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11/06/2008

Food and Health Bureau,
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Dear Sirs,

Consultation: Your Health. Your Life

I attach two contributions to the consultation on the future of Health and Medical services.

Both of the these were prepared, by the Natural Health Association, for the previous consultations. Although they carry dates of 1999 and 2001, they have lost none of their relevance as very little progress has been made in the areas about which we wrote.

The Association is still registered but is no longer active because the matters of health that we promulgated have become more widely accepted except, unfortunately, by dominant western orthodoxy. The fact that you are reconsidering the basic ideas of health and medicine in Hong Kong indicates to us that this orthodoxy has failed and that new ways are urgently necessary. We provide some such ways.

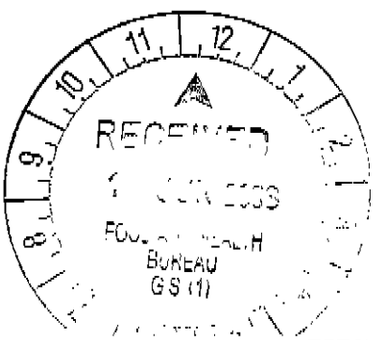
The first paper contains references to research showing efficacy and economy of alternative therapies. Since that was published, research has burgeoned - notably published by the National Centre for Complementary and Alternative Medicine in the USA. It is sad that orthodoxy is blind to this scientific work.

However, our main thrust was, and still is, a fundamental change of paradigm away from 'Medicine' towards 'Community Health' - summed up by the diagramme at the end of the second paper - that would benefit everyone and everything, notably the whole economy. This paradigm is beginning to be understood in many countries and we hope that it's understanding in Hong Kong will not be long delayed.

If you desire to discuss these ideas further, I would be happy to arrange a gathering of experts in their fields to meet with you.

Many thanks,

Eric Spain. Bsc.



The Natural Health Association of Hong Kong

Response to the Consultation Document on Health Care Reform: Lifelong Investment in Health

Content

The Natural Health Association of Hong Kong,
GPO Box 8268,
Hong Kong.

March 2001

Natural Health Association of Hong Kong

Response to Consultation Document on Health Care Reform

1. Introduction

First, we would like to say that we are delighted to read your statements in Chapter 2 which identify "Health" as a state of being and not just an absence of disease. This is one of the main planks of the philosophy of our Association. We are also grateful for your effort to give recognition to importance of health to the individual and the community. In particular, we wish to commend your observation that investment in health can bring significant returns towards creating a productive, vibrant and successful society. Indeed, one economist has suggested that "health" would provide a better measure of the true wealth of a country than the narrow concept of GDP.

We also agree with many of your other objectives, principles and strategic directions. However we would like to make the following comments on matters which, if implemented, will better serve your stated objectives.

2. Definitions

We use the terms:

"Conventional medicine" to denote the school of medicine which derives, historically, from the Specifistic School of medicine in which disease is seen as the result of specific causative agents producing predictable and classifiable phenomena independent of the organism in which they occur. The concept originated in Cnidos in Asia Minor although it did not predominate until about 200 years ago. Other terms are "allopathic" – meaning "against pathogens", 'Orthodox' and 'Western' -- to differentiate from Eastern schools of thought.

"Natural Medicine" to denote schools of medicine in which disease is regarded as a breakdown of the equilibrium of body, mind and environment -- the concept taught by Hippocrates. The ancient term for this -- no longer used -- was "Eukrasia". Other modern terms are "alternative", "complementary" and "ecological".

"Traditional Medicine" as a very special sub-section of "Natural Medicine" denoting modalities whose origins can be traced to ancient practices going back as much as 4000 years. The ones now most widely known are Traditional Chinese Medicine, Ayurvedic Medicine and Yoga. However, one finds variations of these in all Eastern countries and there are many traditional herbal remedies being rediscovered throughout the world. Also in this category are "energy medicines" such as Qi Kong which is being interpreted

in many modern forms from "hands-on" healing to electrical and magnetic diagnosis and therapies.

"CAM". (Complementary and Alternative Medicine). This term has now been adopted in the USA and UK to denote all modalities which have not previously been practiced by orthodox western doctors -- including traditional medicine. It was the subject of a seminar held by the Gynaecological and Obstetrics department of the Hospital Authority in March 2001. As it is a designation which has gained international recognition, we will use it in this paper -- although we have reservations about its connotations.

3. Discussion of proposals in the consultation document

3.1 Creating a leadership for Health

If, as a starting point, we take your lead which emphasises the role of the individual and the community, two inescapable objectives manifest themselves:

- To create and maintain the health of people in the community.
- To create and maintain a set of processes called "Medicine" invoked when an individual falls out of health.

These two, "Health" and "Medicine", are two completely different realms of thought with different needs for policies, objectives, strategies, interrelationships and actions.

Examples of these differences are illustrated by the following lists:

Health	**Medicine**
long term and ongoing	transitory or emergency action for a person
wide and general	strongly specialist-oriented
community relationships	personal/doctor relationships
action in the whole community	action enclosed within specialised areaslife-
styles & support	medical therapies
living environment	hospital environment
home & working conditions of people	hospital conditions for patients & staff
exercise to maintain health	physical manipulation to return health
health education for everyone	illness related advice to patients
information for public understanding	specialised knowledge & terminologyfood
and nutrition for health	hospital nutrition

In general, "Health" requires the long-term application of broad spectrum of knowledge about people and their environment whereas "Medicine" requires the relatively short-term application of the knowledge of curative therapies which has, over time, become dominated by specialists.

Appendix I is an attempt to visualize the roles and determinants of health and medicine in a community, the starting point for which was the diagram in para. 44 of the consultation document. Whilst we have kept many of the 'boxes' in the original, our redrafting of this is significantly different in the following fundamental respects:

- The original placed "hospital" at the top and the "patient" as the focus. We think that your emphasis on "Health" should be reflected in a diagram which places the 'person' as the focus and "hospital" as a part of the process of "Diagnosis and Curative" and, hopefully, returning to health and rehabilitation. If "hospital" is given as the starting point, it is inevitable that the view of the world is that it is full of "patients". However, if the starting point is "community-based health", (the heading of your diagram), the focus should be the "person" who only become "patients" when they fall from health.

- Following your prime objectives regarding "health", we have examined the determinants of 'health' and conclude that they are largely dependent upon many factors surrounding the person. These are shown in the upper part of the diagram labelled "System for Maintenance of Health and Well-being".

- The oval balloons in the lower part of the "Health system" are the things which have the aim of raising the standard of health in the community and helping those in the last stages of recovery.

- When a person falls from health and becomes a patient, he/she needs a "Diagnosis and Curative System'' -- the lower part of the diagram.

- The reader should note that "residential care" in the "Health System" might be more properly placed in the "Diagnosis and Curative System". Equally, "Preventive Medicine" and "Home Care Services" might be better moved up to the "Health System" The question of the exact services and where they fit requires further study and lines of communication set up between them.

- It appears that the placement doubts raised above might well be the reason for the argument for "integrating" the whole. This is not rational and is the "overlap tail" wagging the "health dog"! There are far greater problems attaining "integration" between all the issues of the "Health System" health than in the communication channels necessary to ensure the smooth relationships between the overlap areas. The extent of the exchange of information is also far less between the overlap areas than that within the health system. The latter is mainly concerned with the movement of someone between being a "person" and a "patient" and back again whilst the former has very many facets affecting many parts of the community and its governance. These require overall co-ordination -- which we now turn to.

This diagram leads one to a number of fundamental conclusions regarding the governance of community health:

- The well established structure of the Hong Kong government comprises a number of bureaus for policy creation of the sectors which are identified as being essential to the development and well-being of the community. A bureau relates to all the departments and bodies whose executive actions determine the successful execution of its policies. An examination of which departments the "Health Bureau" would interact with is very extensive. Examples are:

  Agriculture and Fisheries
  Buildings
  Civil Engineering
  Committee on the Promotion of Civic Education
  Council for the AIDS Trust Fund
  Consumer Council
  Drainage

Education
Environmental Protection
Home Affairs
Housing Authority
Information Services
Labour
Leisure and Cultural Services
Planning Department
RTHK
Social Welfare
Transport
Water Supplies
Council on Smoking and Health
Sports Development Board
Many NGOs and Religious groups concerned with the community

- By contrast, the "Diagnosis and Curative System" is largely a closed system with relatively few relationships with other sectors other than, of course, the 'Health Bureau'.

- One important factor for the separation of a health executive is that the culture of "hospitals" has grown to become one of specialisation. The outlook and knowledge of medical specialists is completely different from what is needed to deal with the multi-faceted system of creating and maintaining health in a community.

- A dedicated Bureau Secretary will have the necessary power to press for adequate funding for this sector which has never, as yet, been the case. Priority of thought and attention is still given to the "Medicine" sector and will continue thus unless there is an advocate in a top key position to change that mind-set.

- Finally, if we are to create an environment in which our whole community takes an active interests in health, the creation of a Health Bureau gives a very strong and clear lead. Indeed, we venture to suggest that, unless this is done, no progress towards the health objectives which you so eloquently state in you document, will be realised.

- We conclude, therefore, that the "Integrated Health Care Model" will completely detract from achieving the objectives relating to health set out in your document and with which we fundamentally agree. The suggestion of "integration" sounds attractive superficially but when the things to be integrated are examined more carefully, there is no basis for it. Rather, the integration of two such different things will be damaging to the prime objective: to raise community health.

3.2. Cost savings and CAM

Our second proposal also relates to the all important issue of cost savings. There is an important way of doing this which has not been included in your listing in paragraph 111. This is to use modalities other than those commonly found in conventional medicine. Whilst the report gives hope that the the value of Traditional Chinese Medicine is now being increasingly recognised, there are many other therapies of proven value which should be given the same recognition.

Under the general heading of "CAM", their use may be either as alternatives to conventional medicine in specific diseases or, in many cases, by integration of the two.

There are now many clinics in many countries where conventionally-qualified practitioners and practitioners of other modalities are working together to obtain the best results for the patient. Even in Hong Kong, there are now a growing number of private practices in which conventional doctors have learned the value of these CAM modalities.

In our previous submission, we attached an appendix of references to research papers showing the efficacy and economy of such therapies. In view of the importance given to cost savings, we are very disappointed that this was not included in the list of the means by which savings can be achieved in para. 111. If the reader wishes to refer to this earlier appendix, we will be happy to provide it.

3.3. Integrated Medicine

We wish to draw your attention to the fact that the word "integrated medicine" has already been established elsewhere as meaning the use, by practitioners, of both Conventional and CAM modalities. It is regrettable that the consultation paper uses the word "integrated" only to refer to clinics where a range of orthodox specialists provide services and to the idea of placing all matters relating to both health and disease under one administrative entity. In using the word this way it will delay, in Hong Kong, the trend towards the increasingly accepted terminology: "Integrated Medicine" with its clear benefits.

3.4 Holistic medicine

Another word which has been used in a way different way from that which has become internationally accepted is "holistic". Whilst your idea is highly creditable -- in that it recognises the relationship between the individual, society and the environment -- it is not a sufficient definition.

Hippocrates, the father of modern medicine, was one of the first to use the term "holistic" to denote a hypothesis that the body is a "temple" sheltering the mind, which is sparked by the spirit. The practical realisation of this is to emphasise the need to treat to the person in his entire environment -- and not a concept of a disembodied 'disease' which affects all people in the same way -- is increasing showing to be incorrect by research.

Those who practice holistic medicine -- and there are a growing number of conventional medicine doctors who do this -- believe that the body, mind and spirit of the person must be regarded as something whole and also part of his whole environment. This is in contrast to the reductionist approach of conventional medicine which, hitherto, has regarded the body as something made up of separate components all of which is separate from of the mind and the environment. "Holistic" practitioners also tend to be '"integrated" practitioners.

The essential point about holistic medicine is that a symptom is often an indication of imbalance of the whole and not the illness itself nor, necessarily, the site of the cause of the illness. This concept lies at the basis of most traditional medicines such as Traditional Chinese Medicine, Ayurvedic medicine and, indeed, the ancient medicine found in Greece in the days of Hippocrates.

It is also the basis of most Western therapies -- outside of conventional medicine -- such as homeopathy, osteopathy, chiropractic, physiotherapy etc.

We suggest that it important to use this word correctly in Hong Kong. If it is taken for a different use, it inevitably slows down the rate at which these relatively new ideas are absorbed by the existing community and, as a consequence, retards the realisation of their benefits.

4. The Truly Integrated Approach

We supplement the above comments with a recommendation that serious study be now given to the introduction of CAM to provide an truly Integrated Medicine Service. Referring to Appendix I, all 'boxes' may well become more effective and economic but the acceptance of CAM to work alongside conventional practitioners. A start has been made by the Hospital Authority with the week-long seminar on CAM recently provided.

The USA now has an office dedicated to it. In the UK, the House of Lords report is the most comprehensive study done to date on the question of embracing and regulating CAM in health services. Chaired by a one-time president of the BMA, it finds much value in embracing CAM modalities.

There is a global realisation that Traditional and Natural Therapies have much to offer and have a role to play. We recommend, therefore that a study be now implemented with the objective of recommending how CAM can best be used in Hong Kong in all sectors.

It is in this area that the "Natural Health Association" are keen to assist.

5. Integration and the Dominant Paradigm

Whilst we would like to see a true integration of therapies of all kinds for the good of the patient, we are very concerned about the terms on which CAM therapies will be accepted by western-trained orthodox allopathic Practitioners (WTOAPs). Their knowledge is based upon a particular view of the world (paradigm) which is, unfortunately, frequently regarded as the only view because it is the 'most modern'. This paradigm derives from reductionist science and has its roots in the allopathic school of medicine.

By contrast, most CAM therapies are based upon the "ecological" school of medicine which, as we said in our first paper, is the older paradigm going back to ancient cultures notably Greece, India and China.

The orthodox western paradigm is now dominant in the institutions of our society in Hong Kong and we see a great risk that CAM therapies will only be 'taken on board' if they are distorted to fit that paradigm.

An example of this has arisen in the UK where the new regulations have identified acupuncture as practiced by orthodox doctors (after a short course) separately from TCM as practiced by Chinese doctors. The former has been categorised as a class 1 therapy (one which has been proven) whilst TCM is in class 3 -- which includes most unproved modalities.

We find this categorisation inappropriate, dangerous and, indeed a gross insult to what has been described as a "National Treasure of China". Whilst we doubt that such an extreme situation would be entertained in Hong Kong, there is, nevertheless, a tendency in that direction among many WTOAPs.

Apart from the problem of the fundamental way in which we look at the world, there is also the problem of the terminology used. Even if the ecological paradigm and the concept of homeostasis is accepted, many of the words used are foreign to a WTOAP -- sometimes quaint and often creating derision.

This applies to most CAM therapies but is a particular problem when a TCM practitioners tries to explain the principles of TCM to a western-trained doctor or scientist.

This whole problem is summed up in the Chinese saying "Chicken talking to Ducks". Not only do they use different languages, they undoubtedly have different paradigms!

Therefore, we recommend that a unit be created to find people with the right abilities to be able to explain the principles and terms of CAM therapies -- including, notably, TCM -- in terms which are acceptable to WTOAPs. The requirements are not necessarily that these "interpreters" be practitioners but that they are able to interpret the words used into those similar to those found in conventional medicine. We feel that, if conventionally educated practitioners understood better the basis and rationality of CAM therapies, they would be less dismissive of them.

6. Traditional Chinese Medicine

Whilst we welcome the suggestions to bring TCM into the fold of the health services, we feel bound to comment on some of the statements which, we feel, indicated a somewhat limited view of TCM.

References to the Chinese Medicine ***"industry"***, such as that in para. 67 (c), suggest that the main reason for developing TCM is to create industries which package herbal medicine and sell them in the western world. There are many dangers in adopting this approach:

- not only does this miss the point about the value of TCM in maintaining health and curing sickness, it is also based upon a fallacy that herbal medicine works, like allopathic drugs, on the disease. In fact, herbs are used to regain homeostasis of an individual person. The same symptoms in western terms may be caused by totally different imbalances in TCM terms and require different herbs. This point was shown to be true a few years ago in London in the case of treatment of skin disease.

- following this point, the research protocols developed to test allopathic drugs by industry, such as double blind crossover testing, are almost totally irrelevant to the system which treats the patient.

- if the value of TCM is only seen as to be creating an industry, all research effort will be focused on this aspect to the detriment of the greater benefits to the local

community and, indeed, the world as a whole. The things which cannot be packaged and exported -- such as acupuncture and bone-setting -- will remain unused.

There are frequent statements such as those in para. 66 which suggest that TCM is only useful for the treatment of chronic illnesses. Whilst it is true that TCM has shown to be able to cure many illnesses for which western medicine is ineffective, this should not blind us to the fact that there is ample evidence that it is effective in many acute conditions. We are conditioned to accept western cures because they seem effective without asking if TCM -- or other therapies -- might give better results with fewer side effects. There is a need to open minds to the possibilities and examine everything dispassionately however silly it might seem to the mind with a long-embedded western view of the world (paradigm).

The history of science shows that the paradigm of an age has been supplanted by another when there is a sufficient body of belief which changes it (see "The Structure of Scientific Revolutions" by Thomas S. Kuhn). However, there is always great resistance to the new paradigm and change is slow. Bohr, the great physicist, said that the change only finally happens when the experts of the last generation have all died! We hope that it will not take that long to achieve the change which is now under way.

Regarding this change, it is interesting to observe that, more and more, fundamental research is revealing the underlying truths of the ecological paradigm. There are also many findings of modern physics which suggest that there is more to life than molecules.

Furthermore, the underlying thinking of TCM is wholly compatible with modern systems thinking. Notably, the patterns of relationships and terminology represents a structure of words developed to enable the mind of a practitioner to make sense of the external observations of the highly complex system which is the living human being. In systems terms, TCM is an extraordinary achievement which is 'scientific' in the broadest sense of the word.

Bridging the gap between disciplines is of paramount importance and is one of the purposes of our Association.

The whole issue of the value of research -- particularly into TCM -- should, itself, be subjected to examination under the following headings:

- industrial objectives should not be the only reason for funding.
- what new research protocols are needed? Double blind testing may not be relevant.
- would collection and processing of empirical data give better, faster and cheaper results than laboratory testing?
- Is dependence upon research results a rational solution? Laboratory testing for all of TCM would take hundreds of years!
- Are we applying double standards? One estimate of efficacy of western medicine in the USA in 1976, concluded that only 20% of therapies have any basis in science. If meta research were to be done on CAM, the result is unlikely to be different. The argument of CAM therapies being 'unproven' is therefore, specious.
- what use can be made of the extensive archives residing in such places of Beijing which provide an enormous body of knowledge about TCM, are available but not opened because of lack of interest?

On this issue, is it not more rational to try to find out more about the body of knowledge and wisdom which already exists in libraries and within practitioners? Laboratory testing and methods have been described as the 'gold standard' of western medical research. Apart from being seriously flawed, even for drawing conclusions about allopathic medicines, they are not to be regarded as a fundamental scientific principle -- as they often are. In fact, they have only grown out of the western allopathic paradigm and their application to a totally different paradigm can only be described as "unscientific"!

7. Recommendations

In summary, we propose that:

1. Create a Policy Bureau dedicated to the "System for Maintenance of Health and Well-being" and separated from the present policy branch which will then require a new name such as "Medical Policy Bureau".

2. The concepts of CAM be introduced in all areas and ways sought of using them for improving efficacy of treatment and reducing costs.

3. The word"'integrated" should be used only in the internationally accepted meaning of combining conventional medicine and CAM to achieve the best results.

4. Use the word "holistic" in its original meaning as "the whole person together with his/her environment"

5. There is a need to "translate" the view of the world of CAM philosophies and the words used into language understood by those educated or being educated in the conventional stream of medicine.

6. That a study group comprising a broad range of persons be set up to study and report on the wider use of all CAM in Health Services.

7. The whole issue of the purpose, value, viability and method of research -- particularly into TCM -- should, itself, be subjected to examination.

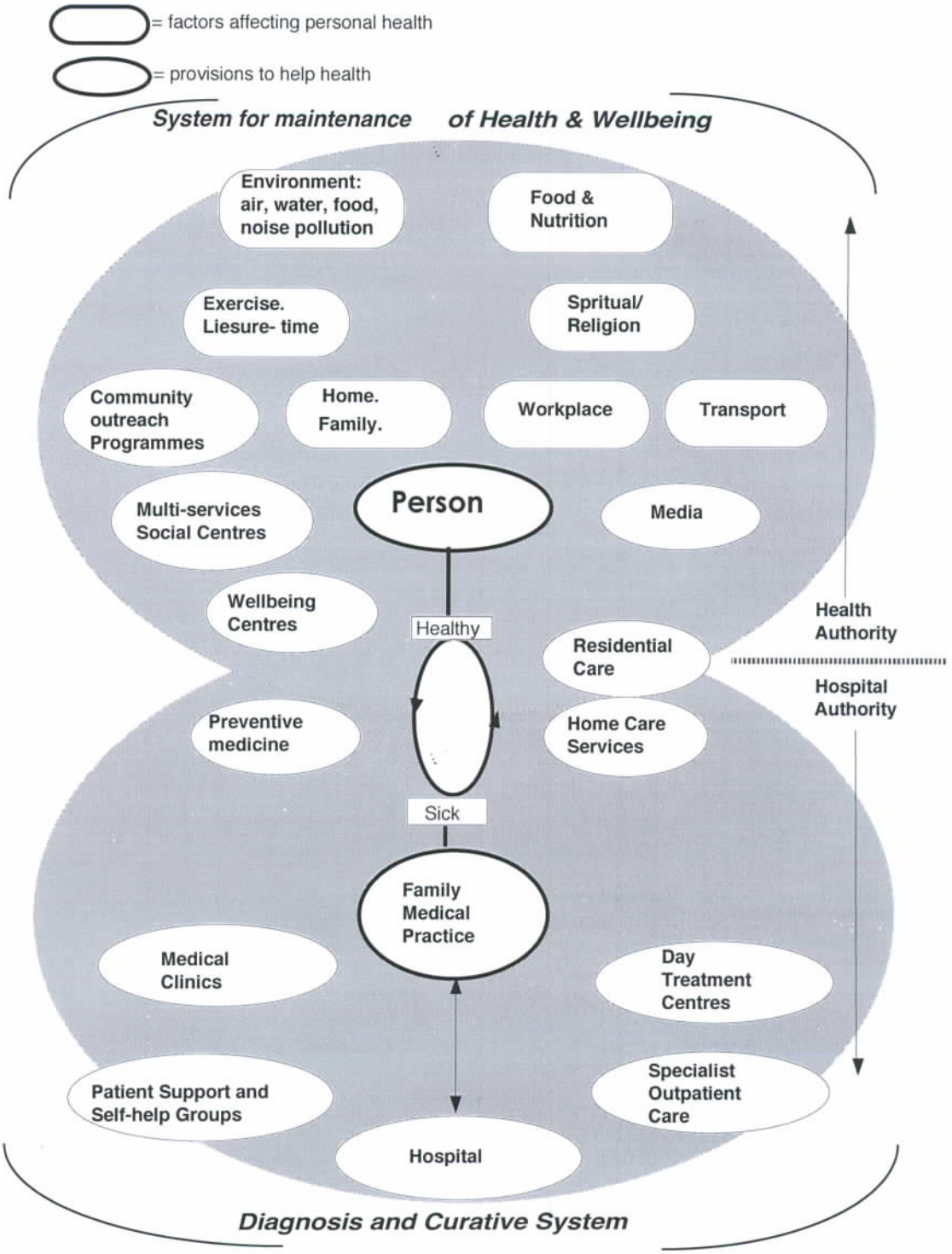
8. Greater efforts should be made to use the body of knowledge which already exists about CAM and, notably, TCM.

9. The recent House of Lords report in the UK should be considered as an input to deliberations about the use of CAM in Hong Kong.

Natural Health Association of Hong Kong
March 2001

(Chairman contact e-mail address: ericjs@netvigator.com)

Relationships in the Health and Medical Systems



Response by the

Natural Health Association

to the consultation document
issued by the government
of Hong Kong S.A.R.

('Improving Hong Kong's Health Care System: Why and For Whom?')

August 1999

Content

List of Appendices

1. Introduction: defining 'Natural Health'

The aims of the 'Natural Health Association of Hong Kong' are set out in Appendix I.

The basis for the philosophy of the association dates back to the time of Hippocrates who placed medicine on a scientific footing. He viewed disease as a breakdown of health and concerned himself with 'Eukrasia' or the equilibrium of body components in health. He thus gave rise to what has sometimes been called the Ecological school of medicine.

Opposition to Hippocrates initially arose at Cnidos in Asia Minor under Aesculapius and later Europhon. The Cnidos school viewed disease as a pathogenic intruder from outside which had to be rooted out and dispelled. This led to the Specifistic School of medicine in which disease is seen as the result of specific causative agents producing predictable and classifiable phenomena independent of the organism in which they occur[1] . Health as an entity was and still is poorly understood and consequently largely ignored.

Thus was laid the basis of 'allopathic' medicine which gained momentum with the invention of 'mechanisms', the separation of mind and body by Descartes and the development of reductionist thinking of Newtonian science. The physical biochemical concept of life has dominated and the notion of 'balance' and a 'life-energy' is excluded.

In the meantime, the Greek influence was lost after the death of Alexander in 323 BC and, although it reappeared during the renaissance and has influenced many individuals since then, it has never again dominated Western medicine. In recent years, it is again re-emerging under a number of names such as 'Complementary', 'Alternative' or 'Complementary & Alternative Medicine'[2] and 'Natural Health'. In the last decade, this re-emergence has gained momentum in the West to an extraordinary degree and the integration of the two approaches is beginning to emerge in some of the more enlightened places[3] . (see Appendix II).

In Asia, the medicines developed on principles similar to the Grecian ones and are widely practised - notably in China, India and Japan - alongside imported western allopathy. Presumably, the colonial elitist influence in Hong Kong, referred to in the report, accounts for the total absence of schools of anything other than western orthodoxy until very recently awakenings for teaching Traditional Chinese Medicine (TCM).

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[1] *in other words, treatment is the same for all persons. This contrasts with the ecological school in which similar symptoms in two people might be due to quite different imbalances requiring quite different treatments.*

[2] *This term, abbreviated to 'CAM', is that used by The National Centre for Complementary & Alternative Medicine, a US Congress body which is devoted to conducting and supporting basic and applied research and training, and disseminating information on CAM to practitioners and the public.*

[3] *This kind of integration is, of course, not new in China where many hospitals have had, for many years, close collaboration between TCM and allopathic doctors.*

'Natural health' defines health as a positive state of being that has to be given attention to in order to be maintained[4] . Orthodox Western medicine regards health as an absence of disease. In Hong Kong, as in the western world, the word 'Health-care' has come to denote 'Medical care' and 'Health Policy' to denote medical/hospital policy. The misuse of the word 'health' in this way is not trivial - indeed, it is pivotal because it leaves no word to describe the policy for the care of true health. The very real consequence of this is that no attention is directed to it, no support and funding to develop it, thus leading, inevitably, to a deterioration of the health of the community[5].

Most discussion, to date, has focused on how to deal with the rising costs of health care in Hong Kong. It is assumed that health care costs can only increase in the future. Does this have to be the case? We would like to suggest two feasible ways in which these costs could be significantly reduced.

The basis of our submission is that the rise of costs can be halted and reversed by:

- creating a policy focussed on 'HEALTH' as a state of being and not merely an absence of disease. This will reduce the demand for medical treatment.

- giving modalities, whose lineage is to be found in the philosophies of Hippocrates and Asian traditional medicine a place, at least equal to western allopathy, in both the application and the science of health and medicine.

2. Reducing demand for medical treatment

The fewer people that come for medical treatment, the lower the burden for the government (and consumer). The best way that this can be done is by ensuring a much better level of health among the populace than at present.[6] If good health can be maintained in advance, with prevention of illness as far as possible, the financial savings and workforce productivity increases to be made must be considerable - to say nothing of the quality of life the community and every member of it.

The following is a format of how this could be done.

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[4] *'Health' comes from the Old English word 'hAl', which became 'hethe' in Middle English. It refers to the condition of being hale, sound or whole in body, mind, or spirit. (Merriam-Webster Dictionary)*

[5] *This is, indeed, a living example of what George Orwell meant when he referred to 'Corrupt language leads to corrupt thought'.*

[6] *Results from a number of studies have shown that, within a community, 10% were found to be 'healthy', with 10% under medical treatment. The remainder (80%) were found to be 'unhealthy'. Only 30% were aware that they were 'not well'. The remainder were either wholly unaware of their disorders or ignored them.*

2.1 Create a Health Policy Bureau and a Health Executive

As has been written above, the use of the word 'Health-care' to denote 'illness-care' has had a devastating effect on the health of the community and the cost of services. It is essential to create a 'Health policy' in the proper meaning of the word which, to differentiate it, could be called a 'Community Health' policy and would be completely separate from the 'illness-policy' which carries the misnomer of 'health policy'..

To execute the policy, there should also be created a 'Health Authority' (or similar appellation) absolutely separate from any other body such as the Hospital Authority. A main plank in the resources of this authority would be the Neighbourhood Health Centres (para. 2.1.4) which are not clinics but places which dispense knowledge about health and provide resources to help people keep it.

The resources of the Health Authority would be of a type referred to above but should stop short of including the 'Primary Health Practitioners' (or GPs) who would be the gatekeepers to the realm of 'illness-care' (see para. 2.2) .

Among the things that the Authority should attend to are:

2.1.1 Education – adults

It is clear that most people are not aware of how they can manage their health properly. Most abrogate all responsibility for it to a doctor when they fall ill. People need to be educated on how to take more responsibility for their own well being and on preventative care. Ways this could be done include seminars, mailings from the Government Health Department, Community Health Centres (see para. 2.5) and the media (newspapers, radio, posters and Television[7])

[7] *The most pervasive medium of today is television. Unfortunately, in Hong Kong, this has been given over to commercial operators who are not interested in the matters discussed here. The absence of a Public Broadcasting Service with the necessary channels and reach - as is the rule in all developed countries - leaves a very big weakness in the changes in community cultures such as attitudes to health.*

2.1.2 Education – children

As the 'art of living' is surely one of the most important aspects of the development of young people during their education, we propose the introduction of a compulsory subject in the primary and secondary school curricula. This would be concerned with health and the individual's responsibility for their own well being. It would cover diet, lifestyle, nutrition, preventative methods (of healthcare), healthy/unhealthy environments, the misuse of medial drugs, drug abuse and what health actually is.

Notably, it could introduce some of the traditional values of Chinese health and medical thought, which encompasses the concept of 'balance' and of food as a health resource as being a part of living. This latter point is of utmost importance to counter the 'MacDonalds culture' which has swept the world.

Overall there is a need to build, in the next generation, an appreciation of the heritage of Traditional Chinese Medicine (TCM) which is constantly at risk of being lost to Western values.

Obesity has now reached epidemic proportions in some countries and the trend in young people in Hong Kong has raised considerable concern.

2.1.3 Education - the aged

With an increasing older population, there is an urgent need to pay special attention to the need for them to keep their health and stay out of hospital. The means are similar to those aimed at the general adult population but would be extended to provide more community services as are discussed in para 5 below.

Apart from keeping healthy, there is a need to educate elderly patients and help them in the self-administration of medicine. One estimate says that 10% of the admissions to geriatric wards were precipitated by inappropriate drug treatment and that the elderly consume 35% of all drugs prescribed.[8] In the same article, a certain Dr. Chi was quoted as saying that although 60% of all patients are elderly, doctors have very little training in dealing with this group.

2.1.4 Neighbourhood Health Centres

Provide Neighbourhood Health Centres whose aims are to maintain and improve the actual health of the people, (not illness and the treatment of it). This concept is

[8] *Dr. Au Si-yan, president of the Hong Kong geriatric society reported in an article in the SCMP on 14/9/95*

discussed in more detail in Appendix III. A point that we wish to reiterate is that the health centres are *not* to be confused with 'clinics'. Again, words are important: the Health Centre is to keep people 'at-ease'; the clinic is to deal with their 'dis-ease' and is where primary health-care starts.

2.2 'Primary Health-care'

These are the words describing the work of the General Practitioner (GP). It is the interface with the section of the population who 'fall out of health'. It is a role which should be radically strengthened: it is a job which has been allowed to sink in stature with the ever increasing glamour of specialist technologies and their accompanying fees. In fact, as a 'gatekeeper' between the realm of health and the realm of treatment, it is probably the single most important job not only for the wellbeing of the sick but the economics of the medical-care system.

There is an absolute need for an individual to be able to identify with his own GP who develops a long-term view of the person rather than the present haphazard use of doctors and of 'doctor shopping'. Furthermore, the recently announced regular assessment scheme should include an appreciation of CAM and its application. GPs need to be provided with further professional education so that they keep abreast in the most recent thinking of health maintenance.

The profile of the ideal GP is one who understands health on the one hand and all the available modalities on the other. He would look 'outwards' to the community with its Neighbourhood Health Centres (para. 2.1.4) and 'inwards' to the illness-care system with an aim of minimising the need for people to pass into that system.

2.3 Integrated medicine clinics

The GPs referred to in para 2.2 should work in clinics where practitioners of all modalities work together and provide an 'integrated' means of diagnosis and possible treatment. The GP could be from either a Western orthodox background or any other medical background but should possess an appreciation and respect of all modalities.

3. Improving effectiveness and safety of treatments

3.1 Professions, paradigms and belief systems

We believe that a very large contributory factor to the present parlous state of health and medicine has been caused by the whole series of events in the history of science which caused the Specifistic medical school of thought to become the dominant paradigm to the exclusion of all else.

It is to be expected that any professional group whose education only encompasses the institutionalised knowledge of his profession builds a belief system which rejects the possibility that there are other paradigms. Within this restricted view, any rational person would come to the conclusion that such things as acupuncture, homeopathy and qi-gong are ridiculous.

Furthermore, if he is concerned with ethical standards, he would consider it his duty to do all he could to protect the public from such 'quackery'.

Another, less rational, result is 'my paradigm right or wrong' syndrome in which the shortcomings and failures are denied.

It is altogether unfortunate that this has to happen but it seems to be a characteristic of the status which professional institutions have been given - the result of another historical development in the realisation that professional standards and self-regulation are, on balance, necessary.

It is not until a personal event occurs that the professional medic may start to doubt his belief system and may, eventually, discover the fact that there are other paradigms, notably that which stems from the Ecological school of Hippocrates and from TCM[9] .

The outcomes of these issues are now dealt with in more detail.

3.2 Non-science and iatrogenic illness

It is well recognised that western orthodox medical treatment is expensive and getting more so. It is held that this is because of increasingly complex technology and expensive drugs but there are many other factors involved.

The public image of the medicine is that it is based upon sound scientific principles, extensive research and that the procedure of diagnosis and treatment are based upon methods which make them almost infallible.

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[9] The reader who wishes to explore further how science changes knowledge should read 'The Structures of Scientific Revolutions' by Thomas S. Khun - a classic text.

There is much evidence which casts doubt upon this bright image. Not only is the claim to be 'scientific' on very shaky ground (appendix IV) but a sizeable portion of the cost of medical services can be attributed to ineffectiveness of treatment and iatrogenic illness induced by it.(Appendix V)

From the disturbing information found in appendices (IV) and (V), it would seem to be reasonable to ask for research to be done in Hong Kong to determine the answers to a number of question including the following questions:

- How effective is western medicine - how efficiently does it return people to health?
- How much illness does it create - i.e. iatrogenic illness
- How much illness is caused by misdiagnosis, misuse and mistakes?
- How much illness do hospitals create?
- What data is accumulated and integrated 'from the field' on matters of efficacy and safety?
- What data is accumulated about the unwanted effects of drugs?
- What procedures have been subjected to scientific research before being applied?

3.3 Attitudes to alternatives

The fallibility of the tools of any endeavour in life is excusable - and medicine is no exception. However, putting a totally benevolent 'spin' on the facts, together with institutional action which denies the existence of other tools which might do better, is not excusable. In respect of natural healing methods, western medical institutions have persistently:

- denied their existence
- ignored research finding of their efficacy
- given no resources to research when prima-facie cases of efficacy are apparent.
- have not understood that the clinical research procedure used in allopathic medicine (where an invading pathogen is independent of the patient) is not the same as the procedure necessary for clinical testing of natural medicine where treatments will vary from patient to patient[10]
- told patients that natural therapies cannot be used because they are only based upon anecdotal evidence and is not 'scientifically proven' whilst not applying the same criterion to their own practices.
- make it sound dangerous (such as the constant repetition of the case of the two deaths which happened years ago from wrongly prescribed Chinese herbs)
- hounded practitioners (as in the case of chiropractors in Hong Kong who were raided and arrested)

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[10] The double-blind randomised method was invented within the principles underlying allopathy - one of which assumes that all people are the same. The principles of ecological medicine are that disease is an imbalance in a particular person. It is not rational to conclude that the same method of clinical testing is relevant.

- helped create 'establishment' barriers such as laws and insurance practices, the outcome of which prevent general use of any practice other than orthodox ones.

3.4 Quality Control

Appendices V & VI refer to statistics from the USA which suggest that there is a big gap between public perception of efficacy and safety and the facts. There does not appear any similar statistics about the situation in Hong Kong - at least very few have been made public. Such statistics are a first step towards improving quality and costs but, whilst industry has seen the need to embark on extensive schemes of quality certification, no similar drive has been apparent in the field of medicine.

3.5 Closed shop

One of the most astounding things, in a society which aspires to democracy, is that there is virtually no appeal against poor medical practice other than through the courts. All complaints from members of the public are heard only by members of the profession. The small amount of disciplinary action - largely on administrative matters - inspires no confidence in the ability of the profession to regulate itself.

The recently announced 'improvement' in the complaints system in hospitals still fails to meet the requirements for an avenue of communications which is independent of the supply side. The proposals will only lead to a further erosion of confidence when it is realised that dealing with complaints will continue to be from a defensive standpoint.

Some other process is necessary such as an independent and impartial Ombudsman if any confidence in the medical profession is to be restored.

3.6 Conclusions

From the foregoing, we conclude that:

- the success of western allopathy in many cases has raised it, unjustifiably, to be regarded as the only 'real' medicine based, for the first time in history, on 'real science'.
- this 'spin' has little foundation in fact.
- no quality assurance methods exist and there are no statistics as to efficacy and safety in Hong Kong
- there have been modalities for health and sickness for thousands of years before western allopathy developed in recent times. The power of the professional institution and its consequent education system has, however, lead to a paradigm of life which excludes these other modalities.
- its unquestioned acceptance together with its failings has led to a failure to cope with increasing load in an increasing population because:
  - it has diverted attention and resources from the maintenance of health
  - it is, itself, one of the causes of a larger proportion of sickness.
  - it has denied the use of other efficacious therapies

4. Solutions

So what might be done to relieve this situation?
The main need is for the 'dominant player' - the orthodox medical establishment - to understand that the specifistic paradigm is not a sufficient explanation of the world and to base a whole system of medicine upon it is totally unscientific.

Once the existence of the 'ecological' paradigm is understood, there follows the need to respect those who have knowledge and skills which are part of that paradigm.

We recognise that natural therapies are not all efficacious, not all harmless and not all proven by scientific methods. However, whatever image may be created otherwise, the same is true for western orthodox medicine. There is no more reason to ignore natural therapies than there is to ignore orthodox ones. To do otherwise is to ignore possibilities of healing.

There is a growing public demand for methods of treatment alternative to orthodox methods (see appendix II) . Both common experience and mounting clinical evidence has proved to the public that they are efficacious and safe. Many orthodox-trained practitioners refer patients to natural practitioners, some include natural practitioners in their practices or study the alternative methods personally.

It is this impressive success that makes it worthwhile and sensible to consider the need to create a truly 'integrated' medicine in which allopathic and natural medical practitioners

work side by side with mutual respect. In clinics practising integrated medicine, the first choice would be modalities which are the least intrusive, most safe and most cost-effective. Only if these fail will recourse be taken to more complex and technological modalities. In this way, a great deal of money could be saved.

Generally, - but not in every case - allopathic treatment has proved itself to be highly effective for acute cases and natural treatments have been shown more effective for chronic cases. Neither should be subservient to the other. By definition, allopathy is the wrong treatment for degenerative diseases - the cause of much chronic sickness in the aged - which result from a breakdown in the internal ecology of the body and not by an invading pathogen[11] .

It makes financial sense to use the most effective and successful treatment for each medical condition, regardless whether the method used is allopathic or 'natural'. Impartial assessment, objectively evaluating where each medical modality is the most effective, is the key to successful integrated healthcare[12] . Some examples of where 'natural health' methods are effective and cheaper than normally accepted western allopathic methods are given in Appendix VI.

Finally, a drive to institute a quality control system should be started and managed by a body which is independent of practitioners - this being the normal practice in other industries.

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[11] The growing incidence of chronic illness, which is reported in the Harvard report, mandates that ways of treatment alternative to western allopathy be explored. The cost of continuous palliative treatment which does not cure, must be enormous.

[12] Whilst objective research of efficacy and safety of any modality is, today, considered to be the most desirable situation, the unfortunate fact is that, if this were to be the barrier, it would take decades, possibly centuries, to prove everything even if funding were unlimited

5. Recommendations

We wish to recommend the following:

5.1 Community Health-care

1. Create a Community Health Policy Bureau
2. Create a Community Health Executive to implement means such as:
   - Neighbourhood Health Centres
   - compulsory child education on health and appreciation of medicine of all kinds
   - community education
   - special attention to the health of the aged
   - an openness to all ways of creating good health without reference to medicine.

1. Introduce a compulsory curriculum in primary and secondary education on health and the appreciation of medicine.

5.2 Illness-care

1. Develop a policy similar to that for TCM for other 'Natural health' modalities which would:
   - enhance their status and recognition
   - require insurance companies to cover them
   - encourage self-regulation
   - create more qualified practitioners[13]

1. Convert existing government clinics into 'integrated primary health care centres' in which:
   - general practitioners have a broader knowledge of all modalities.
   - practitioners of all modalities work together to seek the best treatment for patients.

1. Raise the status of the GP to become the key interface between 'health' and 'medical care'.

2. Provide compulsory professional development programmes for orthodox trained doctors in the appreciation of natural medicine. Include this requirement in the professional assessment of doctors.

5. Require that western orthodox doctors refer patients to natural health practitioners where such treatment is more appropriate, notably in chronic cases where western drugs are known to be only palliative.

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[13] *such studies are in great demand. There were 300 applicants for the first degree course in TCM to be introduced in Hong Kong, by the Baptist University.*

6. Introduce, into the orthodox medical degree, an understanding of 'health' and an appreciation of all available modalities. This must be combined with an appreciation that most of them require extensive training and cannot be otherwise safely practised just on account of holding an orthodox medical degree.

7. Pass legislation which protects the right of citizens to obtain therapies that they themselves wish to use and forbids raising different conditions for different modalities. An example of this is inability, in Hong Kong, to obtain insurance reimbursement for natural therapies[14] .

5.3 General

1. Create many more degree courses - totally separate from orthodox medical schools - for the study of community health and Natural modalities notably TCM.

2. Create a universal system where *all* therapies and their outcomes can be recorded and assessed.

3. Create a 'drugs side effects' recording, analysis and dissemination system which is compulsory to use and is a criminal offence to ignore.

4. Measure the incidence of iatrogenic illness in hospitals and take action to reduce it.

5. institute a quality control system managed by a body which, as is normal practice in other industries, is independent of practitioners.

6. Foster research programme aimed to study the efficacy of other modalities - notably TCM but using research protocols which are relevant to those modalities which may not be the same as those relevant to allopathy

7. Create a Medical Ombudsman.

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[14] *this is another area in which Hong Kong is behind the times: such insurance is now available in many countries.*

Appendix I

Aims of the Natural Health Association

(formerly the Complementary Medicine Society)

1. to promote a public appreciation of natural health and its therapies;
2. to disseminate knowledge of natural health amongst members;
3. to foster research in natural health medicine;
4. to protect the right of people to obtain therapies that they themselves wish to use;
5. to encourage a move towards a more integrated system of healthcare within Hong Kong.

'Natural health' is taken to mean the encouragement of natural processes of the body to maintain and regain health. This encouragement is based on and makes use of philosophies and therapies which, currently, are not included widely in established orthodox western medicine.

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Extract from: 'Quackery to Integrated Care: Power, Politics and Alternative Medicine'

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Introduction

Medical services today seem paradoxically to be going in two opposing directions. On one hand, we are dazzled almost daily by ever more sophisticated biotechnologies: viral genetic delivery vectors, synthesised pharmaceuticals, new internal imaging techniques. Yet there is also an expanding interest in low-tech "alternative" therapies, and managed care companies, elite medical centres, and practitioners are scrambling to meet demand.

It is a truly ironic development. Who would have predicted-that the very medical centres and hospitals that vilified alternative medicine as quackery for most of the century would suddenly be opening clinics, hiring practitioners, and advertising alternative, traditional, and spiritually-based therapies to their patients? The latest data show that 75 medical schools[15] now include courses in complementary and alternative medicine (CAM) in their curriculum.

The National Institutes of Health has established the National Centre for Complementary and Alternative Medicine. Community hospitals and academic medical centres are opening new services such as the "Division of Complementary Medicine" (University of Maryland), "The Centre for Integrative Medicine" (Thomas Jefferson University), and '.'The Centre for Alternative Medicine and Longevity" (Miami Heart Institute). The brochure for the Miami Centre lists at least 26 modalities it offers, from applied kinesiology to bio-oxidative -therapies to qi-gong to iridology.

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[15] *This number is in the USA -- there are probably an equal number in Europe. In the UK, examples are Exeter University and Westminster which offer degree courses.*

The American Medical Association is finally suggesting that maybe doctors should know something about alternative medicine, and has recently published a full issue of its journal on alternative medicine 2 (though it also recently pulled back from a commitment to publish a volume on alternative medicine, fearing a conservative backlash). Many states are loosening their laws as well. Washington State, for example, passed a law in 1996 mandating insurance coverage of alternative care, and now conventional doctors and Naturopaths are working side by side in clinics and collaborating on the care of patients.

Appendix III

The profile of a 'Neighbourhood Health Centre'

The centre itself would be as little like a clinic hospital as possible. It would be more welcoming with social areas for people to meet such as a small tea shop, library, reading rooms and places where people can talk informally among themselves or with members of staff provided for this very purpose. It would be a focus for healing. The idea would be to create confidence in people to share their worries on an informal basis rather than the rather threatening 'appointments' system (which is also included). This is particularly relevant to the aged.

Apart from the informal environment that would be created, there would also be 'very general practitioners'(VGPs) who can be seen by appointment. The emphasis would be given to 'Very' because these health care professionals, perhaps trained as nurses[1], would:

- understand the whole range of options open - including TCM and other alternatives.
- understand the processes of improving health so that people will consult them before they fall sick.
- be versed in the underlying factors causing ill-health rather than simply treating sickness symptoms.
- treat, as far as is possible, the same patients so that his records will give him guidance on the whole background and history of every patient he sees.

In a community such as a housing estate, everyone will be eligible to become, at a small fee - or possibly free - a member of the 'Health Centre'. He or she will have a card which allows admission to use some of the free services such as:

- a 'check-up' which, apart from uncovering illness, is primarily aimed at giving a 'profile of health' and what needs to be done to raise it. For example implementing strategies for active living which provide exercise in the daily routines, taking into account the user's work pattern
- access to books and journals and leaflets on all possible subjects
- events, such as talks and videos
- access to internet for health and medical searches
- general advice on nutrition including traditional Chinese concepts
- general advice on symptoms
- computerised self-diagnosis which can advise the need to see a doctor
- informal discussions with staff skilled in listening to and dealing with problems and concerns
- information about management skills
- instruction on understanding how to take medicine
- instruction for women to examine themselves for breast cancer and cope with menopause
- general advice on child rearing
- general guidance on relationship challenges

- brain-based strategies to help aged users retain their mental agility.
- the centre as a whole - which is designed to instil the ideas of 'health' in a human way, thus promoting patient autonomy.

In addition, he/she will make payments for:

- diagnostic appointments with GPs
- treatment such as herbal medicine, acupuncture, manipulation, exercises & massage. This relates both to treating sickness and to raising their health profile.
- specific nutritional advice based on the circumstances of the user
- testing for allergies;
- guidance to develop stress management skills
- specific guidance on relationship challenges.
- exercise classes including Tai-chi and qi-gong
- craft and other classes for the elderly
- organised community events and competitions in various things such as Chinese Chess.

References:

[1]: "Primary Care Services in search of Alternative Ways of providing Services, that are affordable, accessible and appropriate- a review of recent literature." By N. North Nurses Prax New Zealand, July Volume 6, Issue 3, page 11-18

How 'scientific' is Orthodox Western Medicine?

A frequently heard statement, which has assumed the status of a truism is that western orthodoxy is the only 'scientific' medicine. This has very little substance in fact.

For example, a report prepared by the US Government[16] found that only 20% of medical procedures had any scientifically proved basis and that many practices were still undertaken even though they had been found to be ineffective or unsafe. Whilst this report is now some 20 years old, current evidence still points to the same situation.

According to an editorial in the British Medical Journal of 5/10/91, only 15% of medical interventions are supported by solid scientific evidence and that only 1% of the articles in medical journals are scientifically sound. It was found, when investigating material on glaucoma, after searching published medial report back to 1906, there was not one randomised controlled trial of the standard treatment!

Clinical randomised trials on drugs are usually undertaken by drug companies using double blind testing. One aspect of these is that the curative effects are based upon the assumption that every person reacts in the same way to the same substances -- something which has no scientific basis and is, in fact fallacious by common experience. The worst outcome of this is that a sizeable proportion of the population is seriously affected by effects which are not given prominence but referred to as 'side effect'.

Modern scientific methods are, undoubtedly, one of the finest intellectual achievements of the human race in the search for new knowledge. However, those with only a superficial understanding of the processes of science arrogate its importance above knowledge garnered in other ways. There is a wide-spread notion that the scientific knowledge of today is the only knowledge that is 'true'. One just has to look back over only a few decades to realise that scientific knowledge, which is regarded as the 'truth' at any time, will almost certainly be superseded by something different at a later date. This is particular true in medical science[17] . One estimate is that the 'half-life' of scientific knowledge is only about 5 years.

Only when one fully appreciates both the beauty and frailty of the scientific method, one appreciates the lasting validity of traditional knowledge.

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[16] *'Assessing the Efficacy and Safety of Medical Technologies' Office of Technology Assessment. Sept. 1978.*

[17] *An outstanding case of this is the relatively small attention given to the immune system until the Aids epidemic arose. The reason for its scant attention was that it manifestly does not figure in a paradigm which believes that the body always needs external help to cure it - that is the allopathic paradigm.*

Unfortunately, the wisdom to accept this truth is largely absent from the practising professionals of western allopathic medicine where, with some exceptions, 'scientific knowledge' is naively totally accepted as 'all time truths' and other evidence rejected because it has not been 'scientifically proven'. It is usually overlooked that scientific research needs money and much knowledge has not received 'scientific study' because there is no commercial value in it. The essential issue is not that there is 'no scientific proof' but that money is not spent on trying to prove something that is not within the current fashionable paradigm (in other words 'clearly ridiculous').

In a phrase "Absence of proof is not proof of absence".

Iatrogenic Illness

1. A landmark study reported in the New England Journal of Medicine[18] found that, of the 815 consecutive patients of general medical services of a university hospital:
   - 36% had an iatrogenic illness
   - of these, 9% were considered major in that they were life-threatening
   - in 2%, the iatrogenic illness was believed to have contributed to their death.

2. There is much evidence to suggest the over-prescription of antibiotics world wide. The misuse of antibiotics is now causing grave concern in Hong Kong. Although warnings were given some ten years ago, they were entirely ignored by the medical profession and policy makers[19].

3. Some statistics about the situation in the USA:
   - Between 1971 and 1986, in the USA, the likelihood of cancer developing in anyone had risen from one person in six to one in three.
   - Diabetes has increased by 600 per cent in the same period.
   - One x-ray in five is taken unnecessarily.
   - Defensive medicine (tests done in case of litigation not related to any medical needs) has led to four doctors out of five admitting to this as a normal strategy and to only two per cent of test results actually influencing subsequent treatment decisions
   - Based on autopsy findings, errors in diagnosis are now just as prevalent as in the past (around 50 per cent in many studies) despite enormous technological improvements.
   - Between 50 and 80 per cent of adults swallow prescription medication every 24 to 36 hours.
   - 12 per cent of all surgery is unnecessary, with caesarean section being the worst offender, amounting to as much as 23 per cent of all deliveries in the US.
   - Errors in medication supplied in hospitals occur once every 6.5 administrations (either in dosage or medication given).

(Source: Professor Werbach , a faculty member of the School of Medicine at UCIA and a leading authority on the nutritional causes of illness, at a lecture in London in 1992.)

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[18] *NEJM Vol. 304, no.11 pages 638 - 641*

[19] *" Over-prescription of antibiotics outside the hospital" by J. Sternon and Y. Glupczynsky, Revue Medical de Bruxelles, 1999 February, Volume 20, Issue 1, page 43-7. One report suggests that it is common practice not to give a complete course of such drugs so requiring the patient to return and pay for another consultation!*

4. A medical report in 1998 estimated that adverse reactions to prescription drugs are killing about 106,000 Americans each year -- roughly three times as many as are killed by automobiles.[1]

This makes prescription drugs the fourth leading killer in the U.S., after heart disease, cancer, and stroke. The report included only drugs that were given properly and under normal circumstances, excluding drugs that were administered in error or taken in attempted suicides. (When errors of administration are included, the death toll may be as high as 140,000 per year.[2] Such errors include prescribing the wrong drug or the wrong dosage; giving medications to the wrong person; giving medications to the right person but in the wrong quantities or the wrong frequencies, and so forth.)

According to the 1998 report, which analysed the data from 39 separate studies conducted over the last 32 years in U.S. hospitals, 3.2 out of every 1000 (or 3200 per million) hospital patients die from adverse reactions to prescription drugs. Of the 106,000 people killed each year by prescription drugs in the U.S., 41% (43,000) were admitted to the hospital because of an adverse drug reaction; the other 59% (63,000 people) were hospitalised for some other cause but developed a fatal reaction to prescription drugs they received while hospitalised. In the U.S. in 1994, there were 33,125,492 hospital admissions.

The sale of prescription drugs has more than doubled in the U.S. during the past 8 years. In 1990, Americans spent $37.7 billion on prescriptions; in 1997, national spending on prescriptions reached 78.9 billion.[3] Prescription drugs are the fastest-growing portion of health-care costs, having risen at the rate of 17% per year for the past few years.[3]

Urging physicians to prescribe particular drugs -- especially new drugs -- is a huge business. According to the NEW YORK TIMES, the sales force of the largest 40 drug companies has "exploded" in recent years.[3] In 1994, there were 35,000 full-time "detail people" employed by drug companies to visit doctors and describe pharmaceutical products; by 1998, the number had grown to 56,000 -- one sales person for every 11 physicians.[3] Drug companies spent $5.3 billion in the first 11 months of 1998 sending their "detail people" into doctors' offices and hospitals, plus another $1 billion putting on "marketing events" for doctors.

Not all adverse reactions to new drugs can be anticipated or avoided under the present system, according to medical experts. "It is simply not possible to identify all the adverse effects of drugs before they are marketed," say three physicians writing in the NEW ENGLAND JOURNAL OF MEDICINE.[4] In fact, "Overall, 51% of approved drugs have serious side effects not detected prior to approval."[5]

Side effects from new drugs cannot be anticipated for 2 main reasons: (1) Individuals vary greatly in their reactions to chemical substances; and (2) when drugs are tested rare side effects may not appear in such a small group but may become painfully obvious when millions of people start taking the drug. Even a few years ago, drugs reached a mass audience slowly, providing time for unexpected side effects to show up in relatively small numbers of people. But today drugs are marketed directly to consumers via TV, so

a huge market for a new product can be created quickly and side effects can appear in large numbers of people. The sexual potency drug, Viagra, provides an example of this phenomenon. Within a few months of its introduction, several million people began taking Viagra, and many serious side effects, including fatalities, suddenly appeared.

Despite the widespread knowledge that half of all new drugs will cause serious side effects in some people, neither the government nor the drug companies systematically collect information on adverse reactions to new drugs. "Even when it is recognised that a new drug will be given to many patients for many years, rarely are systematic post-marketing studies carried out."[4]

References:

[1] Jason Lazarou and others, "Incidence of Adverse Drug Reactions in Hospitalised Patients," JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION Vol. 279, No. 15 (April 15, 1998), pgs. 1200-1205. And see: David W. Bates, "Drugs and Adverse Drug Reactions; How Worried Should We Be? [editorial]" JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION Vol. 279, No. 15 (April 15, 1998), pgs. 1216-1217.

[2] David C. Classen and others, "Adverse Drug Events in Hospitalised Patients," JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION Vol. 277, No. 4 (January 22/29, 1997), pgs. 301-306.

[3] Abigail Zuger, "Fever Pitch: Getting Doctors To Prescribe Is Big Business," NEW YORK TIMES January 11, 1999, pgs. A1, A13.

[4] Alastair J.J. Wood and others, "Making Medicines Safer -- The Need for an Independent Drug Safety Board," NEW ENGLAND JOURNAL OF MEDICINE Vol. 339, No. 25 (December 17, 1998), pgs. 1851-1854.

Drug Safety

From: Thomas J. Moore and others, "Time to Act on Drug Safety," JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION Vol. 279, No. 19 (May 20, 1998), pgs. 1571-1573.

A competent drug safety program should include:

(1) A program to monitor all adverse effects from prescription drugs and annually report the number of injuries and deaths and their likely causes. Currently no one keeps such statistics.

(2) A program to monitor side effects from new drugs. This currently small group collects anecdotal information about side effects of new drugs, but hasn't the resources to be systematic or thorough.

The problem with anecdotal information is that only about 1% of adverse drug reactions gets reported in this way. For example, the FDA received an average of 82 reports each year about adverse reactions caused by the drug digoxin. This relatively small number of reports seemed to indicate that digoxin was not a big problem. However a systematic survey of Medicare records revealed 202,211 hospitalisations for adverse reactions to digoxin during a seven-year period.

(3) Measures that would make sure that safety information is being disseminated and heeded by physicians. FDA currently has no such program.

(4) The fourth part of a competent drug safety program would aggressively seek out information about unsuspected adverse reactions to drugs. Instead of waiting passively for anecdotal information to filter in, the government needs to aggressively look for drug involvement in reported birth defects, heart problems and other common disorders that are frequently caused by prescription drugs. In the same way that the world's public health specialists aggressively seek out new strains of influenza, FDA needs to be aggressively seeking out new side effects of drugs.

Treatments alternative to western allopathy with proven efficacy and economy.

1. In the case of osteo-arthritis, GPs can offer the following: palliative or joint replacement. "Osteo-arthritis in the elderly", a report conducted by researchers at Maryland University found that acupuncture helped 7 out of 29 patients avoid surgery that would have cost an estimated US$63.000. Many other treatment methods have been reviewed in studies conducted in Exeter and America [1] and [2].

2. Low back pain (lumbago): GPs are only able to prescribe anti-inflammatory drugs, pain relievers and or vertebral disc removal for this condition. Sufferers have found that physiotherapy, chiropractic[3], osteopathy, acupuncture and Neuromuscular Therapy have been far more effective in successfully treating their condition. Furthermore, the costs to do so are far lower.

3. Meniere's Disease is currently treated allopathically by use of diuretics to remove excess fluid from within the ear. In some cases surgical intervention is used. Extensive research has shown that acupuncture is very highly effective in treating this condition whose symptoms involve tinnitus, vertigo, and hearing impairment[4].

4. Eczema: Topically applied creams are the solution provided by allopathic medicine, but these only treat the symptoms, not the cause. Therefore treatment is long-term and possibly costly. Chinese medicine (TCM)[5] and Ayurvedic medicine[6]has proved itself in thousands of cases of eczema and psoriasis to provide a complete cure, and that after a minimal number of treatment [7]. Hence lower costs and a higher treatment success rate.

5. See also Annex:
   'Some examples of research papers relating to the economics of non-orthodox therapies.'
   Obtained from the data base of the Research Council for Complementary Medicine

References:

[1]: "Usage of Complementary Therapies in Rheumatology – a systematic review" by E. Ernst, University of Exeter. Clinical Rheumatology, 1998 volume 17, Issue 4, page 301-5

[2]: "Conservative Management of Spinal Osteo-arthritis with glucosamine sulphate and chiropractic treatment." By M.S. Gottlieb, Journal of Manipulative Physiological Therapeutics, 1997 July-August, Volume 20, Issue 6, page 400-14

[3]: " Experts' opinions on complementary / alternative treatments for low back pain." By E. Ernst and M. H. Pittler. Journal of Manipulative Physiological Therapeutics, 1999, February, volume 22, Issue2, page 87-90.

[4]: "The Treatment of Meniere's Disease by Acupuncture." By A. Steinberger and M. Pansini. The American Journal of Chinese Medicine, Volume 19, Issue 1-4, page 102-5

[5]: " A Survey of Eczema treated with Chinese drugs." Chung Hsi I Chieh Ho Tsa Chih, 1989 January, Volume 9, Issue1

[6]: "Ayurvedic medicine, a pilot study." By G.W.H.M. Janssen, Nederlands Tijdschrift voor Integrale Geneeskunde, volume 6, page 586-594.

[7]: "A one year follow-up of children treated with Chinese Medicinal herbs for atopic eczema" by D.J. Atherton, British Journal of Dermatology, 1994, April, Volume 130, Issue 4, page 488-93

NATURAL HEALTH ASSOCIATION OF HONG KONG

SOME EXAMPLES OF RESEARCH PAPERS RELATING TO THE ECONOMICS OF NON-ORTHODOX THERAPIES. Obtained from the data base of the Research Council for Complementary Medicine, London. September 1999

INTRODUCTION

These references are arranged mostly under 'conditions' together with a section covering some modalities and general research into the use of 'complementary and alternative' modalities as follows:

- Anxiety and stress management
- Back problems
- Birth
- Drug abuse
- Headache/migraine
- Heart
- Irritable bowel
- Pain
- Urinary
- Acupuncture - general
- Biofeedback
- Nursing
- Nutrition
- Pre-operative measures/Measures to help surgery
- General use of complementary/alternative therapies

It is emphasised that this is a representative selection from just one data base – many more papers exist for research in all fields.

ANXIETY AND STRESS MANAGEMENT

Reference: Pruitt RH. **Effectiveness and cost efficiency of interventions in health promotion.** ***Journal of Advanced Nursing*** **1992;17:926-32**
Study: The effect of a stress management programme as a component of an overall fitness programme.
Modality: Stress Management Programme

Psychological, physiological and economic parameters were examined in relation to stress management activities in an experimental study. Subjects were stratified by life stressors and then randomly assigned to groups.
Results: Stress-related physical symptoms decreased significantly (P less than 0.05) in the treatment group. Those who practised the relaxation techniques regularly had significantly lower systolic blood pressure (P less than 0.05). Results of cost evaluation
demonstrate the benefits from a programme with relatively low overall costs.

References: Herron RE. Hillis SL. Mandarino JV. Orme Johnson DW. Walton KG. **"The impact of the transcendental meditation program on government payments to physicians in Quebec'.** ***American Journal of Health Promotion*** **1996;10:208-16**

BACK PROBLEMS

Reference: Brouillette DL. Gurske DT**. Chiropractic treatment of cervical radiculopathy caused by a herniated cervical disc.** ***Journal of Manipulative & Physiological Therapeutics*** **1994;17:119-23**
Study: The effectiveness of treating cervical radiculopathy (caused by an MRI documented herniated cervical disc) without surgery.
Modality: Chiropractic in conjunction with conservative care.
A 60-yr-old woman was treated by a chiropractor for symptoms including a deep, constant, burning ache in the left arm, and severe neck and left shoulder pain. A diagnosis of acute herniated cervical disc was made based on the findings of physical examination and an MRI study of the patient's cervical spine. Important orthopaedic findings included exacerbation of the radicular symptomatology with the performance of Valsalva's and cervical compression tests. Neurologic findings included absent biceps and hyporeflexive triceps reflexes on the left, as well as C6 sensory deficit and C7 and C8 sensory hypesthesia. The primary finding on the MRI scan was posterior and lateral herniation on the C6-7 disc.
Treatment included chiropractic manipulative therapy, longitudinal cervical traction and interferential therapy. The patient began a regular schedule of treatments, which started on a daily basis but were gradually reduced as the patient progressed.
Results: By the third week of treatment, the neck and shoulder pain was completely resolved. Subjective evaluation indicated the radicular pain to be improved by 60% within 6 weeks. The patient's pain, numbness and grip strength returned to normal within 5 months.
Conclusion: Conservative treatment including chiropractic manipulative therapy seems to be a reasonable alternative to surgery for cervical radiculopathy caused

by a herniated cervical disc. Clinical trials should be performed to evaluate long term success rate, risk of permanent disability, rate of recovery and cost effectiveness of this and other forms of treatment for such conditions.

Reference: Carter JL. **Economic management of industrial back injury.** ***Am Chiropractor.*** **1988;1988:28-9**

Reference: Jarvis KB. Phillips RB. Morris EK. **Cost per case comparison of back injury claims of chiropractic versus medical management for conditions with identical diagnostic codes.** ***Journal of Occupational Medicine*** **1991;33:847-52**
Study: This study assessed the total cost per case of chiropractic claims and medical claims for conditions with identical diagnostic codes. The sample consisted of 3062 claims or 40.6% of the 7551 estimated back injury claims from the 1986 Workers' Compensation Fund of Utah.
Modality: Chiropractic
Results: For the total data set, cost for care was significantly more for medical claims, whereas costs for chiropractic claims were 10 times less.

Reference: Kukurin GW. **Chiropractic vs. medical management of work-related back injuries: cost comparison studies of workers compensation cases.** ***Dig Chiropractic Econ*** **1995;37:28-34**
Study: Comparison of medical and chiropractic treatment for work-related back injury.
Modality: Chiropractic
Results: Data obtained from workers compensation boards comparing MD versus DC care revealed a consistent 2-to-1 superiority in favour of chiropractic care, in terms of treatment costs and work absenteeism.
Conclusion: The author concludes that the therapeutic power of spinal manipulation and/or the ineffectiveness of most medical procedures for acute LBP may be responsible for the apparent differences.

Reference: Meade TW. Dyer S. Browne W. Townsend J. Frank AO. **Low back pain of mechanical origin: randomised comparison of chiropractic and hospital outpatient treatment.** ***BMJ*** **1990;300:1431-7**
Study: To compare chiropractic and hospital outpatient treatment for managing low back pain of mechanical origin.
Modality: Chiropractic
Randomised controlled trial. Allocation to chiropractic or hospital management by minimisation to establish groups for analysis of results according to initial referral clinic, length of current episode, history, and severity of back pain.
Patients were followed up for up two years. SETTING--Chiropractic and hospital outpatient clinics in 11 centres. PATIENTS—741. Patients aged 18-65 who had no contraindications to manipulation and who had not been treated within the past month. INTERVENTIONS--Treatment at the discretion of the chiropractors, who used chiropractic manipulation in most patients, or of the hospital staff, who most commonly used Maitland mobilisation or manipulation, or both.
Results: Chiropractic treatment was more effective than hospital outpatient management, mainly for patients with chronic or severe back pain.
The benefit of chiropractic treatment became more evident throughout the follow-up period. Secondary outcome measures also showed that chiropractic was more beneficial.

Conclusions: For patients with low back pain in whom manipulation is not contraindicated, chiropractic confers long-term benefit in comparison with hospital outpatient management. The benefit is seen mainly in those with chronic or severe pain. Introducing chiropractic into NHS practice should be considered.

Reference: Smith LL. **Cost-effectiveness - the second Magna Report: the high cost of failing to use cost-effective care.** ***Chiropractic Rep*** **1998;12:1-3, 6-8**

Reference: Stano M., Smith M. **Chiropractic and medical costs of low back care.** ***Medical Care.*** **1996;34:191-204**
Study: This study compares health insurance payments and patient utilization patterns for episodes of care for common lumbar and low back conditions treated by chiropractic and medical providers.
Modality: Chiropractic.
Using 2 years of insurance claims data, this study examines 6,183 patients who had episodes with medical or chiropractic first-contact providers. Multiple regression analysis, to control for differences in patient, clinical, and insurance characteristics.
Results: Total insurance payments were substantially greater for episodes with a medical first-contact provider. Most of the cost differences were because of higher inpatient payments for such cases.
Analysis of recurrent episodes indicates that chiropractic providers retain more patients for subsequent episodes and that patient exposure to a different provider type during early episodes significantly affects retention rates for later episodes. Patients choosing chiropractic and medical care were comparable on measures of severity and in lapse time between episodes.
Conclusion: The lower costs for episodes in which chiropractors serve as initial contact providers along with the favorable satisfaction and quality indicators for patients suggest that chiropractic deserves careful consideration in gatekeeper strategies adopted by employers and third-party payers to control health care spending. More research is needed, especially in developing alternative measures of health status and outcomes.

Reference: Tuchin PJ. Bonello R. **Preliminary findings of analysis of chiropractic utilisation and cost in the workers' compensation system of New South Wales, Australia.** ***Journal of Manipulative & Physiological Therapeutics,*** **1995;18:503-11**
Study: To review the literature and test a new methodology of assessing chiropractic utilisation and cost-effectiveness on workers' compensation claimants.
Modality: Chiropractic
Design: A retrospective analysis of data from the WorkCover Authority (WCA) of New South Wales, Australia.

Main outcome measures: Average chiropractic treatment cost per case, average medical treatment cost per case, comparisons with total compensation payments, assessments of related indirect costs (e.g., pathology tests).
Results: From the total number of employment injuries (n = 51,077) in NSW for 1991-92, 1289 cases met selection criteria. Approximately 30% of the total injuries were
described as back problems. The total utilisation rate for chiropractic intervention in spinal injuries for workers' compensation claimants was 12%. Payments for physiotherapy and chiropractic treatment totalled over AUS$25.2 million and represented 2.4% of total payments for all cases. Average chiropractic treatment cost for a sample of 20 randomly selected cases was AUS$299.65; average medical treatment cost per case was AUS$647.20. Further analysis of the 20 selected cases seemed to show an average cost per claim that was significantly different from WCA database figures.
Conclusion: An analysis of 20 randomly selected cases from the WCA suggested that chiropractic intervention for certain conditions may be more cost-effective
than other forms of intervention.

Reference: Timm KE. **A randomised control study of active and passive treatments for chronic low back pain following L5 laminectomy.** ***Journal of Orthopaedic & Sports Physical Therapy*** **1994;20:276-86**
The professional literature contains relatively few randomised control studies that have assessed the efficacy of physical therapy in treating chronic low back pain (CLBP).
Study: The purposes of this study were: 1) to investigate the effects of joint manipulation, low-tech exercise, and high-tech exercise on CLBP; 2) to track the length of CLBP relief; and 3) to determine treatment cost-effectiveness.
Modality: Physical therapy
250 subjects (68 females, 182 males; aged 34-51 years) with CLBP following an L5 laminectomy were randomly assigned to five separate groups for a treatment period of 8 weeks. Chronic low back pain status was measured by modified-modified Schober, Cybex Liftask, and Oswestry procedures.
Results: 1) only low-tech and high-tech exercise produced significant improvements.
2) the mean period of CLBP relief ranged from 1.6 weeks (control) to 91.4 weeks (low-tech exercise). 3) low-tech exercise was most cost-effective.
Conclusion: It was concluded that: 1) low-tech and high-tech exercise were the only effective treatments for CLBP, 2) low-tech exercise produced the longest period of CLBP relief, and 3) low-tech exercise was the most cost-effective form of treatment. Clinically, low-tech exercise may be the treatment method of choice for the effective management of chronic low back pain.

Reference: Devulder J., De Laat M., Van Bastelaere M., Rolly G. **Spinal cord stimulation: a valuable treatment for chronic failed back surgery patients.** ***Journal of Pain & Symptom Management*** **1997;13:296-301**
Study: To evaluate long-term results and cost effectiveness of SCS, we interviewed 69 patients treated during a period of 13 years.
Modality: Spinal cord stimulation (SCS). This has been used in the treatment of "chronic failed back surgery syndrome" for many years.
Results: 26 patients stopped using SCS; there was no clear explanation for this unsatisfactory result in 10. Forty-three patients continued with the therapy and obtained good pain relief. Ten patients obtained better pain relief than during the trial procedure. Some still need opioid analgesics, but 11 of the 16 who require these drugs obtained a synergistic effect when concomitantly using the stimulator. Eleven patients
have returned to work.
Conclusion: In our center, the application of SCS costs on average $3660 per patient per year. Although this seems expensive, it may be a cost-effective treatment if other therapies fail.

BIRTH

Reference: Schauble PG. Werner WE. Rai SH. Martin A. **Childbirth preparation through hypnosis: the hypnoreflexogenous protocol.** ***American Journal of Clinical Hypnosis*** **1998;40:273-83**
Study: A verbatim protocol for the "Hypnoreflexogenous" method of preparation for childbirth is presented wherein the patient is taught to enter a hypnotic state and then prepared for labor and delivery.
Modality: Hypnosis. The method provides a "conditioned reflex" effect conducive to a positive outcome for labor and delivery by enhancing the patient's sense of readiness and control.
Results: Previous applications of the method demonstrate patients have fewer complications, higher frequency of normal and full-term deliveries, and more positive postpartum adjustment. The benefit and ultimate cost effectiveness of the method are discussed.

Reference: Field TM. Schanberg SM. Scafidi F. Bauer CR. Vega Lahr N. Garcia R.Nystrom J. Kuhn CM. **Tactile/kinesthetic stimulation effects on preterm neonates.** ***Pediatrics*** **1986;77:654-8**
Study: Tactile/kinesthetic stimulation was given to 20 preterm neonates (mean gestational age, 31 weeks; mean birth weight, 1,280 g; mean time in neonatal intensive care unit, 20 days). Their growth, sleep-wake behavior, and Brazelton scale performance was compared with a group of 20 control neonates.
Modality: The tactile/kinesthetic stimulation consisted of body stroking and passive

movements of the limbs for three, 15-minute periods per day for a 10 days.
Results: The stimulated neonates averaged a 47% greater weight gain per day, were more active and alert during sleep/wake behavior observations, and showed more mature habituation, orientation, motor, and range of state behavior on the Brazelton scale than control infants. Finally, their hospital stay was 6 days shorter, yielding a cost savings of approximately $3,000 per infant.
Conclusion: This data suggests that tactile/kinesthetic stimulation may be a cost-effective way of facilitating growth and behavioral organization even in very small preterm neonates.

CANCER

Reference: Duda RB. Kessel B. Curtin M. Goodman D. Kessel M. Eisenberg D. Colditz G. Prouty J. Bookman. **The use of herbal remedies and alternative therapies by breast cancer patients (Meeting abstract).** ***Proc Ann Meet Am Soc Clin Oncol*** **1995;14:70**
Study: A recent survey was designed to determine what alternative therapies are used by breast cancer patients to alleviate menopausal symptoms. 201 postmenopausal women (PMW) completed the survey, 48 (24%) were diagnosed with breast cancer (BRC). The mean age of menopause was 46.0 years, the mean age of women surveyed was 53.6 years. Menopausal symptoms of hot flashes, sleep disturbances, palpitations, fatigue and mood changes were noted in 69%, 50%, 38%, 39%, and 36% of PMW with BRC compared to 66%, 59%, 41%, 58% and 50% of PMW without BRC.
Modalities: Non-medically traditional therapies, including acupuncture, chiropractic treatments, massage, spiritual work and meditation, were practiced in 35% of PMW with and without BRC. Herbal therapies, including ginseng, dong quai, evening primrose, and black cohosh were used for relief of symptoms in 3% of PMW with BRC and 12%
of PMW without BRC. Antioxidants (vitamins C and E, beta-carotenes) were used in 65% of PMW with BRC and 38% of PMW without BRC.
Results: Relief of menopausal symptoms was achieved in 74% of PMW using herbal therapies, and 96% using non-medically traditional therapies. Yearly non-reimbursed costs ranged from US$15 to US$2000, and 54% of respondents stated that their physician was informed of their use of these therapies.
Conclusion: This survey shows that treatments which are unconventional by Western medical standards are frequently used by breast cancer patients, often without the knowledge of the physician, at a significant expense to the patient and frequently with a perceived benefit by the patient. Further studies on the biologic effects, safety and efficacy of herbal and antioxidant therapy on breast cancer are warranted.

Reference: Kite SM. Maher EJ. Anderson K. Young T. Young J. Wood J. Howells N.Bradburn J. **Development of an Aromatherapy service at a Cancer Centre.** ***Palliative Medicine*** **1998;12:171-80**

Study: The Aromatherapy service at the Cancer Support and Information Centre (CSIC) of this regional Cancer Centre has been continually assessed since its inception in 1993. New methods of assessing complementary therapies, based on the 'therapy-as-practised', have been explored. The present study evaluates the service following changes made after an initial pilot.

Modality & Method: The professional aromatherapist developed an evaluation tool, and formal questionnaires were limited to the Hospital Anxiety and Depression Scale
(HADS). HADS was completed before and after a course of six aromatherapy sessions. Of 89 patients referred, 58 patients completed the six sessions. Referrals were made by health professionals working in the Cancer Centre and in the CSIC. The majority of patients were female with breast cancer and were receiving radical oncological treatment. Tension, stress and anxiety/fear were the most common reasons for referral, and this was reflected in high initial HADS scores.

Results: There were significant improvements in HADS scores in the 58 patients completing the course (mean anxiety, depression, and combined scores dropped from 8.9 to 6.2 6.1 to 4.0 and 15.0 to 10.2, respectively). 50% or more of the sample reported a significant improvement in the eight most commonly assessed symptoms. The therapist was initially cautious about using questionnaires, but she gained confidence in using HADS as an assessment tool. The areas covered by her own evaluation tools were broadly comparable to established instruments such as the EORTC QLQ-C30.

Conclusion: We conclude that aromatherapy massage has a role in reducing psychological distress, and improving symptom control in cancer patients. Further service evaluation is needed to promote appropriate referral and effective planning of treatment, and to justify cost. Given the multifaceted nature of complementary therapies, the need to develop new research methodologies is acknowledged.

DRUG ABUSE

Reference: Newmeyer JA. Johnson G. Klot S. **Acupuncture as a detoxification modality.** ***Journal of Psychoactive Drugs*** **1984;16:241-61**

Study: Investigation of the effects of acupuncture (APT) detoxification on heroin abusers (aged 18+ yrs), who were clients of a drug detoxification project
in San Francisco.

Modality: Acupuncture.

Of 460 Subjects, 69%were male, 78% were White, and 65% were unemployed. Continuous APT treatment was made available to the subjects for a 21-day period; during this time Subjects were assessed by an intake interview, a daily checklist of symptoms, a symptom evaluation sheet, the Profile of Mood States, a urinalysis, and

a closing interview. After 3 months, a follow-up interview was conducted. Subjects were offered the opportunity to participate in (1) APT only (n = 72), (2) APT and medication (n = 334), or (3) medication only (n = 54) treatments.
Results: Findings provide limited support for the relative efficacy of the APT modality. Results indicate that soft-core users were retained longer in APT treatment than hard-core users. The short-term effects of APT treatment, overall Subject evaluation of APT, APT's successes, and a cost-benefit analysis are discussed. (Referenced in ter Riet et al. A meta-analysis of studies into the effect of acupuncture on addiction. Br J Gen Pract
1990;40:379-82 Scored 28 points, no clear result).

HEADACHE/MIGRANE

Reference: Gutkin AJ. Holborn SW. Walker JR. Anderson BA. **Cost-effectiveness of home relaxation training for tension headaches.** ***Journal of Behavior Therapy & Experimental Psychiatry.*** **1994;25:69-74**
Study: Taped home relaxation training was evaluated in a single-case replication design across three patients suffering from tension headaches.
Modality: Listening to relaxation tapes.
Results: Data from daily headache diaries indicated that headache frequency decreased
substantially for two of the patients. For the third patient who reported almost continual headache pain, intensity was reduced by over 50%. When compared with results of our previous research taped home relaxation training, this appeared as effective as (and therefore, more cost-effective than) live clinic relaxation training.

Reference: Ilacqua GE. **Migraine headaches: coping efficacy of guided imagery training.** ***Headache*** **1994;34:99-102**
Study: This study compares the effectiveness of guided imagery, (psychosynthetic approach), and biofeedback in the treatment of migraine headache.
Specifically, the volunteer's subjective perception of the efficacy of the treatments is assessed.
Modality: Guided imagery training.
The subjects were 40 male and female volunteers presenting with migraine headache diagnosis at Sunnybrook Health Sciences Centre in Toronto, Canada. Subjects were randomly assigned to one of the three treatment conditions or to a control group. All subjects attended six sessions of training. Measures were completed pre- and post- treatment.
Results: No significant reduction in migraine activity in any of the treatment groups. There were no differences among the groups regarding the intake of medication. Nevertheless, the implementation of guided imagery training resulted in subjective reports of improved capacity to cope with the pain and in subjective reports of a reduced perception of the pain itself, although objective measures did not indicate

an appreciable change in migraine activity. Findings from the present study do not support either
feedback or guided imagery training as more effective in counteracting migraines, although subjective reports do favor guided imagery as having a positive influence on the perception of migraine pain.
Conclusions: These findings are discussed from the perspective of empowering the sufferers by providing them with a more active role in dealing with the migraine-triggering physiology, abandoning the "learned helplessness" typical of chronic pain syndromes. The issue of cost effectiveness is raised and it supports the
use of guided imagery versus biofeedback training given the lack of
theoretical agreement in the current literature.

Reference: Kassak KM. **Determinants of general health status in patients with chronic tension headache.** ***Dissertation Abstracts International,*** **1993;54:1919,**
Study: Analysis, using causal modelling, of variables abstracted from a clinical trial to assess the determinants of the general health status of patients with chronic tension headache. The setting for the study was the Center for Clinical Studies at Northwestern College of Chiropractic, Bloomington, Minnesota. A sample of 150 subjects with chronic tension headache were randomly assigned into two treatment groups of equal sizes.
Modality: Chiropractic.
One group received 10-30 mg of Amitriptyline at bedtime for 6 weeks, while the other group received chiropractic treatment two times a week for six weeks. Clinical measurements included pain scores and over-the-counter medication usage, and the SF36 was used to measure general health status. In addition, sociodemographic, lifestyle and clinical history data were collected. Chi-square was used to test the differences between the two groups with respect to the subjects' characteristics. MANCOVA for repeated measures as well as stepwise linear regression were used to test the hypotheses of this study and to build the analytical model.
Results: Data analysis showed that chiropractic management was more effective than the Amitriptyline treatment in reducing the pain scores and improving the global health
status of the subjects. Global health status was determined as a function of gender, type of treatment, reduction in pain scores and subject's perception of headache severity. The conclusion has to be taken within the constraints imposed by the study limitations. **Conclusions:** Further research is needed to establish the efficacy and cost effectiveness of chiropractic care in the management of chronic tension headache patients. Future studies should control for the doctor-patient relationship as a
placebo effect. Future studies are recommended to use outcomes instrumentation, such as the SF36, coupled with patient satisfaction tools to assess the patient's experience with the care provided.

Reference: Attanasio V. Andrasik F. Blanchard EB. **Cognitive therapy and relaxation training in muscle contraction headache: efficacy and cost-effectiveness.** ***Headache*** **1987;27:254-60**
Study: To examine the efficacy of adding a cognitive therapy component to traditional relaxation training; secondly, to examine the feasibility and cost-effectiveness of administering these treatments in a largely self-administered format for headache patients.
Modality: Cognitive therapy and relaxation training.
Twenty-five muscle contraction headache sufferers were assigned to one of three treatment conditions which provided either relaxation training alone or relaxation training combination with cognitive therapy. Procedures were delivered utilizing either a therapist-administered office-based format, or a largely self-administered format designed to provide significantly less therapist contact than the office-based procedure.

Results: At one-month post-treatment, patients in all 3 conditions exhibited significant groups, although there appeared to be a slight advantage for the cognitive groups and for groups with increased therapist contact.

HEART

Reference: Ballegaard S. Norrelund S. Smith DF. **Cost-benefit of combined use of acupuncture, Shiatsu and lifestyle adjustment for treatment of patients with severe angina pectoris.** ***Acupuncture & Electro Therapeutics Research*** **1996;21:187-97**

Study: 69 patients with severe angina pectoris were treated with acupuncture, Shiatsu and lifestyle adjustments, and were followed for 2 years.

Modalities: Shiatsu, Acupuncture and lifestyle management.

49 patients were candidates for coronary artery by-pass grafting (CABG), whereas by-pass grafting was rejected in the remaining 20 patients. We compared our endpoint findings with those of a large prospective, randomized trial comparing CABG with percutaneous transluminal coronary angioplasty (PTCA).

Results: The incidence of death and myocardial infarction was 21% among the patients undergoing CABG, 15% among the patients undergoing PTCA and 7% among our patients. No significant difference was found concerning pain relief between the three groups. Invasive treatment was postponed in 61% of our patients due to clinical improvement, and the annual number of in-hospital days was reduced by 90%,

bringing about an estimated economic saving of US$12,000 for each of our patients. Despite the fact that the men in the present study, had significantly less positive expectations towards the outcome of the treatment, when compared to the women, there was no significant difference concerning the effect.

Conclusion: The study suggests that the combined treatment with acupuncture, Shiatsu and lifestyle adjustment may be highly cost-effective for patients with advanced angina pectoris.

Reference: Luskin FM. Newell KA. Griffith M. Holmes M. Telles S. Marvasti FF.Pelletier KR. Haskell WL. **A review of mind-body therapies in the treatment of cardiovascular disease. Part 1: Implications for the elderly.** ***Alternative Therapies in Health and Medicine*** **1998;4:46-61**

Study: A review of research on complementary and alternative treatments, specifically mind-body techniques, was conducted at Stanford University. The goals of the review were to establish a comprehensive literature review and to provide a rationale for future research concerning successful aging.

Methods: Computerized searches were conducted using MEDLINE, PsychInfo, Stanford Library, Dissertation Abstracts, Lexus-Nexus, the Internet, and interviews conducted with practitioners. All studies since 1990 that examined mind-body treatments of cardiovascular disorders in the elderly were included.

Modalities: Mind-body practices evaluated were: social support, cognitive-behavioral treatment, meditation, the placebo effect, hope, faith, imagery, spiritual healing, music therapy, hypnosis, yoga, t'ai chi, qigong and aikido. Studies conducted after 1990 were a priority, but when more recent literature was scarce, other studies using randomized,

controlled trials were included.
Results: Mind-body techniques were found to be efficacious primarily as complementary and sometimes as stand-alone alternative treatments for cardiovascular disease-related conditions. Studies provided evidence for treatment efficacy, but the need for further controlled research was evident.
Conclusion: Reviewers found only a handful of randomized, controlled research studies conducted in the United States. As a result, there is a lack of replicated studies with which to determine appropriate treatment dosage and the mechanisms by which many of the practices work. Compelling anecdotal evidence, the presence of some
controlled research, overall cost effectiveness, and the lack of side effects resulting from mind-body treatments make further investigation a high priority. [References: 181]

Reference: Kidd PM. **Integrative cardiac revitalization: bypass surgery, angioplasty, and chelation. Benefits, risks, and limitations.** ***Alternat Med Rev*** **1998;3:4-17**
Discussion: Coronary artery disease (CAD) is still the main cause of premature death in the industrialized world. The revascularization modalities, bypass surgery and angioplasty, when successful provide restored blood flow the the myocardium. Bypass remains the most proven means for managing more severe cases of CAD, namely triple vessel disease with or without complications, while angioplasty works best for cases of single or double vessel disease with minimal complications. Both types of intervention partially relieve angina as they clear arterial blockage. Both save lives to an extent greater than medication alone. However, both are limited to being
palliative since they fail to treat the underlying atherosclerotic occlusive process. EDTA chelation therapy appears to achieve revitalization of the myocardium, and is a viable alternative or adjunct to revascularization. Fish oils are now proven to help revitalize vessel wall endothelia and to partially reverse atherosclerotic damage. Being safe and
having proven benefits, chelation therapy and fish oils can be integrated into a cardiovascular revitalization strategy. Cardiovascular revitalization would be highly cost-effective and procedurally compatible with the revascularization modalities, while extending beyond revascularization to halt atherosclerotic progression, restore cardiac
functionality, extend survival, and improve quality of life.

IRRITABLE BOWEL SYNDROME

Houghton LA. Heyman DJ. Whorwell PJ. **Symptomatology, quality of life and economic features of irritable bowel syndrome--the effect of hypnotherapy. Alimentary Pharmacology & Therapeutics 1996;10:91-5**

Study: To quantify the effects of severe irritable bowel syndrome on quality of life and economic functioning, and to assess the impact of hypnotherapy on these features.
Modality: Hypnotherapy.
A validated quality of life questionnaire including questions on symptoms, employment and health seeking behaviour was administered to 25 patients treated with hypnotherapy (aged 25-55 years; four male) and to 25 control irritable bowel syndrome patients of comparable severity (aged 21-58 years; two male). Visual analogue scales were used and scores derived to assess the patients' symptoms and satisfaction with each aspect of life.
Results: Patients treated with hypnotherapy reported less severe abdominal pain, less bloating, better bowel habits ($P < 0.0001$), less nausea ($P < 0.05$), less flatulence ($P < 0.05$), fewer urinary symptoms ($P < 0.01$), and less lethargy ($P < 0.01$), less backache ($P = 0.05$) and less dyspareunia ($P = 0.05$) compared with control patients. Quality of life, such as psychic well being ($P < 0.0001$), mood ($P < 0.001$), locus of control ($P < 0.05$), physical well being ($P < 0.001$) and work attitude ($P < 0.001$) were also favourably influenced by hypnotherapy. For those patients in employment, more of the controls were likely to take time off work (79% vs. 32%; $p = 0.02$) and visit their general practitioner (58% vs. 21%; $P = 0.056$) than those treated with hypnotherapy. Three of
four hypnotherapy patients out of work prior to treatment resumed employment compared with none of the six in the control group.
Conclusion: This study has shown that in addition to relieving the symptoms of irritable bowel syndrome, hypnotherapy profoundly improves the patients' quality of life and reduces absenteeism from work. It therefore appears that, despite being relatively expensive to provide, it could well be a good long-term investment.

LUNGS

Reference: Reuther I. Aldridge D. **Qigong Yangsheng as a complementary therapy in the management of asthma: a single-case appraisal. *Journal of Alternative & Complementary Medicine* 1998;4:173-83**
Modality: Qigong Yangsheng, the health-promoting method of traditional Chinese medicine that combines movement, mental exercise, and breathing technique, is used in China for the therapy of bronchial asthma, and for some time now has been enjoying an ever-widening acceptance in the Western world as well.
Study: This pilot study investigates whether Qigong Yangsheng could be used as a complementary therapeutic measure to treat asthma patients in a Western industrialized country.
Thirty asthma patients, with varying degrees of illness severity, were taught Qigong Yangsheng under medical supervision. They were asked to exercise independently, if
possible, on a daily basis and to keep a diary of their symptoms for half a year, including peak-flow measurements three times daily, use of medication, frequency

and length of exercise as well as five asthma-relevant symptoms (sleeping through the night, coughing, expectoration, dyspnea, and general well-being). The concept of this study was based on a single-case research design series with baseline, one teaching phase, a phase of self-practice and a refresher teaching course. A 4-week follow-up period was carried out in the same season as the original baseline phase 52 weeks later.
Results: An improvement was indicated if subjects showed a decrease of at least 10%
in peak-flow variability between the 1st and the 52nd week. This occurred more frequently in the group of the exercisers (n = 17) than in the group of non-exercisers (n = 13) ($p < 0.01$ chi-square with Yates correction). When comparing the study year with the year before the study, there was improvement also in reduced hospitalisation rate, less sickness leave, reduced antibiotic use and fewer emergency consultations resulting
in reduced treatment costs.
Conclusion: Qigong Yangsheng is recommended for asthma patients with professional supervision. An improvement in airway capability and a decrease in illness severity can be achieved by regular self-conducted Qigong exercises.

PAIN

Reference: Merrill DC. **Clinical evaluation of FasTENS, an inexpensive, disposable transcutaneous electrical nerve stimulator designed specifically for post-operative electroanalgesia. *Urology* 1989;33:27-30**
Previous studies have shown that electroanalgesia is an effective method of reducing postoperative pain in patients who have urologic surgery. All prior studies of postperative transcutaneous electrical nerve stimulation (TENS) have employed TENS stimulators which were designed for the control of chronic pain. Disadvantages to the use of standard TENS stimulators in postoperative patients include the high cost of the devices and their operative complexity which make it difficult for staff and patients to use them. FasTENS is a lightweight, relatively inexpensive disposable TENS stimulator which has been designed specifically for use in postoperative patients.
Study: We evaluated the effectiveness of FasTENS in patients who had implantation of an inflatable penile prosthesis, radical retropubic prostatectomy, or radical nephrectomy.
Results: Patients treated with FasTENS used 60 % less pain medication (P less than 0.001) and made 61% fewer requests for Demerol injections (P less than 0.001) than did control patients who were not treated with post-operative electroanalgesia. FasTENS
was most effective in patients who had radical prostatectomy or penile prosthetic surgery. FasTENS was not cost-effective or practical in patients who had radical nephrectomy.

Reference: Bourne IH. **Economic aspects of tender spot injection therapy.** ***Acupunct Med*** **1996;14:114-6**
Study and Modality: One partner of a four-man general practice in Essex used injection therapy to tender spots for musculo-skeletal pain.
Results: In a financial audit it was found that the prescription costs for this doctor were significantly less than the average for the other partners. It is speculated that the savings were due to effective elimination of musculo-skeletal pain by tender spot
injection, thus reducing the need for analgesic and non-steroidal, anti-inflammatory medication in these patients.
Conclusion: If one doctor in every group practice nationwide were to adopt a similar, effective technique for treating musculo-skeletal pain, extrapolation of the savings to this practice suggest a national saving in excess of £95 million per year.

RHEUMATISM

Reference: Boisset M. Fitzcharles MA. **Alternative medicine use by rheumatology**
patients in a universal health care setting. ***Journal of Rheumatology.*** **1994;21:148-52**
Study: To assess the prevalence, extent of use, and cost of alternative medicine by patients attending a rheumatology clinic.
Modalities: Alternative health products, spiritual/relaxation aids, dietary adjustment.
235 unselected consecutive patients attending a rheumatology clinic were evaluated by questionnaire to record their current use of alternative medicine practices.
Results: 66% of patients had used alternative medicine interventions in the preceding 12 months; 54% used over-the-counter products, 39% spiritual aids (including prayer,
relaxation, meditation), and 13% each had visited alternative practitioners or used dietary interventions. Patients in the upper middle income group and French-speaking patients used more bought products, but no other differences were observed when the groups were analysed according to level of education, income or cultural background. The current annual cost for the patients of alternative medical therapies was US$100.
Conclusion: Our results demonstrate a moderate use of alternative medicine by rheumatology patients, mostly inexpensive products and no-cost spiritual aids. Universal
health care may have a negative impact on the extent of use of more costly practices.

URINARY

Reference: Glen ES. **Effective and safe control of incontinence by the intra-anal plug electrode. *British Journal of Surgery* 1971;58:249-52**
Reference: Hasan ST. Neal DE. **Neuromodulation in bladder dysfunction. *Current Opinion in Obstetrics & Gynecology*** 1998;10:395-9
Discussion: Neuromodulation is one option for the management of a wide variety of lower urinary tract disorders, including non-neuropathic and neuropathic bladder dysfunctions. The mechanisms of action of the reported techniques remain unclear; urodynamic changes are minimal, but symptomatic improvements are common. Although the treatment is relatively free from side-effects compared with more aggressive surgical options, the placebo effect is likely to be significant. Its exact cost effectiveness is unclear, but the technology is a welcome addition to the range of treatment options for lower urinary tract dysfunctions, such as urgency and urge incontinence.
[References: 39]

ACUPUNCTURE - GENERAL

Reference: Lovesey M. **Acupuncture and physiotherapy: a global perspective. *Phys Ther Rev* 1998;3:169-75**
Discussion: Physical therapists from many countries are including acupuncture in their treatment programms. With their knowledge of anatomy and manual skills, physiotherapists are particularly suited to use acupuncture. This paper gives an international overview on the use of acupuncture by physiotherapists and traces its development in the UK. While the scientific basis for acupuncture is gradually being demonstrated, much further research is needed. The design of acupuncture trials is difficult. This is illustrated in the recent paper on acupuncture pain relief by Jackson in
this journal and the response to this by Barlas. Many physiotherapists, as well as using acupuncture for pain relief, are also using acupuncture for other effects such as relief of stress or reduction of bronchospasm in asthma. Some examples of the cost benefits of acupuncture as part of treatment programmes are given. The paper provides an overview of the status and some of the potential benefits of acupuncture in physiotherapy.

Reference: British Medical Acupuncture Society**. Acupuncture's place within medicine. *Acupunct Med* 1997;15:104-7**
Discussion: This paper reviews the evidence for acupuncture in the fields of its current Western medical use. It is proven by controlled trials to be effective in pain relief, for dysmenorrhoea, and in nausea and vomiting. It has been found clinically useful in a wide variety of other areas including allergy, bladder dysfunction, drug dependency and stroke.

Conclusions: There is an increasing body of evidence that acupuncture is a cost-effective treatment option, and its use has become widespread in pain clinics, hospital rheumatology and physiotherapy departments, and in general practice. Medical acupuncture is now based firmly on modern physiological principles, and an understanding of the opioid and other neurotransmitters involved in needle stimulation has made clinically useful acupuncture practice readily accessible to medical practitioners.

Reference: Downey P. **Acupuncture in the normal general practice consultation: an assessment of clinical and cost effectiveness.** ***Acupunct Med*** **1995;13:45-**7
Study: An audit of the effectiveness of acupuncture was carried out to ascertain whether short courses of acupuncture therapy in a normal general practice surgery setting were appropriate and effective.
Modality: Acupuncture.
Clinical effectiveness was measured in terms of improvement in patient symptomatology, and the cost-effectiveness was assessed by asking, "What would have been offered if acupuncture was not used?". Fifty consecutive cases were analysed over a six-month period.

BIOFEEDBACK

Reference: Schneider CJ. **Cost-effectiveness of biofeedback and behavioral medicine treatments: a review of the literature.** ***Biofeedback Self Regul*** **1987;12:71-92**

NURSING

Reference: Valentine KL. **Exploration of the relationship between caring and cost.** ***Holistic Nurs*** **Pract 1997;11:71-81**
Discussion: Cost and caring are both dimensions of holistic nursing practice. Each is a
term that is complex and ambiguous, yet assumed to be simple and well understood. Nurses need to examine the specific embedded assumptions of cost and caring; measure each; and demonstrate their inter-relationship and effects on patient outcomes. Integral to caring is "professional vigilance", which cannot be delegated; attempts to do so may incur future hidden costs. Nurses are urged to be alert to cost-shifting that affects
caring and quality. Advocacy for cost-effective caring practices is urged
through participation in governance structures.

Reference: Dunham Taylor J. Oldaker J. DeCapua T. Manley NK. Oprian B. Wrestler J. **Nurses cut health care costs. *J Holistic Nurs* 1993;11:398-411**

Reference: Zerwekh JV. **Wisdom and falsehoods: naming the practice wisdom of nursing in the home and the falsehoods opposing that practice. *Holistic Nurs Pract* 1997;11:46-55**

Discussion: The article reviews qualitative studies of historical and contemporary home visiting by nurses to articulate the expert practice wisdom integral to this practice. Ten assumptions about reality that have become barriers to funding for home visits are examined, and strategies to challenge these false assumptions are proposed

NUTRITION

Reference: Hemingway DC. **Good nutrition lowers health care costs.** ***J Orthomol Med*** **1992;7:67-71**

Reference: Challam J. **Nutrition research, computer databases, and insurance cost-cutting.** ***J Orthomol Med*** **1992;7:247-8**

HOSPITAL/SURGERY – PRE-OPERATIVE MEASURES

Reference: Gibbons E. **Can Aromatherapy replace pre-medication?** ***British Journal of Theatre Nursing*** **1998;8:34-6**
Discussion: An examination of the use of the therapy within the theatre environment
would be a useful extension of the care we already give our patients. It would be interesting to explore the cost effectiveness of oils versus conventional medication. It may be appropriate therefore for studies to be undertaken into the suggested benefits of Aromatherapy. If, as it has been implied, this therapy is beneficial in reducing the levels of anxiety, it would seem sensible to introduce it to preoperative patients
who suffer varying degrees of anxiety. [References: 26]

Reference: Disbrow EA. Bennett HL. Owings JT. **Effect of pre-operative suggestion on postoperative gastrointestinal motility.** ***Western Journal of Medicine.*** **1993;158:488-92**
Modality: Pre-operative instruction. Autonomic behaviour is subject to direct suggestion. We found that patients undergoing major operations benefit more from instruction than from information and reassurance.
Study: We compared the return of intestinal function after intra-abdominal operations in 2 groups of patients: the suggestion group received specific instructions for the early return of gastrointestinal motility, and the control group received an equal-length interview offering reassurance and nonspecific instructions.
Results: The suggestion group had a significantly shorter average time to the return of intestinal motility, 2.6 versus 4.1 days. Time to discharge was 6.5 versus 8.1 days. Covariates including duration of operation, amount of intra-operative bowel manipulation, and amount of postoperative narcotics were also examined using the statistical model analysis of covariance. An average saving of US$1,200 per patient resulted from this simple 5-minute intervention.
Conclusion: In summary, the use of specific physiologically active suggestions given pre-operatively in a believable manner can reduce the morbidity associated with an intra-abdominal operation by reducing the duration of ileus.

Reference: Johnston M. Vogele C. **Benefits of psychological preparation for surgery: A meta analysis.** ***Ann Behav Med.*** **1993;15:245-256**
Modality: There is now substantial agreement that psychological preparation for surgery is beneficial to patients. It is important, however, to establish which benefits can be achieved by psychological preparation, and if all forms of preparation are equally effective.
Study: The results of randomised controlled trials of psychological methods of preparing adult patients for surgery were analyzed in terms of eight outputs (negative affect, pain,
pain medication, length of stay, behavioural and clinical indices of recovery, physiological indices, and satisfaction). In order to reduce publication bias, published as well as unpublished studies were included in the meta analysis.
Conclusion: It was concluded that significant benefits can be obtained on all of the major outcome variables that have been explored. Procedural information and behavioural instructions show the most ubiquitous effects in improving measures of post-operative recovery. The results have implications for the improvement of patient care in surgical units.

Reference: Taylor EE. Whorwell PJ. **Cost effective provision of hypnotherapy in a hospital setting: a practical solution.** ***British J Med Econ*** **1993;6:75-79**

GENERAL USE OF COMPLEMENTARY/ALTERNATIVE THERAPIES

Reference: Eisenberg DM. Kessler RC. Foster C. Norlock FE. Calkins DR. Delbanco TL**. Unconventional medicine in the United States. Prevalence, costs, and patterns of use.** ***New England Journal of Medicine.*** **1993;328:246-52**
Discussion: Many people use unconventional therapies for health problems, but the extent of this use and the costs are not known.
Study: We conducted a national survey to determine the prevalence, costs, and patterns of use of unconventional therapies, such as acupuncture and chiropractic.
Modalities: We limited the therapies studied to 16 commonly used interventions neither taught widely in U.S. medical schools nor generally available in U.S. hospitals. We completed telephone interviews with 1539 adults (response rate, 67 percent) in a national sample of adults 18 years of age or older in 1990. We asked respondents to report any serious or bothersome medical conditions and details of their use of conventional medical services; we then inquired about their use of unconventional therapy.
Results: One in three respondents (34%) reported using at least one unconventional therapy in the past year, and a third of these saw providers for unconventional therapy. The latter group had made an average of 19 visits to such providers during the preceding year, with an average charge per visit of US$27.60. The frequency of use of unconventional therapy varied somewhat among socio-

demographic groups, with the highest use reported by non-black persons from 25 to 49 years of age who had relatively more education and higher incomes. The majority used unconventional therapy for chronic, as opposed to life-threatening, medical conditions. Among those who used unconventional therapy for serious medical conditions, the vast majority (83%) also sought treatment for the same condition from a medical doctor; however, 72 %of the respondents who used unconventional therapy did not inform their medical doctor that they had done so. Extrapolation to the U.S. population suggests that in 1990
Americans made an estimated 425 million visits to providers of unconventional therapy. This number exceeds the number of visits to all U.S. primary care physicians (388 million). Expenditures associated with use of unconventional therapy in 1990 amounted to approximately US$13.7 billion, three quarters of which (US$10.3 billion) was paid out of pocket. This figure is comparable to the US$12.8 billion spent out of pocket annually
for all hospitalisations in the United States.
Conclusions: The frequency of use of unconventional therapy in the United States is far higher than previously reported. Medical doctors should ask about their patients' use
of unconventional therapy whenever they obtain a medical history.

Reference: Fisher P. Ward A. **Complementary medicine in Europe. *BMJ.* 1994;309:107-11**
Discussion: Complementary or unconventional treatments are used by many doctors and other therapists throughout Europe. The major forms are acupuncture, homoeopathy, manual therapy or manipulation, and phytotherapy or herbal medicine. The relative popularity of therapies differs between countries, but public demand is strong and growing. Regulation of practitioners varies widely: in most countries only registered health professionals may practice, but in the United Kingdom practice is virtually unregulated. Germany and some Scandinavian countries have intermediate systems. Legal reforms are in progress in the Netherlands and the United Kingdom. European institutions are starting to influence the development of complementary
medicine. Harmonisation of training and regulation of practitioners is the challenge for the future.

Reference: O'Brien BJ. Drummond MF. Labelle RJ. Willan A. **In search of power and significance: issues in the design and analysis of stochastic cost-effectiveness studies in health care. *Medical Care.* 1994;32:150-63**
Discussion: Application of techniques such as cost-effectiveness analysis (CEA) is growing rapidly in health care. There are two general approaches to analysis: deterministic models based upon assumptions and secondary analysis of retrospective data, and prospective stochastic analyses in which the design of a clinical experiment such as randomised controlled trial is adapted to collect patient-specific data on costs and effects. An important methodological difference between these two approaches is in the
quantification and analysis of uncertainty. Whereas the traditional CEA model utilizes sensitivity analysis, the mean-variance data on costs and effects from a prospective trial presents the opportunity to analyze cost-effectiveness using conventional inferential statistical methods. In this study we explored some of the implications of moving economic appraisal away from deterministic models and toward the experimental
paradigm.
Study: Our specific focus was on the feasibility and desirability of constructing statistical tests of economic hypotheses and estimation of cost-effectiveness ratios with associated 95% confidence intervals. We show how relevant variances can be estimated for this task and discuss the implications for the design and analysis of prospective economic studies.

Reference: White AR. Resch KL. Ernst E. **Methods of economic evaluation in complementary medicine. *Forsch Komplementarmed* 1996;3:196-203**
Discussion: Complementary medicine often claims to offer therapies that are cheap, but hard evidence is still awaited. The methods of economic evaluation, which compromise cost-minimisation, cost-effectiveness, cost-utility and cost-benefit studies are considered in this article. This methodology has only recently evolved,

and therefore there are few studies in complementary medicine which include any rigorous economic evaluation.
Study: An analysis is presented of treatment costs and some potential outcome measures for complementary medicine, and certain difficulties are outlined particularly
in measuring quality of life and assessing its financial value.
Conclusions: Complementary therapies have shown promise for certain indications, mostly in retrospective studies. It is concluded that more work needs to be done
before we can be sure of the economic impact of complementary medicine, and that it is important to incorporate an economic evaluation more widely in future clinical trials.

Reference: Lewith G. Davies P. **Complementary medicine: the need for audit.** ***Complementary Therapies in Medicine*** **1996;4:233-6**
Discussion: There is an increasing demand for complementary medicine. This paper
reviews some of the audits that have been used within this area of medicine and suggests a strategic approach to the development of complementary medical audit within the National Health Service. It is hoped that this will allow purchasers and practitioners of complementary medicine to determine the effectiveness and cost-benefits of these therapies, at the same time as improving standards of practice.