R (1960) The brain fag syndrome in Nigerian students. Journal of Mental Science, 106, 559-570.

Reid S, Chalder T, Cleare A, Hotopf M, Wessely S (2000) Extracts from Clinical Evidence. Chronic Fatigue Syndrome. BMJ, 320:292-296.

Rin H, Huang MG (1989) Neurasthenia as nosological dilemma. Culture, Medicine and Psychiatry, 13(2), 215-226.

Sartorius N (1997) Diagnosis and Classification of Neurasthenia. Judd LL, Saletu B, Filip V (eds.). Basic and Clinical Sciences of Mental and Addictive Disorders. Bibl. Psychiatr. Karger:Basel, No. 167, 1-5.

Natelson BH, Cheu J, Pareja J, Ellis SP, Policastro T, Findley TW (1996) Randomized, double-blind, controlled placebo-phase in trial of low dose phenelzine in the chronic fatigue syndrome. Psychopharmacology, 124:226-230.

Sharpe M, Hawton K, Simkin S, Surawy C, Hackmann A, Klimes I, Peto T, Warrell D, Seagroatt V. (1996) Cognitive behaviour therapy for the chronic fatigue syndrome: a randomized controlled trial. BMJ, 312:22-26.

Starcevic V (1991) Neurasthenia: a paradigm of social psychopathology in a transitional society. American Journal of Psychiatry, 45(4), 544-553.

Tseng WS (1973) The development of psychiatric concepts in traditional Chinese medicine. Archives of General Psychiatry, 29, 569-575.

Tseng WS, Xu D, Ebata K, Hsu J, and Cui YH (1986) Diagnostic pattern for neuroses in China, Japan, and the United States. American Journal of Psychiatry, 143(8), 1010-1014.

Van Der Linden G, Chalder T, Hickie I, Hoschera A, Sham P, Wessely S (1999) Fatigue and psychiatric disorder: different or the same? Psychol. Med., 29:863-868.

Van Vliet C, Swaen GM, Meijers JM, Slangen J, de Boorder T, Sturmans F (1989) Pre-narcotic and Neurasthenic symptoms among Dutch workers exposed to organic solvents. British Journal of Industrial Medicine, 46 (8), 586-590.

Vercoulen JHMM, Swanink CMAA, Zitman FG, Vreden SGS, Hoofs Mpe, Fennis JFM, Galama JMD, van der Meer JWM, Bleijenberg G (1996) Randomised, double-blind, placebo-controlled study of fluoxetine in chronic fatigue syndrome. Lancet, 347:858-861.

Wen JK (1995) Sexual beliefs and problems in contemporary Taiwan. In: TY Lin, WS Tseng, EK Yeh (Eds.), Chinese Societies and Mental Health. Hong Kong: Oxford University Press.

Wilson A, Hickie I, Lloyd A, Hadzi-Pavlovic D, Boughton C, Dwyer J, Wakefield D (1994) Longitudinal study of outcome of chronic fatigue syndrome. BMJ, 308:756-759.

Young, Derson (1989) Neurasthenia and Related Problems. Culture, Medicine and Psychiatry, 13, 131-138. Kluwer Academic Publishers:Netherlands.

Zhang MY (1989) The diagnosis and phenomenology of Neurasthenia: a Shanghai study. Culture, Medicine and Psychiatry, 13(2), 147-161.

List of participants
(First Consensus Conference, Beijing April 1999)

Chairman:
Associate Professor Edmond **Chiu**, A.M.
Academic Unit for
Psychiatry of Old Age
University of Melbourne
St. George's Health Service
Kew, Victoria, Australia

Assistant Chairman
Professor Eng-Seong **Tan**
St. Vincent's Hospital
Fitzroy, Victoria, Australia

Members
Professor **Chong** Mian-Yoon
Department of Psychiatry
Koahsiung Medical College
Taiwan

Professor Jorge **Costa e Silva**
WHO NYU Centre for International
Mental Health
New York, USA

Professor MP **Deva**
World Health Organisation
Western Regional Office
Philippines

Professor **Kua** Ee Heok
Department of Psychological Medicine
National University of Singapore
Singapore

Associate Professor Sing **Lee**
Department of Psychiatry,
Faculty of Medicine
The Chinese University of Hong Kong
Hong Kong, S.A.R., China

Professor Sung Kil **Min**
Department of Psychiatry
Yonsei University College of Medicine
Korea

Professor Norman **Sartorius**
President, World Psychiatric Association
Geneva, Switzerland

Professor **Shen** Yucun
Institute of Mental Health
Beijing Medical University
China

Professor Naotaka **Shinfuku**
International Centre for Medical Research
Kobe University School of Medicine
Japan

Associate Professor Chatchawan **Silpakit**
Department of Psychiatry
Ramathibodi Hospital
Bangkok, Thailand

Professor Wen-Shing **Tseng**
Department of Psychiatry
University of Hawaii
School of Medicine, USA

Professor Sasanto **Wibisono**
Department of Psychiatry
Faculty of Medicine
University of Indonesia
Indonesia

Professor **Young** Derson
Mental Health Institute
Hunan Medical University
China

Dr. **Xu** You-Xin
Institute of Mental Health
Beijing Medical University
China

Observers
Professor Eric **Caine**
Professor of Psychiatry and Neurology
University of Rochester Medical Center
Rochester, USA

Dr. **Men** Fanqiang
Institute of Mental Health
Beijing Medical University
China

(2nd Consensus Conference, Kuala Lumpar, February 2000)

Associate Prof. Edmond **Chiu**, A.M.
Academic Unit for Psychiatry of Old Age
University of Melbourne

Professor Ian **Hickie**
Department of Psychiatry
St. George Hospital
Sydney, Australia

Dr. V.R. **Kairvar**
Palmerston North
New Zealand

Dr. Jimmy See Eng **Kiong**
Hospital Sentosa
Sarawak, Malaysia

Dr. Saroja **Krishnaswamy**
Department of Psychiatry
Faculty of Medicine, Hukm
Kuala Lumpur

Dr. Daniel **Kwek**
Department of Psychological Medicine
Tan Tock Sing Hospital
Singapore

Dr. Sing **Lee**
Department of Psychiatry
Prince of Wales Hospital
Shatin, Hong Kong

Dr. Jeffrey **Looi**
Department of Aged Care and Psychiatry
St. George Hospital
Sydney, Australia

Dr. T. **Maniam**
Department of Psychiatry
National University of Malaysia
Kuala Lumpur

Associate Prof. Harry **Minas**
Department of Psychiatry'
University of Melbourne

Professor Norman **Sartorius**
Hopitaux Universitaires de Geneve
Geneva Switzerland

Professor En-Seong **Tan**
Department of Psychiatry
University of Melbourne

Professor Simon **Wessely**
Maudsley Hospital
London

Dr. Quan **Yang**
Department of Psychiatry
Shantou University, Shantou
Guangdong, China

Observers:

Mr. Kazuko Matsuda
Lilly
Japan

Ms Janet Yap
Robinsons Galleria Corporate Center
Ortigas, Philippines

Acknowledgements

Professor Shen Yucun and the Institute of Mental Health, Peking University hosted the Consensus Conference in conjunction with the Joint Meeting of the International Psychogeriatric Association and Peking University.

Excerpta Medica Medical Publications. produced the First Draft document.

Ms Roz Seath and Mrs. Josette Mambury prepared the many versions of the manuscript.

Pfizer (Asia) and espspecially Kerryn Carmichael for support of The Consensus Meetings and the production of this document.

Printed by Imscan Technologies, Melbourne, Australia