

Primary Care and Neurology

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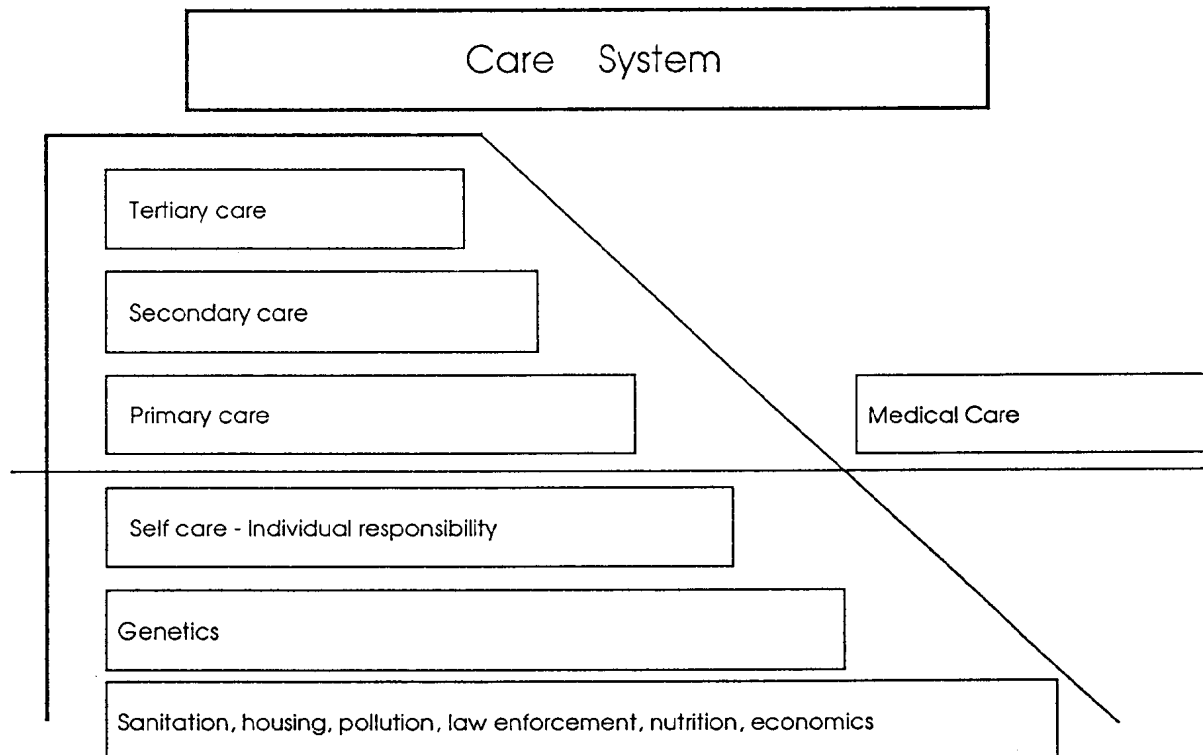
According to the epidemiological study commissioned by the Ministry of Health and Welfare and conducted by Professor Kiyotaro Kondo, neurological disorders cause 20% of all deaths in Japan, and constitute 16% of diseases affecting the Japanese people. The importance of this group of diseases is emphasised by the fact that they now rank third among all disorders - behind cancer and circulatory diseases.

The term "primary care" was first defined in Great Britain and the United States. Research in this area was promoted by Dr. John Fry and other pioneering physicians. The 1977 report of the Royal College of General Practitioners listed common diseases treated within the field of primary care; 12% locomotive disorders, 11% psychiatric disorders, and 3% central nervous system disorders, for a total of 26 %.

The Japanese definition of the term "primary care" was used for the first time in an official Japanese Government document in the 1973 Recommendation of the Council of Graduate Medical Training of the Ministry of Health and Welfare. I helped to formulate this.

"Primary care" refers to the point where the health care system makes the first contact with an individual or family. The roles of a physician include: accurately diagnosing the patient's complaints; giving adequate guidance or performing emergency measures; referring the patient to other suitable physicians in a timely manner; providing continuous treatment to sustain the good health of an individual or family; treating chronic diseases and guiding in their rehabilitation.

Figure 1 - Concept of the health care system (Modified from Nordyke, 1974)



Therefore, a physician who participates in primary care is expected to have;

1. the ability to handle a spectrum of broad common diseases - if not in depth, as a generalist;
2. the ability to put a patient's or family's complaints into a wider perspective, and deal with them in that context;
3. basic levels of technical skills in medicine;
4. the ability to manage and address the various problems encountered by an individual or a family in everyday life because of disorders - by providing treatment, first aid, expert counselling in infectious diseases, maternal and child health care, family planning, etc;

Secondary medical care (medical care carried out by specialists) and tertiary medical care (carried out by sub-specialists or super-specialists) are levels above primary care.

When primary care is expanded to community health, WHO calls it primary "health" care. Underlying primary medical care are components such as self-care (personal hygiene), genetic and environmental hygiene, diet, and economics. Figure 1. shows how Nordyke (1984) organized these elements.

How does a neurologist relate to primary care? Neurology is a subspeciality of internal medicine, and it is preferable to first train in internal medicine before taking it up. The neurologist excels in two basic skills: making a thorough assessment of a patient's medical history, and conducting a systematic physical examination.

These skills are important for developing clinical medicine and sustaining primary care in Japan at a high level, and should be priorities.

At the same time, physicians should refrain from the wasteful, unnecessary and excessively invasive medical tests often seen today in Japanese medical practice. This is important not only for the patients' sake, but for medical economics.

Neurologists carry considerable weight with medical trainees. Students should acquire the neurologist's skills in conducting a systematic examination, and treating patients in a holistic manner, through a psychosomatic approach. Their medical knowledge and competence will be improved career-long if they understand the full profile of a patient's lifestyle - by examining and observing the patient from psychological, social, economic, and ecological points of view.

Consultant neurologists helping physicians involved in primary care should adopt a holistic approach, taking preventive medicine, rehabilitation and psychosomatics into account. Also, as W. Osler taught, a neurologist is strongly expected to understand medicine as "an art based on science". "Art" means the techniques of making human contact with a patient.

The techniques discussed above will enable physicians to enrich the quality of patients' lives - one of the medical profession's most important responsibilities. Many patients with neurological disorders are forced to have long-term treatments. Their difficulties in life increase as they become older. An important role for neurologists is to help and advise their primary care physicians in supporting these patients and their families with kind and thoughtful care.

Neurologists should also underline the importance of their role in primary care by advising public health physicians on the psychological, social and environmental factors concerning a patient's condition.

Including these elements in the curricula for neurological graduate medical education will upgrade the level of primary health care, and improve the quality of life of patients and their families.

References

1. John Fry (1978): *A New Approach to Medicine*, Lancaster England, MTP Press Limited.
2. Nordyke R (1974): *Definition and goals of primary care*. *Advances in Primary Care*, ed. Kallstrom, M. and Yaruall, Seattle, Washington, Medical Computer Services Association.

Concept of Comprehensive Rehabilitation for the Neurologically Disabled

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Introduction

Before addressing rehabilitation, we need to consider its recipients. Who are they? The usual answer is "the disabled". This induces an image of wheelchairs and crutches. When asked if only the users of these aids are disabled, the sensory impaired such as the blind and deaf, and the mentally retarded are also included. However, when asked if training and education for the sensory and mentally impaired is rehabilitation, confusion results. Most people believe that even when they become old, they will require lifelong rehabilitation - providing they do not suffer something like an apoplexy. An average Japanese views rehabilitation as "a medical technique used in respect to mobility impaired patients".

Many books on rehabilitation have been published. Rehabilitation has been described as a person's "recovery of rights". It originally meant "the removal of excommunication" in the religious court. In French dictionaries, the first meaning for rehabilitation is a right to recovery. Depending on the era, people with the right to recovery included the excommunicated and criminals. Rehabilitation began to be used in reference to the disabled, and others who had lost the right to a normal life, after World War I. Today, the recipients of rehabilitation are more than just the disabled. This Chapter will focus on them.

Disorders and impediments

What is a disability? It is an impediment or an obstruction. What is it impeding? The usual walking action, vision, hearing or any other active part of a average life. In this sense, "usual" means something the majority of people can do - with the disabled seen as a minority. This does not mean that what the majority can do is normal, or what they cannot do is abnormal: it simply recognises that an ailment is present. The basis of this misunderstanding is the "abnormal minority" image held by many when the term disabled is mentioned.

I wear glasses because my eyes have abnormal refraction, and my vision is not normal. Based on this, I have a visual impediment and am disabled, but I do not consciously consider myself so. This is because, due to the use of compensatory equipment called glasses, I can live a normal life without feeling any particular inconvenience. However, if I wanted to obtain a pilot's licence, this would be a grave impediment.

People born blind do not think of themselves as disabled. They only feel impaired when they realise they cannot do things other people can do. Subjectively, the blind or "normal people with impaired eyesight" are no different from me. In other words, even though the degree of impairment varies greatly, we are both, subjectively, "normal people with an impairment". Therefore, the disabled includes me.

Most people believe they are living with no impediments. When they become conscious of one - when they go to do something, and realise they have a problem - they are shocked. This could include walking around a room, using a spoon, listening to someone's speech, applying for a pilot's licence, speaking English, etc.

"Having a disability", or feeling disabled so to speak, differs greatly according to whether other people - in the majority - can carry out the action or not. Also, a person must want to do the action - if they do not, they could spend their entire life not being conscious of an impediment. After all, a disability is a relatively subjective thing. This is emphasised, as it has a close connection to rehabilitation.

According to the Resolution adopted by the United Nations General Assembly in 1975, disabled was defined as "people, who due to physical or mental insufficiencies, whether inherent or not, cannot totally or partially complete activities necessary for a normal or independent life". The Basic Law for Measures for the Physically and Mentally Disabled, enacted in Japan in 1970, starting with the physically handicapped, listed various examples of impediments, and defined the disabled as "people, who over a long period of time, have substantial limitations to their everyday life". Mental disorders were not listed among the impediments.

In 1993, the Basic Law was amended to "people, who over a long period of time, due to physical or mental impediments, or mental feebleness, have substantial limitations to their everyday life". While the increase in the kinds of impediments is progress, it is still a limiting definition: the phrases "a long period of time" and "substantial limitations" contrasts with the comprehensive definition of the United Nations.

The aim is to have some sort of policy for the disabled. Frequently however, there are cases of impediment that are short term, and not substantially limiting. For example, a fever caused by influenza which prevents someone from attending a meeting is an impediment. Many people do not think of momentary illness as an impediment - but impediments do not have momentary or permanent limitations. Illness is one face of impediments.

In the above example, if the person was exhausted by work, and hoped for a rest, the fever is an illness, not an impediment. Subjective views cannot be excluded when considering impairments. When everyday actions are slightly impeded, we do not feel disabled. But when we realise there is something we cannot do, and which prevents us from having the life we desire, we feel greatly disabled. Each person should be left to choose his own life, even if he has an impediment. As long as you do not disrupt others, the choice the lifestyle you want is one of the basic human rights.

The IL movement, which began in the United States in 1962, had a huge impact on those involved with rehabilitation. In order to obtain the lifestyle they desired, the disabled should be able to select their own treatment and training techniques. Carers are obligated to provide the patient with all the necessary information. This is linked to the present "informed consent" movement. The IL movement revealed that a life is limited by its lifestyle choices.

This is the subjective face of impediments. The objective face includes impairment, disability and handicap. Numerous detailed reports have already been written about them, and they need not be discussed. However, it should be noted that these are not the only three objective faces of impediment. Disease cannot be forgotten. Using the aforementioned example, the fever was an impairment, the inability to attend the meeting a disability, the resulting lack of information a handicap, and, influenza - the cause of it all - a disease. Impediments are often said to be the result of illness, but this is easily misunderstood. In this case, "result" does not include the passing of time, and therefore does not refer to a sequela. It actually indicates a cause and effect relationship, and includes presently progressive conditions.

The Japanese word for "impediment", or *Shogai*, does not translate well into English, and is differentiated according to situation into impairment, disability, handicap, disease, etc. There are people who say that "circulatory diseases, respiratory diseases and mental impediments should be called illnesses, and thought of a different to impairments". But this is incorrect - and simply a different viewpoint. In fact, all patients are impaired. If the recipients of rehabilitation are the impaired, it must be aimed at all patients.

Cure

Various medical treatment is established through a division of labour. There are examining doctors, X-ray technicians, pharmacists, etc, who combat the disorder; and nurses, physical therapists, occupational therapists, clinical psychologists and social workers, etc, who deal with people affected. Working with people involves working with a "disabled person".

If disabled refers to people with impediments, it is important to determine if rehabilitation deals with the impediment or the person. Medicine, while dealing with disease, seems to forget the diseased. In the same way, if the

progression in rehabilitative medicine concentrates only on the impediment, there is a risk the impaired will be left behind.

It must not be forgotten that not only rehabilitative medicine, but clinical medicine is also no more than a part of the framework of rehabilitation. Also, rehabilitation does not only aim at disease, impairment, disability and handicap, but must also approach the impaired humanely.

Rehabilitation

The "re" in rehabilitation means "again". Originally, rehabilitation was also used in reference to the process of the attainment of rights by those who had none. The definition of disabled by the WHO, including the phrase "whether inherent or not", refers to this. From this, recovery means obtaining the same things as other people of the same age, whether one had them or not previously.

Therefore, the inherently disabled undergo rehabilitation; and rehabilitation for a child who becomes disabled is not simply returning to the stage before the disability appeared, but also responding to growth, and aiming for a condition suitable to the person's age. This greatly exceeds the framework of medicine. This aim is shouldered by the teachers taking part in special education for disabled children. This too must also be seen as a part of rehabilitation.

The recent progress in the manufacture of equipment such as contact lenses and pace-makers for disordered heartbeats, is remarkable. But how beneficial are faxes and word-processors to the disabled? These are products of modern technology. In the fields of urban technology and construction, there appears to be various consideration taken into account regarding the disabled. Engineering is also an important part of rehabilitation.

From the standpoint of conquering social disadvantages, rehabilitation requires the help of economics and law. Also, to eradicate discrimination, education, social psychology and politics must be included.

However, all this still does not mean that the impediment will disappear. An impediment is not simply physical. There are times when, as far as the illness goes, the "abnormality" has totally disappeared, yet the patient's complaint remains. Doctors attach the term *neurosis* or *hysteria* to this situation, i.e. even when patients have recovered from the illness, they still believe themselves ill. The same occurs with disabilities. And if nothing further can be done, the disability cannot be said to be conquered.

Thus, the ultimate aim of rehabilitation is to address the subjective impediments, or deal with the mental approach. For this, we have psychology, philosophy, fine art and religion. These are also a part of rehabilitation.

I have mentioned the subjective face of impediments, and it is linked to QOL. As opposed to the Japanese word for "impediment", there is no single word for "life". Different words are used according to the circumstances. Therefore, where the quality of "existence" is

not expected to be either high or low, the quality of "lifestyle" implies such a feeling. QOL is a subjective topic. Regardless of what others think, each person has their own idea of what "life" is. This image affects that persons' view of the QOL.

A high QOL represents a highly satisfactory lifestyle, and a person can be helped to attain it. The ultimate aim of rehabilitation is to help increase the patients' satisfaction with their life. However, the disabled themselves must also make efforts in that direction. Rehabilitation is not a one-way activity, but a two-way process. If rehabilitation for the disabled is redefined, it can be seen as "the co-operative processes between the disabled and their supporters, in order to increase the QOL of the disabled".

The concept of rehabilitation has philosophical ideas - but it is based on technology. Training in walking should not be used to force the paralysed to walk, but rather arranged so that when a person wants to walk, various options can be immediately executed. It is the duty of people who work in rehabilitation to cultivate the skills so that such offers can be made immediately when the disabled ask for help.

Community Care for Neurological Disorders; A Parent's View on Problems regarding Progressive Muscular Dystrophy

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Introduction

This Chapter reviews the issue of institutionalized care versus in-home care for patients with progressive muscular dystrophy. It argues that PMD is an ideal example of a disease that justifies receiving social support for in-home care. I am the father of a victim of PMD of the Duchenne type.

Toward the "Quality of life" of victims of Progressive Muscular Dystrophy

The welfare movement for children with PMD started in 1964, when specialised hospitals for PMD were established (Chapter 10). It was believed that such institutions would enhance their happiness, and support the parents in extending their children's lifespan - which is very short.

However, the situation of PMD children in the specialised hospitals was not satisfactory.

When the disease reaches an aggravated condition, and a child can no longer walk, he or she needs help to turn over in bed five or six times a night. This increases to ten times a night when the child has to stay in bed longer. There were few carers in the hospitals. In addition, the children were separated from their families, and spent their life in a small, closed environment.

This is not to say that the hospitals did not provide some value - but the parents of PMD children were faced with considerable problems.

Some parents took their children from hospital, back to their homes - where they gave more priority to improving their Quality of Life (QOL) than to just extending their life.

This shifted the emphasis away from appeals to establish more hospitals in each community to pressure for more support for in-home care.

Life in home and medical and welfare problems

During the 1960s, caring for PMD children at home was difficult because of a number of medical and welfare problems:

1. Taking the disabled children to the PMD hospitals often involved expensive, long-distance transportation.
2. Some patients could not tolerate waiting in outpatients' clinic in hospitals for ambulatory care.
3. Emergency care was hardly available for patients at home.
4. While patients were usually advised strongly to leave hospital quickly, it was often extremely hard to find a home doctor with neurological knowledge and skills. This meant that the patients were likely to fall into a gap between hospital and community care.
5. Lack of contact with medical care made the life of the patients, and their families even harder.
6. When the care taker in a family became ill, there was no one to look after the patients.

Bitter reality of terminal care at home

The most important point about home care is the care a patient needs at the terminal stage. As a father of a child with Duchenne type PMD, I had a bitter experience of this situation.

Sleepless nights impose a severe burden on the whole family. We had to help our son turn over in bed ten times a night, when the disease progressed. When respiratory failure necessitated tracheostomy, we had to change his body position and excrete sputa more than 20 times a night. I took the patients to hospital in the day, so it was my wife who mostly took care of our son at night. There were volunteers to help with daily tasks, like changing clothes, toilet, meals, and bath, but it was difficult to get such help at night. I asked a local welfare association to find volunteers during the day, so that my wife could sleep for at least one or two hours.

Support systems for home care

Problem identification from volunteers

I found six volunteers from the local welfare association, but this raised a new problem. When they first saw my son, they were shocked to see him lying weak in bed, constantly excreting sputa with a mechanical suction device. Their

initial reaction was that caring for a PMD child was too much for lay volunteers.

However, they realised that sleepless nights were imposing an intolerable burden on us, and understood we needed their help during the day. Yet, the volunteers faced a dilemma: helping to excrete sputum - an essential task - was a "medical" intervention, which violates the law of medical practice. They went to see the medical association.

Problem of team formation for home care

The local medical association reacted favorably to their request, and approved the training of the lay volunteers in the required skills by designated nurses.

As a result, the volunteers joined doctors and nurses as members of a home care team - assuming a role in home care for an Intractable Disease as nonprofessional helpers. We call it the Zaitaku (in-home) care team.

From my experience, the first prerequisite for successful home care of Intractable Diseases, such as terminal PMD, is the formation of a Zaitaku care team, involving medical, health and welfare personnel, to meet the individual needs of a family with a patient. These teams should become part of the community care system.

Referral system between team care and related organizations

After a care team is formed, one problem for the patient's family is to ensure the continuity and stability of team care activities. If coordination of the teamwork depends on a particular individual, those activities will stop immediately on the loss of that team member. Therefore, a well-organised coordination system is essential.

The second prerequisite for adequate home care is the referral system among medical, health and welfare organisations.

The third prerequisite is effective collaboration between hospital care and community medicine (Byoshin-renkei). The involvement of specialist neurologists and community doctors will significantly raise the quality of home care. The patient will receive daily care from the community doctors, and if necessary, will see a specialist on his or her local doctor's advice. This avoids the patient having to make frequent visits to a specialist hospital some distance away.

Care taker in family

Problems raised by the death of the affected child

My family had no regret at providing terminal care for our child at home. The local support system helped. After our son died, the team members held a conference to evaluate our case. One issue that emerged was how to provide support when an intrafamily care taker became ill.

When this happens, it is hardly practical for a PMD

child to enter a hospital. Rather, it is the care-taker who should be hospitalised. However, it is not possible to ensure a 24-hour visiting home care system because of manpower shortages.

People are admitted to institutions for either medical care or welfare. Medical institutions are hospitals, where physicians decide the criteria for admissions. Officials decide on admission to welfare institutions. Neither was a suitable place for patients like our son to die.

Concept of "Intermediate Institution"

One idea which emerged was an "Intermediate" institution (Chukan Shisetsu). We used my family as the model case for a possible Chukan Shisetsu as a regional institution to support home care. We defined "Intermediate", as an institution standing somewhere between a hospital and families in need, but closer to the families. Ideally, it should be the same size as an average home, and there should be several of them in a community, close to patients and their families.

Hospital care is obligatory in the terminal stage for a neurological patient, who has fallen into a state of chronic respiratory failure or undergone tracheotomy. When a patient's condition becomes stable, the hospital will advise him or her to go home. Intermediate institutions are essential to support the life of such patients.

In 1985, in order to test the idea, my family made our home available as a research site. Based on our experiences over the past ten years, the following points are relevant;

1. Both the team care and intermediate institution are necessary for neurological patients, and patients with other chronic diseases.
2. Because the patient's needs are urgent, he or she requires immediate and comprehensive services 24 hours a day.
3. It was difficult to establish a coordinating function to formulate a team service.
4. Service strengthens human relationships among the personnel concerned.

System formation for community care

Development of a core institution

We started the intermediate institution at our home, to deal with such diverse functions as:

1. handling all kinds of needs, at any time, regardless of age, diseases, and disabilities, including both medical and welfare needs,

2. promoting relationships and coordination among concerned organizations and medical, health and welfare personnel,
3. manpower development,
4. communication and information exchange, to deepen mutual understanding and develop comradeship among all the people involved.

An "Intermediate institution" is not a short-term, single function facility, but a place in the community to provide comprehensive support for the medical, health, and welfare problems of disabled people and their families.

Social background for diversified functions

The diversified functions of the institution resulted from the current social background. In Japan, medical, health and welfare services are organised vertically, and controlled by a centralised bureaucracy. While PMD children are obviously neurological patients, they are classified administratively as handicapped children. This means they are not entitled to a short-term in-patient service for Intractable Diseases at home. A patient with an Intractable Disease, living alone at home and supported by volunteers, and whose condition is stable clinically, cannot enter a governmental nursery home for the aged with diseases. The reasons are purely bureaucratic. There are many similar contradictions that lead to less coordinated community care.

The various services - visiting nurses, home help, volunteers and visiting doctor - must be collaborative, but they are also organised separately by different sections of the Government and private institutions. Their working arrangements are different, so that although they share a case, they cannot provide adequate team care. There is no system to respond to night-time needs. The diversified functions of our pilot "intermediate institution" were designed to address these issues.

Need for self planning by people

Appealing to the Government to assume all the responsibilities for medical and health care is not a complete solution to the problems. The public sector has its own limitations, so there are certainly areas where the private sector can help.

It is important to prepare a plan for total community care, which includes establishing a core institution as a new social resource in the community: an institution which serves as a base for networking, and a plan which takes the social environment into account in managing activities.

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References

1. Research group on primary care of intractable diseases: Approach to Intractable diseases in primary care, Research on treatment and nursing on intractable diseases, Ministry of health and welfare, Tokyo, 1982. (In Japanese)
2. Samon I (1990): Sasa-e-a-u Kurashi to Machi-zukuri, Hobunsha, Tokyo, 1990. (In Japanese)
3. Samon I (1994): Condition for community care required by patients and their families, In: Fujiki N, Macer D.R.J. eds. Intractable Neurological Disorders, Human Genome Research and Society; Proceedings of the Third International Bioethics Seminar in Fukui (Eubios Ethics Institute, 1994)
4. Maruchi N, Matsuda M (1991): Provision and Financing of Health Care Services in Japan, In: Holland W.W. eds., Textbook of Public Health (2nd ed.) Oxford, Vol. 1, 334-346

Desirable Countermeasures for Neurological Diseases; Aging Society and Concerns on Health of the Brain

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As Japan heads to an aged society, public concerns over brain afflictions, particularly dementias, among the elderly is mounting. Yet, while the number of demented elderly is rapidly increasing, neither curative therapies nor social networks to support the patients and their families have been adequately established.

There are various issues - besides dementias - concerning the "health of the brain" that attract public awareness and concern. For example, at a time when a married couple produces less than two children, birth defects represent a serious problem. This is particularly so when the public is aware that some birth defects are caused by drugs or environmental pollutants - not through an accident of birth.

But the problem of neurological disorders in the elderly is a major cause of concern - because of the growing public understanding about how these can lead to loss of independence and dignity.

The number of demented elderly in Japan is estimated to be 1,250,000, of whom 945,000 (75.6%) are cared for at home. About 70% of male patients are looked after by their spouses, while female patients are cared for by their daughters and the first son's spouses.

According to a survey of 2,500 families with demented members, about 50% of them had incomes of less 5 million Yen (ca. 50,000 US dollars) per year. Some 60% of the families have provided care for more than 5 years, and 11% have done so for more than 10 years. Further, the main caretakers, daughters and daughters in law, are in their 50s or even 60s, underlying the heavy burden. The Ministry of Health and Welfare estimates that the number of demented elderlies will reach 1.5 million by the year 2000, 2,750,000 by 2020, and exceed 3,000,000 by 2030.

It is less than ten years since the Japanese Government started grappling with this problem: through the Health and Welfare Promotions for Elderies-10 Year Plan (Gold Plan) and its subsequent revised version - which established national frameworks and a menu of services.

In theory, the situation has been getting better. However, the fact is that overall, still not enough is being done. For instance, there are major differences between cities and towns in their countermeasures against dementia and other psycho-geriatric problems, and there is considerable scope. The Ministry aims to make the welfare, public health and clinical services fit together to form a unitarian framework in each region. But progress towards this concept has been limited. New services such as visiting clinical care

should be expanded to improve the standard of in-home care and the QOL of the patients' and their families. There are many issues that need solving urgently in near future.

In short, "Health of the brain" is a major challenge in the coming century to Japan, and to other countries.

How To Understand Neurology in Oriental Medicine

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Introduction

Oriental medicine originally appeared in ancient China and southeast Asia as native folk medicine, and later developed into systematic traditional medicine in each field. Although this implies three main historical currents - Chinese, Indian and Arabian medicine - Chinese medicine is referred to as a model in this Chapter.

In modern Western medicine, objective observation of symptomatology and experimental studies with reproducibility are fundamental to making a correct diagnosis for causative treatment of a patient. Traditional Chinese medicine tries to see through the whole person, evaluating the patient's complaints as a reflection of his or her surroundings based on the bipolar model of "ying" and "yang".

According to ancient Chinese cosmology, the universe was created by nature's basic quality of ying and yang - the passive, dark, cold, feminine "ying", as well as the active, light, dry, masculine "yang". Anything that altered the proper proportion in the natural relation of ying to yang was considered unusual and ill. Disharmony of ying and yang in either external and/or internal imbalances of the vital forces is recognised as a deviation of healthy and normal condition - which is widely related to functional and organic pathological conditions found in modern Western medicine.

Characteristics of oriental (Chinese traditional) medicine

Based on ancient cosmology in China, the human being was considered as a part of a small universe called microcosmos - rather than macrocosmos, which is the entire universe. Therefore, each physician saw each patient completely as a reflection of his surroundings, more so than today's physician does. He appreciated the patient's rank, changes in social status, household, economic position, sense of well-being, or appetite, the weather - even the dreams of the patient and his or her family.

A doctor had to determine the cause of disharmony in the body, and act accordingly. Modalities have been an integral part of Chinese medical therapy for thousands of years.

According to the progression of a disease, the development of diseases was divided into six stages, called the six proceedings of illnesses. The first three stages, called yang diseases, are stages with a dominant vital force against disease - while the latter three stages are ying diseases,

stages with regressive vital energy to the diseases. When the stage is determined, corresponding to each of six stages, the most effective medication is determined.

The six stages and their symptomatology are as follows:

- yang diseases and their three stages:
 1. Greater yang disease showing buoyant pulse, headache, fever, and chills.
 2. Lesser yang disease showing a bitter mouth, dry throat, giddiness, and vomiting.
 3. Sunlight yang disease anemophobia or chills, constipation or diarrhoea
- ying diseases and their three stages:
 1. Greater ying disease showing diarrhoea, vomiting and dysentery.
 2. Lesser ying disease showing submerged pulse, anemophobia or chills, fatigue, and cold hands and feet.
 3. Absolute ying disease showing thirst, scanty urine, and exhaustion.

Also important is the theory of movement of the blood, which appeared in the *Nei Chiang* written by Huang Ti (c. 2600 B.C.), a summary of all medical knowledge from the period of dialogues between the Yellow Emperor and his prime minister. "All the blood is under control of the heart", and "The blood current flows continuously in a circle and never stops." It has been thought to approach an understanding of blood circulation antedating Harvey by thousands of years - however, some body vessels were believed to convey air.

Blood stagnation (*Oketsu*) is a basic concept, one of the pathophysiological conditions specifically emphasised in traditional Chinese medicine, which produces disharmony of function in a body as a cause of illness. It may be explained as a fine circulatory disturbance with either haemorrhage or stenosis in any local capillary blood vessel. This stagnant blood syndrome has been well recognised in a wide range of disorders within the peripheral microcirculation.

Capillary stenosis (*Keppi*), characterised by numbness, coldness and/or pain in peripheral extremities, is also due to blood stagnation. A detailed description was found in *Chin kwei yao lueh*, which includes a discussion of the diagnosis and treatment of chronic diseases, and was

later separated from the first clinical manual in Chinese medical literature, Shang han tsa pin lun. Shang Han Lun, written by Chang Chung-ching in the early third century, comprises medical theory and practice (practical application of Chinese herbal formulas).

The principles of diagnosis and treatment in traditional Chinese medicine

Diagnosis and treatment are unified in traditional Chinese medicine by means of "Sho" recognition. The "Sho" is the set holistic pattern of patient's symptoms and signs which indicate the appropriate prescription. In the determination of "Sho", an individual, as a reflection of the entire universe, is evaluated based on the ying/yang theory, together with consideration of blood stagnation and the stage of disease progression. When the "Sho" is determined, the corresponding prescription is given in each condition.

The idea of treatment here is to drain off the excess of yang in yang diseases, or ying in ying diseases, to establish a proper balance to reinforce body resistance to eliminate pathogens. This is carried out by invigorating the vital portal, dissipating heat and detoxifying, eliminating dampness, cold, and wind, tonifying the Qi and blood, eliminating the stagnant blood and by activating the blood. However, external energy could also be introduced into the body.

Application to neurological diseases

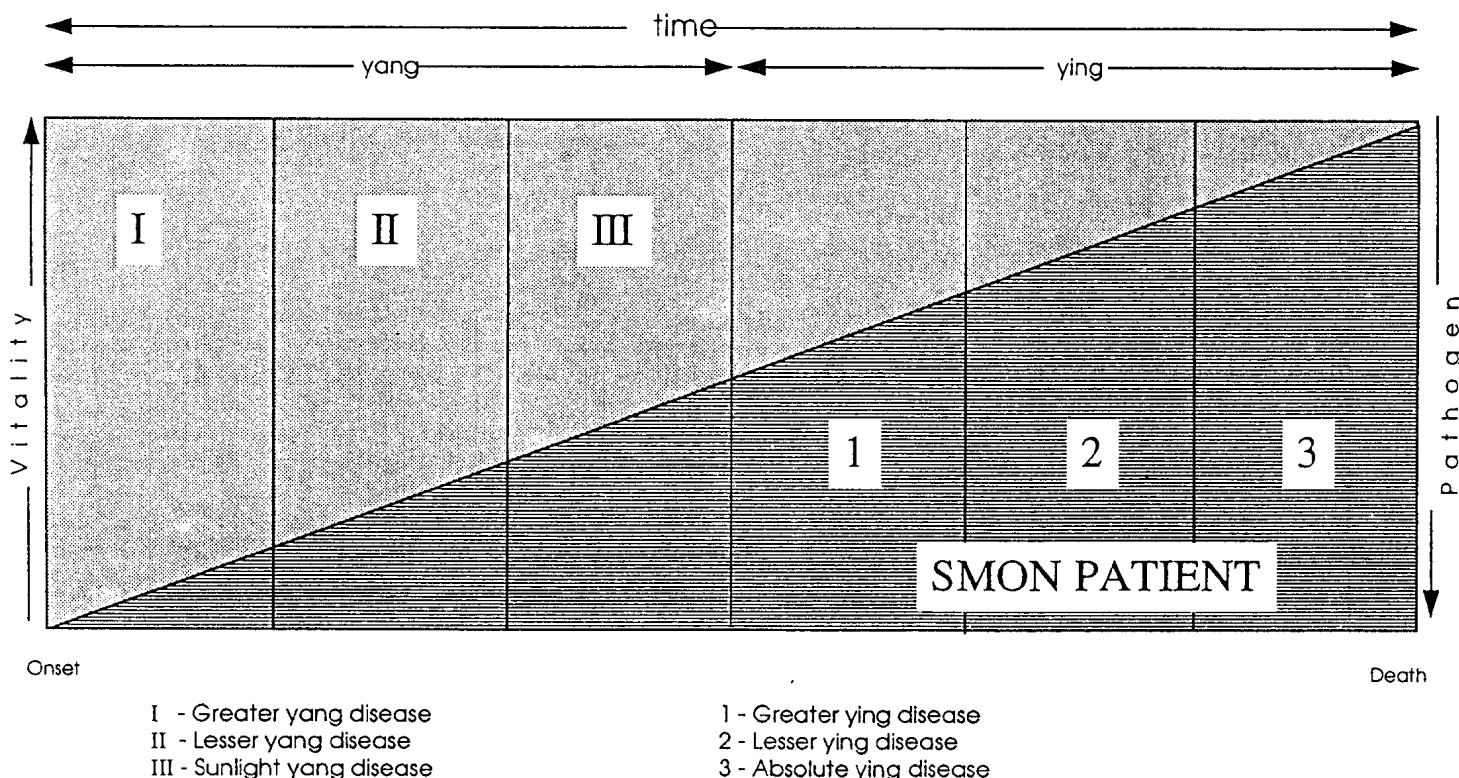
"Oketsu", blood stagnation, is usually recognised in the following neurological diseases: cerebrovascular diseases (CVD), neurodegenerative diseases (Parkinson disease, Alzheimer disease, motor neuron disease, etc.), peripheral polyneuropathy, myopathy, etc.

The neurological significance of "Oketsu" is for example, ischemia or stenosis as seen in CVD. The treatment for CVD in traditional Chinese medicine attempts to deal with not only neurological problems, but also to adjust to a generalised harmony. Since increased blood viscosity seen in hyperlipemia and stagnation of blood flow are the basic findings in "Oketsu", the elimination of stagnant blood and smooth circulation are the first choices, even in CVD.

In addition, before manifestation of a disease such as asymptomatic cerebral infarction, which questions the necessity of early treatment, "Oketsu" is often observed without definite neurological disturbances. These cases, which are requested to be treated as premorbid therapy as a physician deals with a person before the disease is manifest, are found in the Chin kwei yao lueh.

Subacute myelo-optico-neuropathy (SMON) is one of the most Intractable Diseases with severe leg pain, numbness, coldness and GI syndrome (Chapter 15). There is no effective treatment in either Western or Oriental medicine. Because of the unifying approach of diagnosis and treatment in traditional Chinese medicine however, "Sho" confirmation contributes in a helpful way to the treatment with a herbal prescription and/or acupuncture, corresponding to the stage of the disease in the patient (Figure 1). Although "Sho" is originally variable, case by case, in SMON, symptomatology implying cold, numbness, and pain indicates the ying diseases. Formulae to resuscitate, eliminate dampness, cold, and wind to tonifying the Qi and blood are applicable.

Figure 1 - Relation of ying/yang, vitality and pathogen



Since any localised or limited disturbances in the central or peripheral nervous system are always recognised as affecting the whole being, treatable access has never been abandoned in terms of encouraging a patient.

Here is an example of pain from the standpoint of patient. It is entirely subjective and the result of experienced handling. Runners often talk in terms of "pain one" and "pain two". Pain one is a minor pain, similar to soreness, and it can be run and worked out without doing further damage. But pain two is severe pain, similar to that experience when breaking something, or pulling a muscle or a tendon. Running on it will make the injury far more serious. However, how can you tell the difference between the two pains?

Summary

Traditional Chinese medicine, with a different standpoint of pathophysiology than Western medicine, has contributed to the health of peoples, and been used as a treatment for disease for thousands of years. The idea of maintaining the harmony of ying and yang, and establishing a proper balance is fundamental in pre-morbid treatment - which has been considered to be the best physician care in ancient China. Modern society is becoming more interested in the ideas crystallized by traditional Chinese medicine - building on the wisdom which has been accumulating for so long. A further unification of Western and Oriental ideas will produce many effective results in preventive and therapeutic medicine.

Note:

bing wei: stage of a disease progression

yu xue: blood stagnation

xue bi: dysesthesia due to blood stagnation

References

1. Xue-Li Cao: Traditional Chinese Medicine, Proceedings International Congress of Oriental Medicine p211-214, 1986, eds. Sakaguchi et al, Gendai Shuppan Planning, Tokyo
2. Lyons AS & Petrucci R J, II: Ancient China, Medicine An Illustrated History Harry N. Abrams, INC, New York p121- 149 1978.
3. Hong-yen Hsu & Peacher W.G.: Shang Han Lun The Great Classic of Chinese Medicine pp xiv-xvi, 1981, Oriental Healing Arts Institute, Los Angeles
4. Spino M & Warren JE: Mind/body running program p30-31, 1979 Bantam Book, Inc. New York

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