THE ROLE OF TRADITIONAL HEALING IN DEVELOPING REHABILITATION PROCESSES AND ITS CONTRIBUTIONS TOWARD DEVELOPMENT

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PREFACE

This thesis is the outcome of my experiences with people during my five and a half years residency in New Zealand and an eight-week visit as a Visiting Graduate Student to the Pacific Basin Rehabilitation Research and Training Center of Hawaii, U.S.A.

ABSTRACT

The emphasis on Western ways of biomedical health care and rehabilitation has met with problems of practicability in many parts of the world, and particularly problems with those issues related to culture. Reform in rehabilitation and health care should be carried out according to the thinking of people. Being culturally acceptable with philosophies of people, traditional healing can be an invaluable means for innovative rehabilitation health care. Attention to the needs of minority groups, for example, people with disabilities and ethnic minorities, is essential. This thesis sets out a new and innovative rehabilitation model of Individual-Rehabilitation-Society for the use of traditional healing in developing rehabilitation processes. The new model is conceptualized in general systems theory and a basic needs approach. "Think globally and act locally" is the key phrase for health care and development. The contributions of traditional healing and rehabilitation toward development are also discussed.

INTRODUCTION

> What this comes down to is that a nation looking to health reform is hard pressed to find useful ideas to guide its actions...whether physicians or the public have the primary responsibility for health maintenance...
>
> (Ginzberg, 1978, p.202)

The concept of health reform should be based on the notion of improving the existing health care system for promotion and maintenance of health of people. This means that the existing health care system is in a state of incoherence or deficiency as related to current and/or future health needs of people. Establishment of a flexible health care system is important to the development of a country so that its citizens have the right to health. Health and development cover and contribute to each other (Ramalingaswami, 1984, p.252). This recognises the need to attend to interactions that exist between various components of the whole. Health of an individual is not only the concern of the individual. It also involves, for example, a network of relatives, friends, local and state governments. Events happening in one part of the world may have important implications or impacts on other parts of the world. Current social movements of indigenous groups have nurtured ideas of health care for these sections of population. The necessity of meeting the needs of minority groups as opposed to the notion of generalization of needs of all people is under hot debate. However, I do not agree that basic needs of minority groups and the total population are different. This is based on the fact that all people live in one world. The differences lies only in the ways these basic needs are met. This is influenced by the historical and cultural make-up of people involved and also by the diversity in their surroundings.

Through time, the practice of various ways to achieve the state of health has resulted in a pluralistic health care system that

pervades every corner of the world. Conflicts exist within this pluralistic system. The current political dominance of biomedical health care systems creates limitations and is often queried. As a consequence, there is an urgent need for health reform within the biomedical health care system and, to a greater extent, the pluralistic health care system. In this report, a new solution in response to these conflicts is set out. The focus is on the rehabilitation of a particular minority group, people with disabilities, as this group is still the most neglected or under-served group in many countries and their basic needs are not fulfilled. This attention to needs of people with disabilities is in line with current social movements of minority groups. The solution set out here advocates the wider and formal use of traditional healing in development of rehabilitation processes. Associated contributions toward development are also revealed. In this account traditional healing means not only traditional healing itself, it also includes indigenous healing. This includes various healing strategies, except biomedical health care, which are employed by different native, ethnic, refugee, immigrant or migrant-worker groups. Traditional healing systems not only exist in the developing or underdeveloped countries, but they also persist in the developed ones. The employment of traditional healing is suggested as it is a part of the culture of local people, and hence, is precious in the provision of culturally-sensitive health care. This approach to rehabilitation can be further related to the development of other health care services.

This report is made up of three sections. Section One deals with the development of a model of rehabilitation which gives attention to both personal and social aspects of people with disabilities. This model provides a new methodology to help people with disabilities. Section Two explains the application of this model of rehabilitation in areas of health, traditional healing and development. Emphasis is on the importance of efficient use of local health resources. In Section Three a research proposal is set out which is based on relationships

among health, rehabilitation, traditional healing and development. The primary data for the research is to be collected through a questionnaire administered to samples of people with disabilities in the Pacific Basin, in order to evaluate the use of traditional healing strategies by the target population.

SECTION I: INDIVIDUAL-REHABILITATION-SOCIETY MODEL OF REHABILITATION

NEEDS AND FELT NEEDS

Human beings are characterised by needs. Ramsay (1992, p.10) distinguishes fundamental needs from felt needs. Fundamental needs, as according to Ramsay (ibid and p.6), can be defined empirically and objectively as:

> means to ends any human being has good reason to pursue, desire or value if they are to act successfully to achieve any end or realise any value, whatever they may be.

It is important to note that these needs are a "natural necessity" in achieving the ends of survival and health. In order to survive or maintain well-being, these fundamental or basic needs must be fulfilled. Appropriate action must be taken so as to bring about such fulfilment. The World Bank has adapted a core set of five needs, namely, food and nutrition, drinking water, basic health, shelter and basic education, as the operational definition of basic needs of people of the world (Sen, 1978 as from Hopkins and Van Der Hoeven, 1983, p.6). However, the assessment of needs involves value judgements (McKillip, 1987, p.7). Basic needs arise from biological and psychological constitutions of human beings and are relatively universal and unchanging. Changes that occur over time relate to specific ways of satisfying these needs.

In contrast, felt needs are what human beings actually feel their needs to be. These needs are subjectively experienced and belief-dependent. They may or may not correspond to basic needs (Ramsay, 1992, p.10 and p.201). They are constructed in particular social contexts. Hence, they are culture-related. Felt needs are not simply expressions of what exists in society but are affected by people's perceptions, for example:

- people may be mistaken in their perceptions and their basic needs may not be perceived;

- their perceived felt needs may arise through ignorance;
- their perceptions of what their needs are may be directly manipulated;
- their perceptions may be limited to what is available within the system;
- felt needs may be misinterpreted as basic needs

(Ramsay, 1992, p.55, for example).

The environment of every human being plays an essential part in the perception of both basic and felt needs. Satisfaction of basic needs is indispensable for every individual. Hence, the means or action to achieve such satisfaction must be maintained accordingly. As for felt needs, careful scrutiny is necessary to guard against any unnecessary action or wastage of resources. Efficient allocation of available resources is vital in the process of fulfilment of needs as resources are of limited supply in many situations.

For people with disabilities, although they have the same basic needs as able-bodied, there are differences in ways that these needs are fulfilled as compared with able-bodied. For example, people with paraplegia require wheel chairs for locomotion, and hearing aids are needed for the hearing impaired for communication with people in the hearing world. The fulfilment of their basic needs is hindered or even made impossible by their disabilities. For example, a drop in external environmental temperature can act as an input stimulant to the individual in the system. Upon information processing, the input signal may be interpreted as coldness and elicits responses of putting on extra clothing so as to avoid getting cold. Internally-generated signals, for instance, the signal of hunger or thirst, is interpreted as the need for intake of food or water respectively. The output action by the individual is the retrieval of food or water accordingly. However, these retrieval tasks are hindered or made impossible by movement problems as for people with multiple sclerosis. This means that there should be some form of aid which can be used by such a person to achieve his/her task

or need, the need for putting on extra clothing, or intake of food or water for the situation. Therefore, it is important to focus on the management of their disabilities in the rehabilitation process so that their basic needs are satisfied. However, people with disabilities are disadvantaged in many situations in society. "It is inevitable that a highly competitive environment will create difficulties for those who have to struggle for equality of opportunity", especially for people with disabilities. The chance for a fair start in life may never happen. Where public budgets are perpetually under severe scrutiny, service needs of minorities with special problems are likely to be disadvantaged and at risk (See Daunt, 1991, pp.43-51). However, increasing attention has been paid to the fulfilment of needs, particularly basic needs, of people with disabilities. Rehabilitation programs have been set up to achieve this goal. Rehabilitation is the action-process that brings about the satisfaction of needs of people with disabilities.

REHABILITATION

The concept of rehabilitation

The term rehabilitation is derived from the word "rehabilitare" meaning to restore to a former state or capacity of function or, more specifically, to restore to a condition of health or useful and constructive activity (Encyclopedia of Psychology, Volume 3, 1984, pp.215-217; Websters New Collegiate Dictionary, 1973 as from Brissett, Heycox, Longmore and Walsh, 1988, p.162, for example). Habilitation is "the process of education or training persons with disadvantage or disability to improve their ability to function in society" (Taber's Cyclopedic Medical Dictionary, 1985, p.715). The distinction between rehabilitation and habilitation is not often made. Rehabilitation is the preferred term which generally includes habilitation in its meaning (International Labour Office, 1989, p.37). Rehabilitation is thus a facilitative process which enables a person with disabilities to attain usefulness and satisfaction in life, i.e., the fulfilment of needs, especially basic ones. It also aims to equalize opportunity for life attainments as a human right and social obligation (for example, Wright, 1980, p.3).

The rehabilitation process must be undertaken in a way that is large enough to handle and small enough to care. "Large" implies that the rehabilitation process can meet the goals of rehabilitation to promote and maintain the health - physical, mental and social well-being - of people with disabilities, and needs of the other components in the rehabilitation arena. The concept "small" represents the recognition of the differences among various components of the rehabilitation process. This latter concept is essential as related to people with disabilities. "Recognition" does not only mean the matter of knowing, but it also indicates the acceptance of such differences, and that something has to be done about the differences by persons involved in the rehabilitation process. "Rehabilitation aims not only at training [people with disabilities]...to adapt to their environment, but also at

intervening in their immediate environment and society as a whole in order to facilitate social integration" (World Health Organization, 1981, p.9). According to the World Health Organization, the people with disabilities, their families, and the societies in which they live should be involved in the planning and implementation of services related to rehabilitation (ibid).

The need for rehabilitation

The concept of rehabilitation of people with disabilities addresses the issue of equal rights in society. The fulfilment of needs of people with disabilities not only enables these people to have a better quality of life, it also benefits other people who are involved with the rehabilitation process. For example, the successful rehabilitation of patients who have suffered a stroke enables them to live positively. In addition, the process minimizes or frees the burden on patients' families in relation to the daily personal care of the patients. In terms of society, the rehabilitation process eliminates or alleviates the impact of the disablement on society. The United Nations Expert Group Meeting on Socio-Economic Implications of Investments in Rehabilitation Services for the Disabled, held in Geneva in December, 1977, states that,

> whether or not rehabilitation services are provided, the occurrence of disability causes society to incur costs of both an economic and social nature, and that these costs can be reduced by effective rehabilitation and support programmes (World Health Organization, 1981, p.18).

Hence, the rehabilitation process has an important role to play in the efficient use and conservation of society's resources. The "conserved" resources can be allocated to new areas, including those in the rehabilitation field, thus facilitating the development of other rehabilitation services which further benefit people with disabilities. In addition, "conserved" resources can be redirected to other needed areas in society in association with rehabilitation. For example, "conserved"

resources can be used in building special housing for people with disabilities by the housing department. Therefore, the establishment of an appropriate rehabilitation system is important. In this study, a model approach to rehabilitation, Individual-Rehabilitation-Society model, is proposed so as to provide new light in the development of rehabilitation services.

What is a model?

In order to deal effectively with the issue of rehabilitation, it is necessary to conceptualize it within a framework so that rehabilitation processes can be managed appropriately. According to the Taber's Cyclopedic Medical Dictionary (1985, p.1059), a model can be used "as a guide for action". The model is a simplified framework of "the complex reality for analytical purposes by provision of an unambiguous general concept or to highlight fundamental explanatory causal mechanisms in isolation from complicating factors" (Collins Dictionary of Sociology, 1991, pp.403-404). With a model approach, basic essential components of a process can be identified precisely. Furthermore, complex interactions among components in the real world can be accounted for or tackled with reference to basic essential components. A completed model must be able to illustrate the process it represented, that is, showing convincingly the elegance, efficiency, and convenience of employing the model in conceptualizing issues of the process concerned. In addition, the model must be kept up-to-date in its accountability and reliability.

Model approach to rehabilitation

A model, therefore, is a means to understand and tackle issues in the real world. It can give a clear guideline for the conceptualization of issues owing to its simplified nature of the complex reality. Thus, it is important to include basic components of rehabilitation in formulating a rehabilitation model, so that various issues of rehabilitation can be addressed accordingly by expanding the simplified framework of the model. The model proposed here is the Individual-Rehabilitation-Society

model of rehabilitation. There are three levels in this model - individual, rehabilitation and society - which takes into account both the individualistic and holistic aspects of the process of rehabilitation of people with disabilities.

Criteria of people with disabilities, disability and rehabilitation

Before accounting for the Individual-Rehabilitation-Society model, the criteria for people with disabilities, disability and rehabilitation as related to this model are illustrated. People with disabilities are referred to as "human in need". People with disabilities have the same basic needs as able-bodied while felt needs of the former may differ from that of the latter. The fulfilment of needs, sometimes even for basic needs, may be made impossible owing to their disabilities. The term disability is, therefore, equivalent to "deprivation of special need(s)". However, every individual is able in certain ways. Disability is only a social construction. It should not be considered as anything special or a deviation in society. A positive attitude should be held for the issue of disability with the effort to promote the attainment of equality for people with disabilities with other citizens in society. The needs of people with disabilities should not be referred to as special. Here I would use the term "disability" simply as "deprivation of need(s)".

An individual prior to undergoing rehabilitation is deprived of certain need(s), either concerning the individual himself/herself or in relation to society. Rehabilitation is the process of fulfilment of needs as related to people with disabilities. The rehabilitation process is established in response to meet the needs of human beings. It is not used for the stigmatized discrimination of any individual. It is a process to aid those humans in need to pursue a level of reasonable and achievable functioning in their unique environment.

Individual-Rehabilitation-Society model of rehabilitation

The Individual-Rehabilitation-Society model of rehabilitation described here is based on general systems theory. According to general systems theory, there exist a number of bodies called systems. A system is an entity that exists to carry out some purpose (Bailey, 1982 as from Sanders and McCormick, 1987, p.12). Each system is hierarchial in nature, comprising subsystems. Each subsystem can be further subdivided into smaller subsystems. Each system also consists of a boundary which delineates its arena. The system is dynamic in nature. Interactions are characteristic among various systems and different subsystems within a system. Outside the space of each system is its external environment. Open systems communicate or interact with their environment by means of one or more feedback mechanisms. There are several forms of input information or resources into each system. The input may be, for example, in the form of sound from a tape recorder, a movement or an image of the external world. The input information or resources are received by the system and are followed by subsequent information processing. During this latter process, pre-existing information or resources may also be incorporated. The input information or resources are then identified, perhaps, as the voice of an old man, a smile or a child performing exercise training, for example. Finally, there is an output which is the expression of the system. This output may be an action of applause, for instance, or may act as further input to the system or any other system. There is no interaction between the system and its environment for a closed system. The interactions thus described involve the transfer or exchange of materials (information or resources) across the boundaries of the systems according to rules that are acceptable by the systems concerned.

The process of rehabilitation takes place in an open system. This rehabilitation model is composed of three levels - individual, rehabilitation and society:

1. Individual level

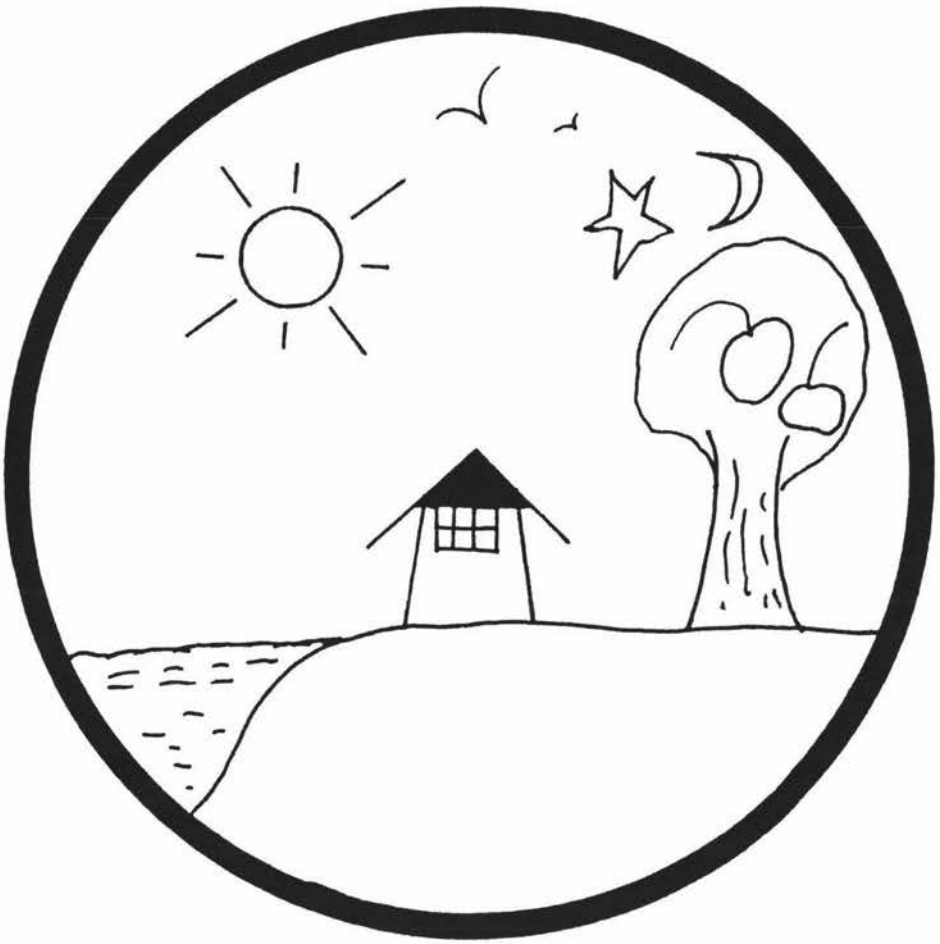
The first or individual level has a single system, Human-in-Need System (Fig. 1) which represents the individual with needs. Each individual has characteristic constituents, for example, personality, physical strength and mental capacity. A person with disability can be viewed as the individual having atypical features (Wright, 1983) and needs which are of a nature to be fulfilled. Fundamental needs are basic to every individual. These needs must be satisfied in order to be successful in life. Deprivation of basic needs not only hinders successful satisfactory living for people with disabilities, but it also imposes adverse effects on people with disabilities. For people with acquired disabilities, there is a sudden change in "body constituents". There is the reformation of the self as concerned with body image, perceptions, and the loss of status roles. Brissett, Heycox, Longmore and Walsh (1988, p.165) state that changes after the acquisition of disabilities constitute:

> Physical aspects including body image changes, altered perceptions, loss of ability to perform tasks, and decrease(d) mobility. Psychological changes encompass anger, frustration, grief, loss of self-esteem, and depression. Social changes include limited social contacts, loss of previous activities, role and financial changes.

As for those with congenital disabilities, they are met with limitations in the fulfilment of their basic needs as related to their environment since their birth. Therefore, there is a need for the fulfilment of the basic needs of these persons with disabilities through either the improvement of their capacities, the invention of devices to help them to function efficiently, or the modification of the environment to accommodate their disabilities. The ways of satisfying basic needs vary from person to person or from place to place as related to the availability of resources and/or the constraints in the environment. The variations also relate to differences in the norms and values among people. Norms and values characterize the culture of the human in need's environment. Hence, the ways of

ENVIRONMENT

HUMAN-IN-NEED SYSTEM



"Human being is characterised
with needs
which consist of basic needs."

Fig. 1: Individual level of the Individual-Rehabilitation-Society model.

satisfying basic needs for different people are culture-related. The felt needs of the human in need may or may not correspond to the basic needs. They are subjectively generated within the Human-in-Need System personally as related to his/her experiences, ability and capacity. To a certain extent, they are developed with reference to local norms and values of the human in need's environment. No man is an island. It is not possible for people with disabilities or anyone else to survive in the contemporary world without relating to other people. In addition, for every individual there is a need to interact with others, or more specifically, the need for companionship. Interaction with the external environment is a characteristic of the Human-in-Need System. These latter concepts come into the arenas of the second and third levels of the model.

2. Rehabilitation level

The second or rehabilitation level is characterised by the interactions among systems (Fig. 2). This level is concerned with the rehabilitation of the human in need. There exist three systems at this level - Human-in-Need, Supportive Personnel and Technologies:

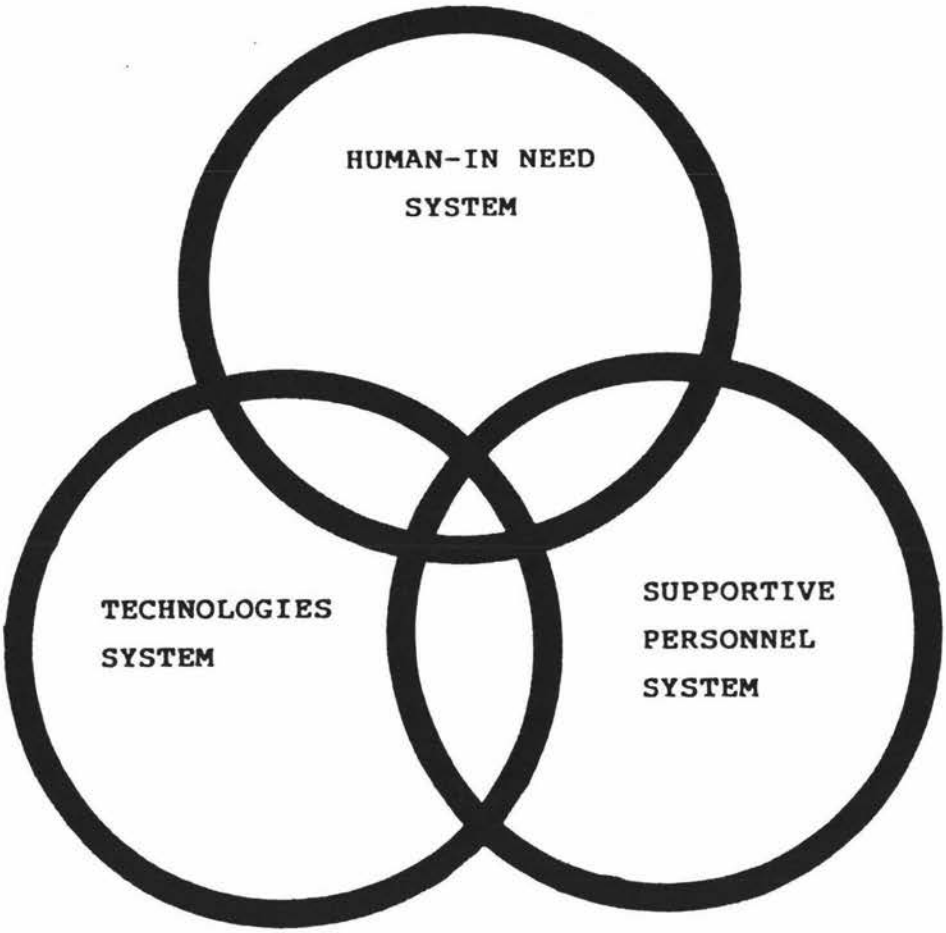
a. Human-in-Need System

The Human-in-Need System at this level is similar to that of the first level, involving the individual with any disability. The only difference is that there are now interactions between the Human-in-Need System and other systems. Upon interaction, there is exchange of information or resources with the interacted systems. Human in need is the vital component at the rehabilitation level. If they do not exist, there will be no demand for rehabilitation services. Furthermore, the existence of the whole model of Individual-Rehabilitation-Society will be worthless.

b. Supportive Personnel System

The Supportive Personnel System involves personnel engaged in the process of pursuit of fulfilling the needs of human in need. They are doctors, nurses, physical, occupational and speech therapists, psychologists, social workers, rehabilitation

ENVIRONMENT



"Interactions are of the systems' characteristics."

Fig. 2: Rehabilitation level of the Individual-Rehabilitation-Society model showing the three basic systems in rehabilitation: Human-in-Need, Supportive Personnel and technologies.

coordinators, volunteers, and relatives and friends of the human in need, for example. These personnel interact with the human in need in the rehabilitation process and function to provide information and/or resources to the Human-in-Need System.

c. Technologies System

The Technologies System is included at this level as human beings cannot exist in isolation without the use of technologies. Technology is defined here as practical, or useful knowledge and refers not only to objects, but also to ways in which tasks are carried out, or things are made. Technology is, or can be, an important input into many aspects of daily living, and can be an important parameter in meeting the needs of people with disabilities (Technological Change Committee, Australian Science and Technology Council, 1984, pp.2-3 and p.29). The technology may be as simple as a pencil for writing, or papers for drawing. It may also be the haemodialysis machines used by patients with chronic renal failure. As for the rehabilitation counsellor, the technology employed will be counselling techniques used in the counselling of the human in need. The presence of disabilities is judged by both the Human-in-Need and the Supportive Personnel Systems. However, with advances in technology, the diagnosis of disabilities or fulfilment of needs is sometimes performed or aided by machines. These machines include the well-known X-ray machines, ophthalmoscopes and audiometers. Advanced technologies are also employed in the rehabilitation process to aid the human in need in leading a desirable life. These technologies include wheelchairs, hearing aids and computers.

The three systems mentioned play essential roles in the process of rehabilitation. Mathematically, rehabilitation can be expressed as:

$$\text{Rehabilitation} = f(HIN * SP * T * E)$$

where HIN = Human-in-Need System(s),
SP = Supportive Personnel System(s),
T = Technologies System(s),
E = Environment, and
$*$ = Interactions among systems, or between

individual systems and their environments. An important point to note is that each of these systems is not mutually exclusive with respect to other systems in the rehabilitation process. Linkages are characteristic. It is these linkages that bring about the rehabilitation of the human in need. Discrepancies in the rehabilitation process occur as the problems faced by the person in need are sometimes wrongly defined as due to faulty interaction between the Human-in-Need and Supportive Personnel Systems. This leads to an inappropriate type of help being provided to the person in need. Thus proper linkages between systems involved in the rehabilitation process must be ensured.

As for the technology aspect of rehabilitation, it must match with the needs of the Human-in-Need system. In addition, it is essential for the human in need to express his/her needs, and be involved in the development of technology to meet those needs (Technological Change Committee, Australian Science and Technology Council, 1984, p.3). In the contemporary technological world, technology can affect any person with a disability, both to their advantage and disadvantage. For example, the invention of spectacles has benefited many persons with impaired vision. On the other hand, the inconsiderate use of technology results in unnecessary wastage of the scarce resources available to the person with disabilities. In some situations, the inappropriate use of technology has resulted in barriers to the functioning of the human in need. Thus inappropriate application of technology should be guarded against in any rehabilitation process.

According to Coudroglou (1984, pp.208-209), the rehabilitation concept involves an attitude, a principle, and a complex process:

> As an attitude, rehabilitation places great emphasis on an individual's independence and on his or her having the opportunity for personalized, self-validating life experiences. As a principle, rehabilitation clearly mandates the right of [a person

> with a disability]...to social benefits and services that will promote functional independence and allow for autonomy in decision making. Rehabilitation is a complex process because it needs to address both individual requirements and socially imposed handicaps.

In order to have effective rehabilitation of the person with a disability, there is a need for the rehabilitation system to provide a service environment that not only recognises human in need's capacity for change, but actively accepts the human in need's right to rehabilitation; "an environment that is both supportive and challenging;...free from ambiguity, confusion, and self-contradiction in its stated objectives and practising policies." In my opinion, decisions concerned with the assessment of needs and the adoption of rehabilitative care must be conceptualized by both Human-in-Need and Supportive Personnel Systems with attention to the available information and/or resources so as to enable the individual undergoing rehabilitation to get the best possible benefit with the most probable means to a successful life.

3. Society level

The third level of the model is the society level. It is the expanded view of individual and rehabilitation levels in the context of disability and rehabilitation as understood by society. Society is considered as a complex of overlapping social systems. A social system is "an organised set of interdependent social persons, activities, or forces (Mayhew, 1968, p.583). This level consists of quite a number of systems of Human-in-Need, Supportive Personnel and Technologies. There are complex interactions within and/or among these systems. For the government subsidized rehabilitation hospital in Fig. 3a, the humans in need are the in- and out-patients of the hospital and its clinics. The Supportive Personnel System consists of: administrators, doctors, nurses, physical and occupational therapists, speech therapists, recreational therapists, psychologists, social workers, prostheticians, technicians,

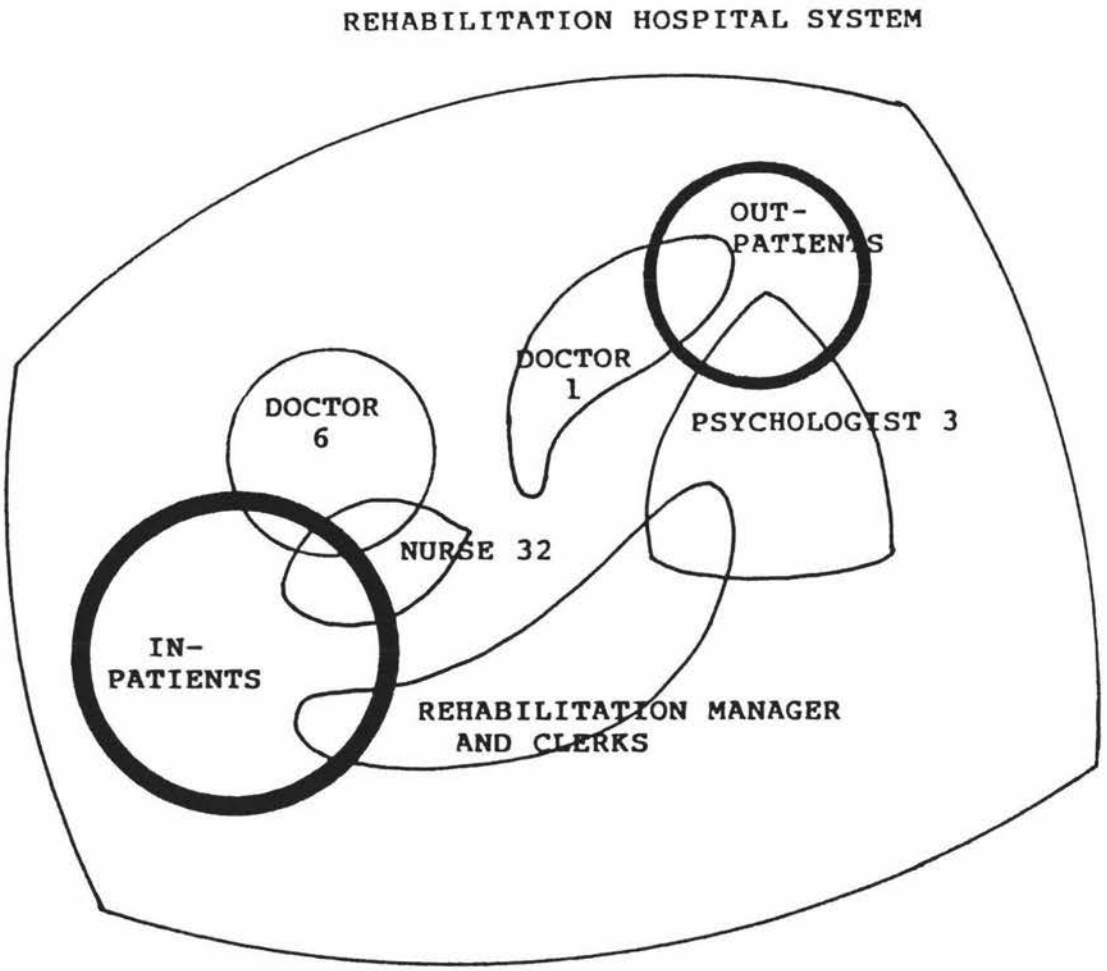


Fig. 3a: A simplified conceptual framework of the Rehabilitation Hospital System.

orderlies, families and friends of patients, and volunteers. These personnel interact with the patients through their therapies or services (of the Technologies System). They also communicate among each other so as to secure the best type of therapy or service for patients in a coordinated manner. The therapies or services provided by these personnel include: therapeutic treatment to correct/reduce disabilities, nursing care, laboratory tests, counselling, out-patient follow-up, mobility exercises, group sessions, transport assistance, home-help and meal-on-wheels. These hospital activities are essential for the successful rehabilitation of the human in need. This hospital can only exist in society upon interactions with its surroundings. The administrators have to identify ways of fund raising as government funding is not enough to assure the smooth running of the hospital. Patients of the hospital may sometimes be referred to an acute care hospital for further treatment. Contacts with therapeutic or hospital equipment suppliers must be made. The personnel in the hospital must also keep in touch with various information sources so as to update their knowledge in rehabilitation for the benefit of the patients. In so doing, the interactions result in the establishment of a network of systems and subsystems (Fig. 3b). In this network, several important points become evident:

1. Each system cannot exist in isolation.
2. Each system is surrounded by its environment. The system must attend and respond to needs and changes in the environment, i.e., system as an open system.
3. Each system has subsystems or constituents. These constituents may be the same as, similar to, or different from constituents of other systems. However, the overall combined outcome of these constituents of the system is different from other systems, i.e., there are differences among systems.
4. There exist interactions among different systems. Interactions can be either temporary or permanent.
5. Each system is in a dynamic state, i.e., each system does not have a fixed value. The dynamic state is the outcome

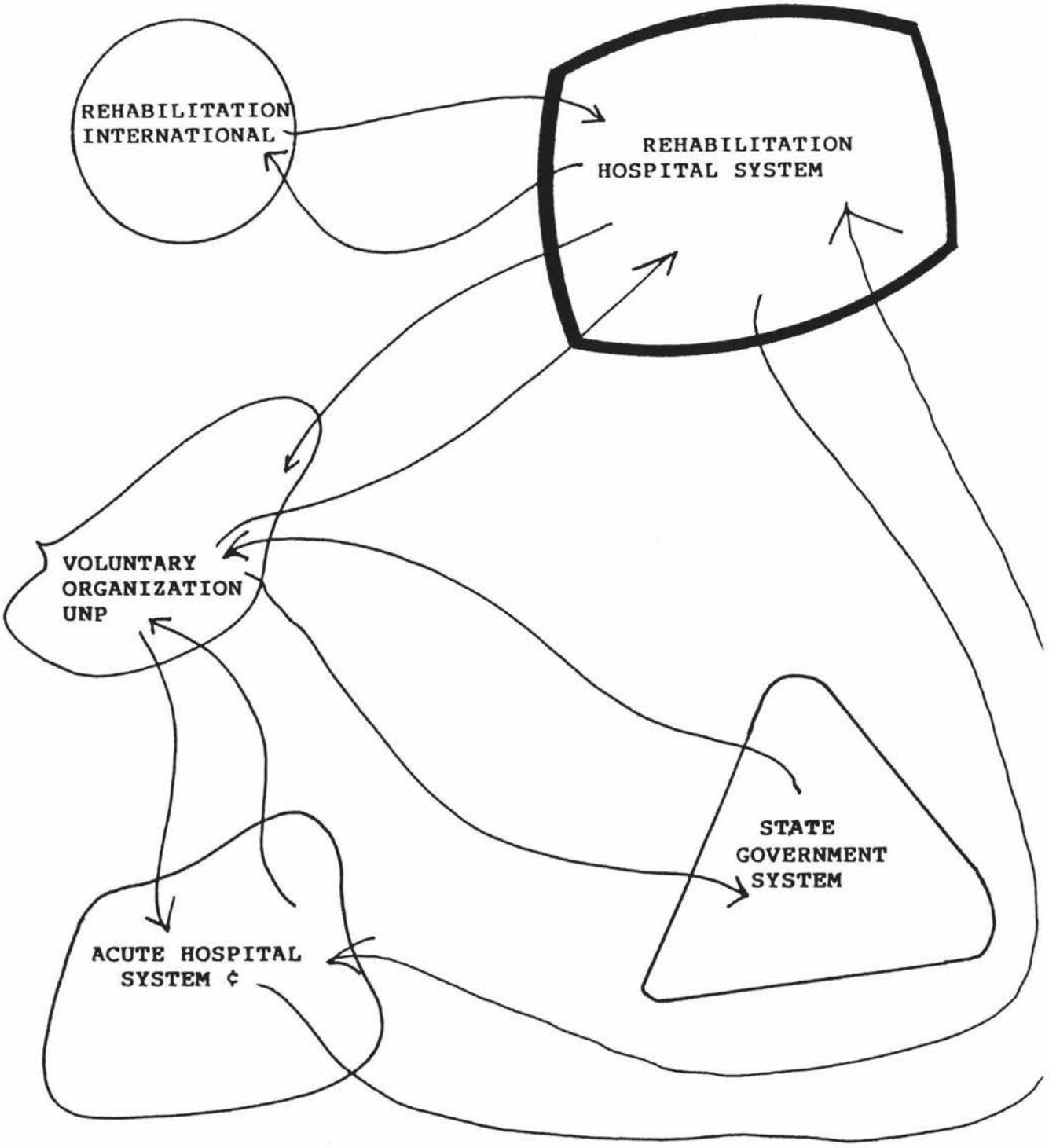


Fig. 3b: Interactions among various systems as related to the Rehabilitation Hospital System (a conceptual framework).

of the individual system in response to needs and changes in itself, other systems and the environment. Each system is in a state of continuous change over time.

6. No system is superior to other systems. The purpose of rehabilitation is to satisfy the needs of various components with reference to existing resources and the environment (both internal and external).

The Individual-Rehabilitation-Society model is simple to follow. It has an indispensable component, Human-in-Need Systems. It depicts the role of three basic systems (Human-in-Need, Supportive Personnel and Technologies) in the contemporary rehabilitation arena. Focus on the dynamic interactions of the three types of systems in relation to environmental influences of historical, cultural, geographical, economic, political, and administrative enrichments and/or constraints is essential in the conceptualization of any rehabilitation strategies.

Current issues in rehabilitation as related to the Individual-Rehabilitation-Society model

The population of people with disabilities is estimated to be about 10% of the world's population (World Health Organization, 1981, p.10). This group of people are alienated or marginalized in many situations due to little sensitivity to their needs. However, in recent years, a holistic view has been advocated about disability, different from the popular individualistic viewpoint. Disability should be viewed as a constituent part of society.

A team approach is advocated in rehabilitation. An ideal team approach, currently practised, is interdisciplinary in nature. Interdisciplinary refers to activities directed towards a common aim by individuals of the Supportive Personnel System. Members of the Supportive Personnel team are multi-disciplinary which involves people with appropriate skills for the effective rehabilitation of people with disabilities. They have the responsibility of not only knowing the skills necessary for the practice of their own discipline, but also the knowledge about how to transfer integrated group activities into a result which is greater than the sum of each part. The activity of the team is synergistic, producing more than each could achieve individually and separately (Brissett, Heycox, Longmore and Walsh, 1988, pp.165-169). Ongoing learning by the supportive personnel is possible with the sharing of skills among themselves. The organizational aim of rehabilitation services provided by this team is centred on the human in need and recognises social connections of the human in need with other people. Every effort must be made to allow for the active participation of people with disabilities in the fulfilment of their needs. This coincides with the Alma-Ata Declaration of 1978 that "people have the right and duty to participate individually and collectively in the planning and implementation of their health care" (World Health Organization, 1986, p.119). Consideration must also be given to the connection of the human in need with society so that they will not be misinterpreted as

unrealistic isolated individuals.

As for the development of the interdisciplinary team, there is a growing need for monitoring of the training of personnel to effectively relate to needs of the locality or country. This has important implications for the country's rehabilitation services, both economically and socially. Whether it is worthwhile to train more personnel or direct more resources to make rehabilitation services more available to people with disabilities in society is a conflict that needs to be solved. In the training of personnel, there is also a controversy in the choice of training of professionals as against generalists for rehabilitation work. Which option is chosen is not the main issue. The important concern is whether the choice adopted is directed towards the needs of people with disabilities in society.

The cost of disabilities to the nation is great in terms of income supplements, medical and other health expenses, for example. The emotional cost to family and friends of people with disabilities is immeasurable (Zola, 1991, p.18). In order for the rehabilitation process to be effective, the language used should be appropriate to both the human in need and supportive personnel. This is to ensure effective interaction and communication between people with disabilities and supportive personnel so that problems of the former can be identified correctly and appropriate rehabilitation strategies can be conceptualized and implemented. With the improvement of standards of living, the needs of people with disabilities are more than the usually cited basic needs. The criteria of basic needs have been expanded. For example, the United Nations' components of basic needs compose a long list of twelve items that make up a minimum standard of living:

1. health, including demographic conditions;
2. food and nutrition;
3. education, including literacy and skills;
4. conditions of work;

5. employment situation;
6. aggregate consumption and savings;
7. transportation;
8. housing, including household facilities;
9. clothing;
10. recreational entertainment;
11. social security; and
12. human freedom.

According to the United Nations report, the basic needs issue has to be determined by "national attitudes and standards resulting from peculiarities of environmental conditions, cultures, values and economic, political and social organisations" (United Nations, 1954 as from Hopkins and Van Der Hoeven, 1983, p.9). This means that no two rehabilitation systems are exactly the same due to existing differences between systems. Many of the components of the United Nations list are relevant to the field of rehabilitation. The need for satisfaction of basic needs necessitates the representation of the government bodies as Supportive Personnel Systems. In some countries, there has been greater advocacy by people with disabilities directed toward more justice. For instance, in New Zealand and the United States, people with disabilities are no longer satisfied with restrictions in society. De-institutionalization is the rule. More and more of them find their work in the normal workplace of "able-bodied". This has been made possible with modifications of workplaces with technologies, among other strategies.

However, people with disabilities are not enjoying the full benefits of technology, irrespective of whether the level of technology is simple or sophisticated. In Australia, barriers to increased use of technology by people with disabilities are a function of lack of adequate income and lack of information. The Australian Science and Technology Council proclaims that people with disabilities should have access to technology in the interests of both these people and the community generally (Technological Change Committee, Australian Science and Technology Council, 1984, p.iii and p.8). To a great extent, a

barrier free environment is advocated. Such a trend calls for the establishment of law to promote a desirable life for people with disabilities. This relates to the issue of social "freedom". These events are the result of interactions among various systems of society. At an individual level, people with disabilities are "not content simply to be alive" (Stubbins and Albee, 1984, p.351). They prefer to be contributors to society rather than beneficiaries. This represents a change in attitude of people with disabilities.

For a model to be effective and practicable, it should explain the happenings of the contemporary world, and furthermore give an indication of the probable trend(s) in the future. In order to be so, the model must be simple and true to the people involved, particularly to people with disabilities. Flexibility is essential so that appropriate changes in the system(s) can be made to suit appropriate situations in the rehabilitation process. The concept of society as a set of overlapping process systems seeks to call attention to the problems of the emergence of larger and more inclusive networks of social organization. Therefore, the issue of rehabilitation is not restricted to any one society or country, but it is related to or under the influence of other societies or countries.

Currently in many countries, the emphasis in the health care delivery systems, including rehabilitation services, has shifted from individual to community, i.e., community-based health care or rehabilitation. For example, the approach to development of health services in Bangladesh is to focus on the family as the basic unit in health care delivery. In such a case, it is imperative to understand the ecology of the community and the development process as it affects education, agriculture, and economic progress, priorities and planning. The Government's policy requires a multisectoral approach and planning, not just of health services but for the health of people, including both people with disabilities and able-bodied. Health services should therefore be based on integrated and comprehensive community

health care services covering all social and economic activities.

Cosmopolitan and international organizations have outrun national boundaries. With the declaration of the 1981 International Year of Disabled Persons by the World Health Organization, the issue of rehabilitation has been formally considered ever since in a global perspective. In addition, the role of rehabilitation as related to other health care issues within the health system in the promotion and maintenance of health of people with disabilities is closely examined (for example, World Health Organization, 1981, p.7). The concept of society as a set of overlapping systems also permits flexibility in the analysis of individual systems in society. Hence, a prudential examination of the needs of an individual system is possible. Furthermore, the fulfilment of needs of people with disabilities as related to environmental resources in society becomes an aim and goal.

Future role of the IRS model

For a model to be valid and persist in the future, it must describe and explain what will happen, at least to an extent. Thus what is likely to happen in the future is predictable, i.e., the model can take bits and pieces from the rehabilitation setting to predict the future. The model must also work reasonably well. The Individual-Rehabilitation-Society model focuses on individual characteristics of people with disabilities. Furthermore, it elaborates the rehabilitation of any individual with disabilities in relation to other people with disabilities, and to a greater extent, a society. There will be changes in constituents of various systems involved with respect to the changing internal and external environment. Change in any of the systems will be inevitable if there is a change in the component external to such a system. These changes will influence new development and have implications for all people as any strategy imposed on people with disabilities will affect any other decision. Hence, in a wider perspective, the development of rehabilitation services is not only the concern of people with disabilities or supportive personnel, it is also an issue related to the general public. Thus the management of rehabilitation issues should be an essential part of every country's policy-making process. The Individual-Rehabilitation-Society model provides a guideline for policy-making processes by focusing on both a small scale, individuals with disabilities, and on a large scale, society as a whole. Interactions among various systems will remain a characteristic feature of the rehabilitation process. The three levels of the model will be expressed in a more flexible and dynamic state through time. The boundary of any of the systems will be more or less permeable to the flow of information or resources as compared with its pre-existing state. The coverage of the systems will expand or shrink with the increase or decrease in the number of subsystems and/or constituents respectively.

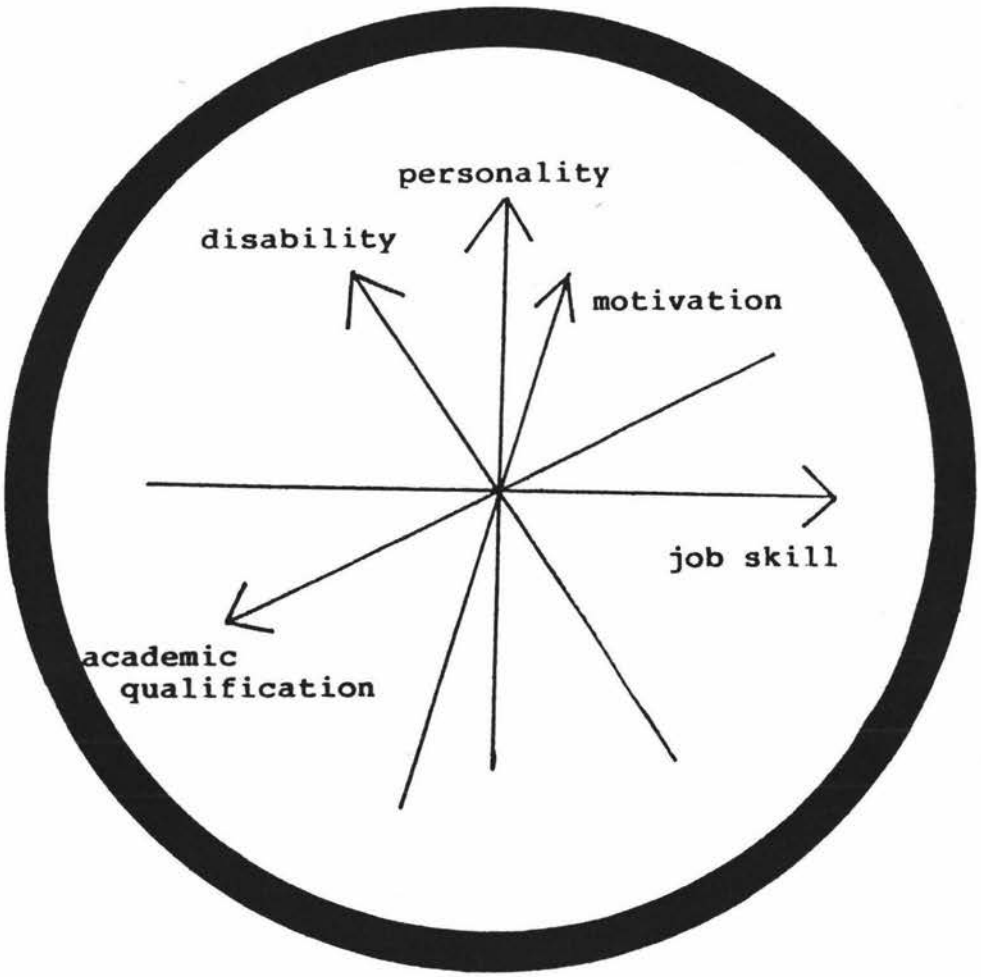
1. Individual level

As described previously, the Human-in-Need System at the

individual level of the model is made up of a number of constituents. These constituent, will interact in a multi-dimensional fashion in future (Fig. 4) to bring about valuable thought for the survival of the Human-in-Need System in the changing environment. New constituents will be added while unsuitable constituents will be modified or abandoned. The knowledge and experience of the human in need will contribute to his/her decision making process. There will be modification in the criteria of disability as related to the changing perception of disability. Traditional thinking about disability such as the tendency to think of a person's disability as the problem in a given situation rather than perceiving the injustices inherent in the environment itself, and defining the person in terms of his/her disability rather than his/her capacities (see Daunt, 1991, p.52) will probably be eliminated. Each individual with disability will consider himself/herself as an individual with appropriate needs rather than just one with a combination of disadvantaged constituents. These changes in perception of disability will call for innovation along the line of felt needs of people with disabilities, while basic needs will remain unchanged. However, there will be changes in ways to achieve the fulfilment of the latter needs. For example, people with disabilities will attain higher educational levels and/or new job skills so as to meet with the expanding acceptance of people with disabilities and requirement of employment. All such changes will contribute to a new concept of health.

The new concept of health will be directed towards quality of life with a decrease in dependence and an increase in independence and interdependence for people with disabilities. Such new concepts will have an enormous impact on the development of existing and future services for people with disabilities. In order to effectively manage the disability issue, the services thus provided must be directed towards the needs of the Human-in-Need System. People with disabilities will not be satisfied with the fulfilment of only the need for a minimal level of survival. There is a growing trend for people with disabilities to lead a

HUMAN-IN-NEED SYSTEM



"Constituents interact in a multi-dimensional space."

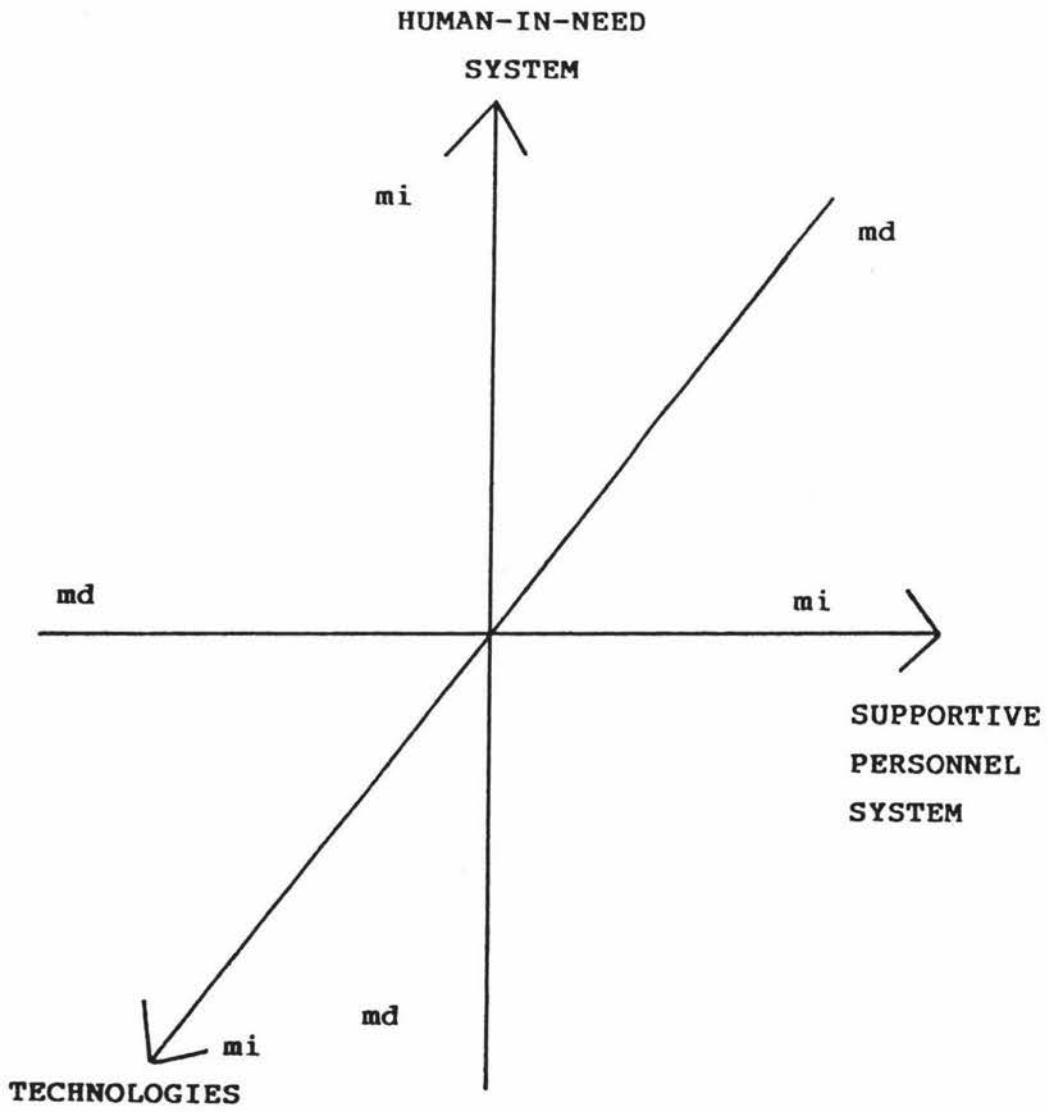
Fig. 4: Individual level of the future Individual-Rehabilitation-Society model in a multi-dimensional space.

life with dignity. People with disabilities have a growing desire to live on their own as far as possible. This means the reduction of any unpleasant dependence. It is not possible for any one to live in the world without depending on others. However, dependence of people with disabilities should be kept to a minimal level consistent with the consideration of their disabilities. In the aspect of independence, people with disabilities will have more say over their life, particularly the management their own disability. Participation and empowerment of people with disabilities in rehabilitation will be strongly advocated, in a manner which is more intense than at present. There must also be effective linkages between individual Human-in-Need Systems and other systems in the environment so as to promote the health of people with disabilities. Interdependence not only implies mutual dependence of people with disabilities and other systems, it also means an effective way to achieve proper handling of available resources. This latter idea falls into the area of the second rehabilitation level of the Individual-Rehabilitation-Society model.

2. Rehabilitation level

At the rehabilitation level, the three basic systems, Human-in-Need, Supportive Personnel and Technologies, exist as three axes of a three-dimensional space (Fig. 5a). The scale of each axis covers a range of value varied from maximum involvement to maximum detachment with reference to the degree of participation of the respective system in the rehabilitation process. The three systems are inter-related through the degrees of their involvement in the rehabilitation processes. The resulting position in the three-dimensional space represents the outcome of the rehabilitation process. There will be greater degrees of interaction and co-operation among the three systems. Such interactions will be featured with different forms of dependence. Traditional bipolar concepts of dependence and independence, in which one pole represents all that is bad (dependence) and the other that is good (independence), will no longer be able to illustrate the dynamic dependence relationship among the three

mi = maximum involvement,
md = maximum detachment.

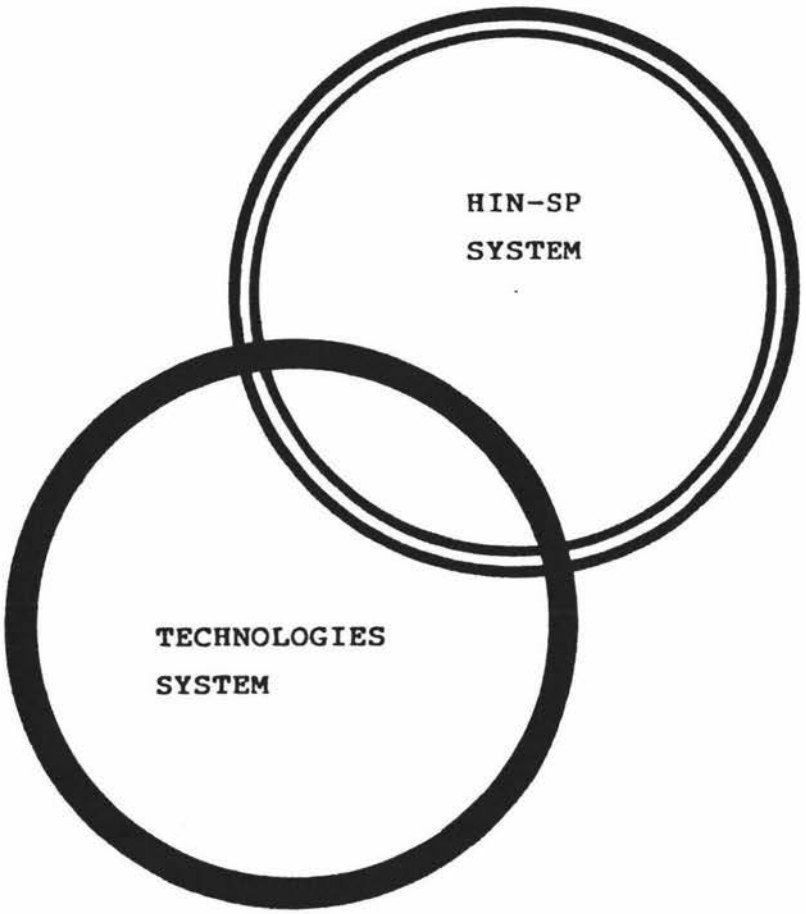


"The three basic systems interact in a three-dimensional space to bring about the rehabilitation of people with disabilities."

Fig. 5a: Rehabilitation level of the future Individual-Rehabilitational-Society model in a three-dimensional space.

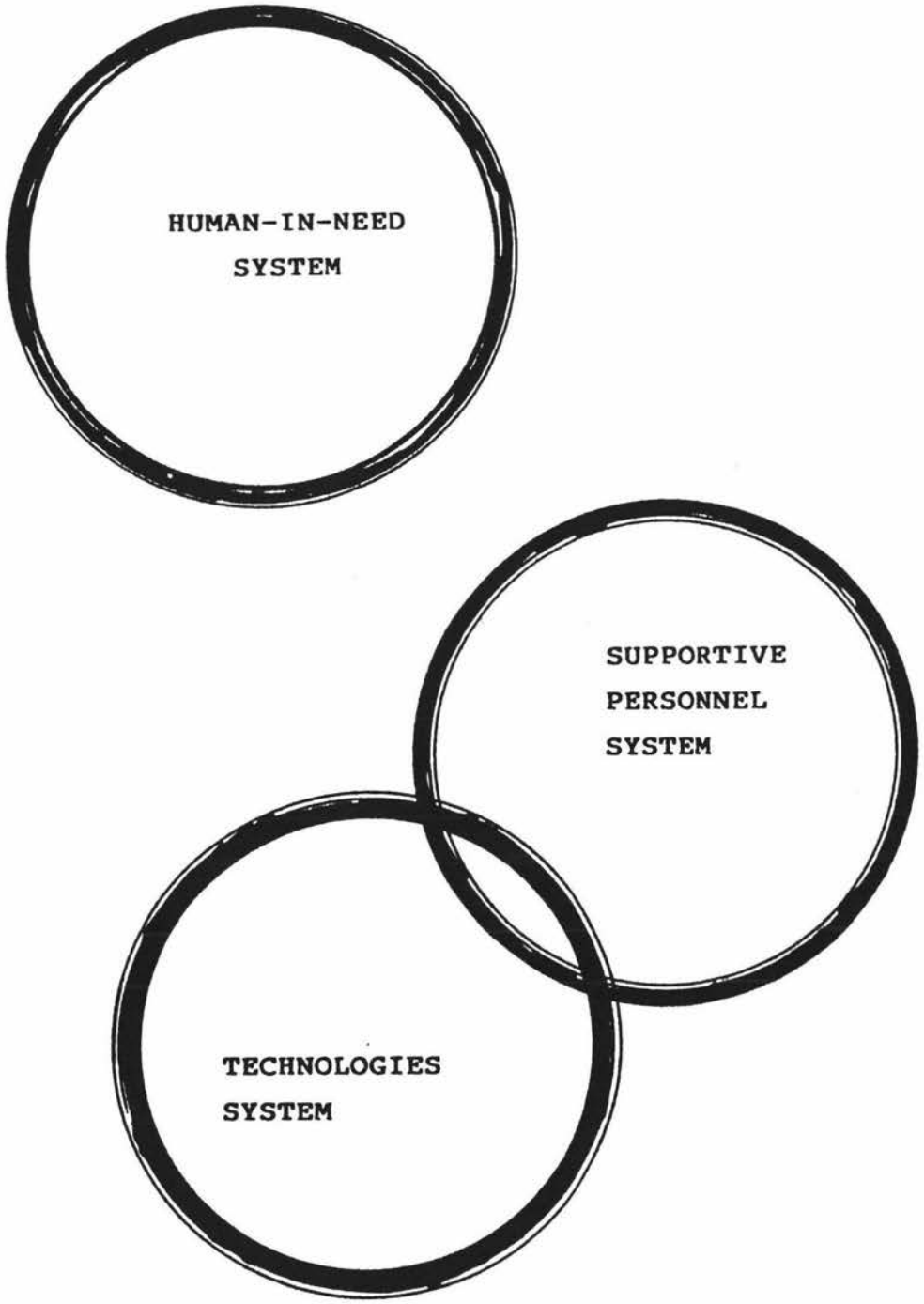
systems as it is unduly limited and has a flawed representation of human potentialities in relation with others. A new concept of dependence as suggested by Kerr and Meyerson will provide a challenge to the development of rehabilitation process. This new concept focuses on the changing role of each individual with respect to different situations. It comprises a network of dependence, interdependence, dependable and interdependence. These parameters can be conceptualized as a square with each corner of the square representing a parameter. Well-adjusted people with disabilities are those having free interactions (finite and alterable relationships) with others over the whole surface of the plot. "Sometimes their positions are determined largely by their own preferences, sometimes by their needs and requirements of those with whom they interact, and sometimes by external forces that they do not control." It is impossible for any individual, either people with disabilities or supportive personnel, to remain permanently in any of the positions of the plot as humans are social beings (Kerr and Meyerson, 1987, pp.176-177). The current advocacy for independence and criticism about the dependence of people with disabilities will be more wisely considered by both people with disabilities and supportive personnel. Although dependence has been criticized as the negative aspect of many people with disabilities undergoing the process of rehabilitation, it does provide relief to people with disabilities psychologically, to a certain extent. Each individual has a long personal and cultural history of dependence. Hence, dependence should not be viewed as a taboo. On the contrary, there must not be too much stress on independence in the process of rehabilitation, due to the fact that true independence may represent behaviour that is shared with no one. Persistent advocacy will lead to inappropriate disregard for the needs of others, hence, resulting in faulty interactions with others. This point also emphasizes the need to look into the notion of interdependence. Interdependence can represent mutually supportive care based on an agreement of both Human-in-Need and Supportive Personnel Systems. This agrees with the old saying, "Joy shared is joy doubled; trouble shared is

trouble halved." Cooperative interdependence between the Human-in-Need and the Supportive Personnel Systems can lead to synergistic accomplishments in the rehabilitation process. "Interdependence results in people's being both dependable and dependent as various aspects of the group's functioning requires" (ibid, p. 178). In situations of crisis, people with disabilities will benefit from the presence of someone/something upon whom/which they can depend. Such a dependable person or thing can provide physical, psychological or social support to people with disabilities, thus alleviating annoying effects on them. Advanced technology will provide a possible breakthrough in problem solving, innovation in rehabilitation strategies and ergonomically sound assistive aids. Upon acceptance and adoption of these new concepts in dependency, negotiation or co-operation between people with disabilities and supportive personnel will occur more frequently and in a more constructive manner. Hence, this will bring about the satisfaction of appropriate needs and the promotion of health for people with disabilities. The resulting dependence in rehabilitation processes will be a co-operative mode of action among the three systems. For example, in the area of research, by testing and evaluating various aids, it is possible to define the needs of people with disabilities more closely, and to identify improvements in equipment (Technological Change Committee, Australian Science and Technology Council, 1984, p.75) for more effective assistance of people with disabilities. In the future, there probably will be a time when people with disabilities will employ self-help technologies (as obtained from the market) that enable them to help themselves without the involvement of any supportive personnel. In this situation, the Human-in-Need and Supportive Personnel Systems will merge as one single system of HIN-SP (Fig. 5b). In another situation, the rehabilitation personnel of the Supportive Personnel System will participate in the prevention of disability and thus, there is a detachment of the Supportive Personnel System from the Human-in-Need System (Fig. 5c). Holistic ideas about rehabilitation will be more prevalent in the future. However, with the changing environment, there must be



"Individual with a disability employs
self-help technologies in the
process of rehabilitation."

Fig. 5b: Merging of the Human-in-Need and Supportive Personnel Systems as HIN-SP System.



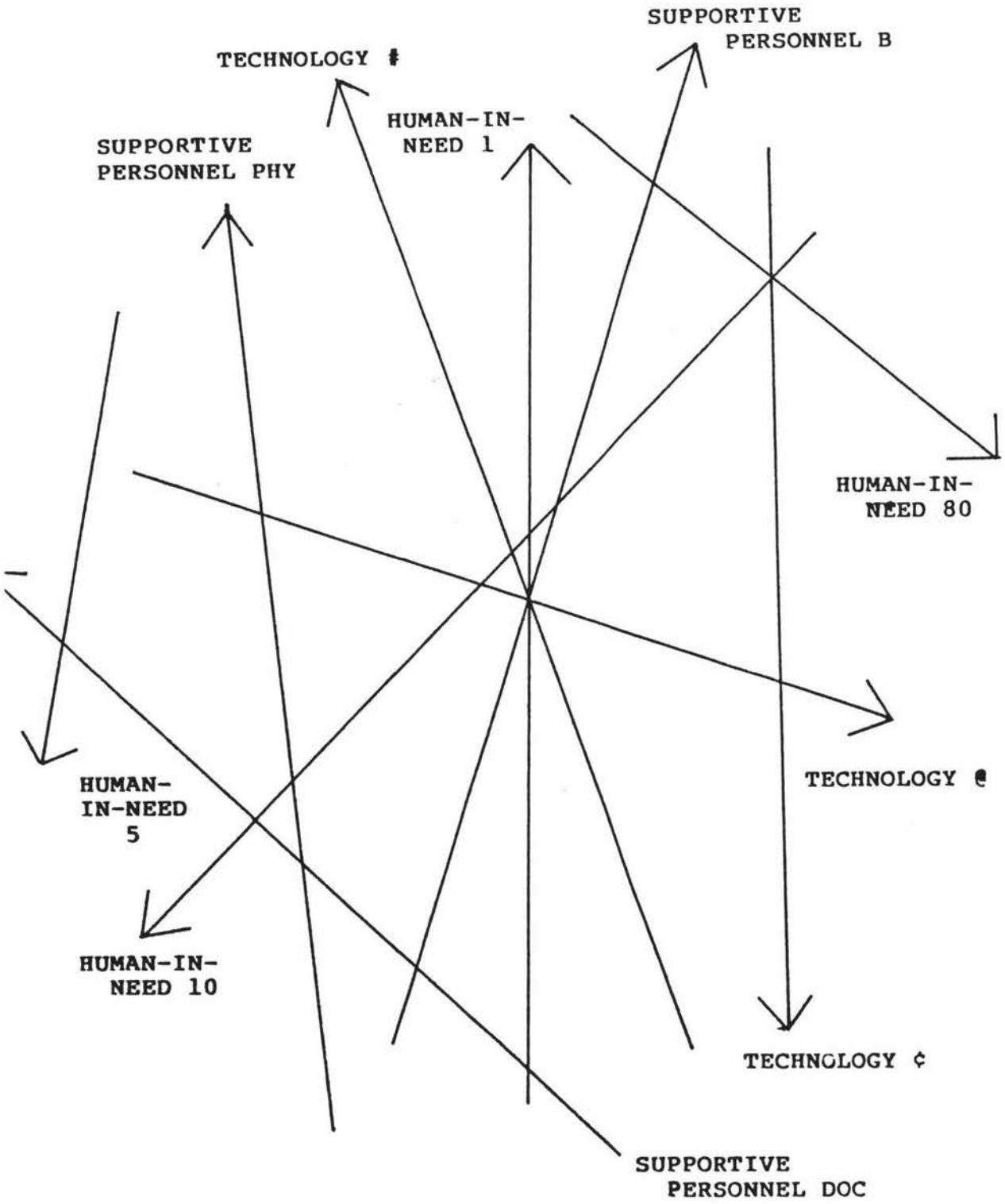
"Rehabilitation personnel participate
in the prevention of disability."

Fig. 5c: Detachment of the Supportive Personnel System with the Human-in-Need System.

greater advocacy for both Human-in-Need and Supportive Personnel Systems in rehabilitation so as to overcome limitations and constraints in availability of resources and information. This can ensure that the health of people with disabilities is in line with the ever changing criteria of health and needs of people with disabilities over time.

3. Society level

At the society level, there will be complex interactions among a number of Human-in-Need, Supportive Personnel and Technologies Systems (Fig.6). Any outcome of the rehabilitation process as the result of interactions among systems is represented at a particular location in multi-dimensional space. Rehabilitation, as according to Coudroglou (1984, p.209) is a complex process as it must address both individual impairments and socially imposed handicaps. Thus it is necessary to attend to the needs and the extent of involvement of each system and the resulting participatory effort of all the systems engaged in the rehabilitation process. The adoption of the Health for All by Year 2000, the United Nations International Year of Disabled Persons (1981) and the United Nations Decade of Disabled Persons (1982 -1992) has raised international awareness of disability issues and of the necessity to improve the quality of life of people with disabilities (Awori, 1993, p.5). Moreover, the fulfilment of needs of people with disabilities and the consequent development of rehabilitation services is always hindered by the persistent negative attitude towards people with disabilities by the general public. In the future, a major effort will still be needed to change the basic attitude of society towards people with disabilities (Pinet, 1990, p.9). This can be achieved with governmental support and efforts of various disability activist groups. By this, the needs of people with disabilities will be met in a more complete manner, particularly with reference to the notion of human rights and equality in society. Hence, more effective rehabilitation services for people with disabilities will be made possible.



"Complex interactions of various systems in the multi-dimensional space resulting in the rehabilitation of individuals with disabilities."

Fig. 6: Society level of the future Individual-Rehabilitation-Society model in the multi-dimensional space.

For an effective program of rehabilitation, it should provide a service environment that not only believes in people with disabilities's capacity for change, but "actively recognizes their right to it; an environment that is supportive and challenging; most of all, an environment that is free from ambiguity, confusion, and self-contradiction in its stated objectives and practising policies" (Coudroglou, 1984, p.209). The positioning of any rehabilitation process in multi-dimensional space will be dynamic with reference to historical, cultural, geographical, economic, political, and administrative parameters of the environment of any system. This not only takes into consideration local issues relating to aspects of disability, but also societal events relating to the general public. Individual norms and values, which are closely associated with the historical and cultural aspects of society will remain the important parameters to be taken into account in the conceptualization of any rehabilitation process, as they are essential to the formulation of priorities in needs for any person. In reality, the needs of people with disabilities have to match with the resources available in the environment for effective management of the disability issues. For example, particular rehabilitation services will depend on the forms and severity of disabilities, the availability of funding for such services, the availability of funding for particular rehabilitation areas as compared with other services in society, and in a wider aspect, the country. This means that individual needs have to be in line with the country's needs. In the Nairobi Plan of Action for the 1990s (the 17th World Congress of Rehabilitation International, 1992), it was found that little was achieved in the enhancement of the quality of life of people with disabilities due to the lack of clear national policies on disability, a poor resource base in organizations of people with disabilities, and the lack of financial support by governments and donor agencies to programs supporting people with disabilities. In order to remedy these discrepancies, effective leadership has to develop at national, regional and international levels (Awori, 1993, p.5). "Leadership is vital for any social

movement on condition that it leads in the right directions and does not lead astray" (Mahler, 1985, p.91). The challenges of the 21st century as related to disability, according to the Nairobi Plan of Action (Awori, 1993, p.5), will be focused on issues of human rights, adapting environments, women with disabilities, children, policy development, education and training, public education and the media. For example, government must develop comprehensive and enforceable legislation to protect the rights of people with disabilities. The Plan challenges governments all over the world, especially in developing countries, to formulate coherent and integrated disability policies to replace the piecemeal approach to disability in order to break the isolation of the disability issue and to include it in the overall national planning process. Organizations of and for people with disabilities shall promote and advocate for the equalization of opportunities and the human rights of people with disabilities in areas of education, training, employment, accessibility to social, cultural, and political opportunities, rehabilitation services, auxiliary personnel and aid, counseling services, health services and communication. In environmental design, elimination of environmental barriers with the promotion of free access to places should be stressed. The Plan stresses that it is vital for individual countries to take the responsibility for coordination of rehabilitation issues as part of national policies. This involves the fair distribution of resources to the disability area in national allocation.

Efficient allocation of resources requires effective dialogue among various Human-in-Need and Supportive Personnel Systems. An out-reach strategy will be beneficial. This strategy involves the dispatch of information or resources to grassroots level, that is, people with disabilities. It is essential to provide efficient communication channels for people with disabilities, for example, to verbalize their feelings, to sort out queries, and to seek proper help. As for supportive personnel, for instance, it means the finding of effective ways of identifying

the needs of people with disabilities through acceptance and adoption of the opinions of people with disabilities in the formulation of national policies. This will help to establish mutual communication and understanding between the Human-in-Need and Supportive Personnel Systems. Proper rehabilitation of people with disabilities will benefit not only individuals with disabilities, but also the country as a whole.

Technology has played an important part in the establishment of communication networks. Through time, people have come up with the idea of appropriate technology for the rehabilitation of people with disabilities. It is necessary to find out "whether appropriate technology is available [locally], and that includes, as always, social and behavioural alternatives or supplements to technical measures. Linked to that consideration is of course the cost involved - in both human and financial terms" (Mahler, 1986, p.112). What is needed for the rehabilitation process depends on the needs of people in society; not only the needs of people with disabilities. The appropriate technology to be employed is based on the understanding of the usefulness of this in terms of benefits to both people with disabilities and society. However, Mahler (ibid, p.113) stresses that one of the main problems in technology utilization in health care is not the lack of appropriate technology, but the lack of appropriate application of this technology. Irrational employment of foreign technologies without consideration of local ones would mean a burden to individuals in need, their families, and/or society. This is because quite often they are not suitably designed for local use and are relatively expensive as compared with local ones. Foreign technology can have a prominent impact on the cultural system of the receiving nation. For example, the adoption of Western IQ tests in psychological assessment can easily result in anomalous definition of certain children as "untestable", or defining a significant section of a Third World Country society as intellectually "backward" (Serpell, 1988 as from Serpell and Nabuzoka, 1991, p.111). Likewise a superficial transfer of the concept of environmental enrichment has sometimes

been used to justify the supply of largely irrelevant, imported toys and puzzles to rural societies in the Third World Countries, rather than attempting to mobilize their indigenous cultural resources (Ivic, 1987 as from Serpell and Nabuzoka, 1991, p.111). In addition, potential effects may only be observed after several years of implementation of the technology (Madu, 1992, p.19). Hence, in the choice of appropriate technology it is necessary to pay meticulous consideration to potential problems. Trade-offs may sometimes be considered in the selection process. The technical, social and psychological conditions of the technology chosen must match with the state of individuals (either people with disabilities, supportive personnel or the general public) and the country respectively (Wicki-Schwarzschold, 1992, p.18; Ullrich, 1992, p.285). In addition, the technology adopted should be simple so as to guard against the use of unnecessarily complicated systems which may hinder the rehabilitation of people with disabilities. In many situations, it means the use of indigenous technologies.

Indigenous technologies are gaining popularity as they are usually comparatively cheap and they usually match with the cultural thinking of local people. These user-friendly advantages of indigenous technologies can promote the participation of people with disabilities in the rehabilitation process as they are working with socially-accustomed technology. Therefore, the development of rehabilitation technology in the future, in my opinion, should focus on the conceptualization of a system of customised indigenous technologies. This system does not exclusively involve only local technologies. It includes both local and foreign technologies. The implication for such a system is that it is necessary to attend to both the internal and external resources and information of any country so as to work out the most appropriate strategy for any rehabilitation process. The basic theoretical rationale for a given technology must be considered in order to establish its relevance to the understanding of the local problem. Each factor contributing to the original design of the technology must be carefully evaluated

for its local applicability. For instance, Caston and others have developed impressive samples of prosthetic and assistive devices for children with movement disabilities which can be constructed by local craftsmen or women in most Third World societies from locally available and affordable materials (Serpell and Nabuzoka, 1991, p.112). However, some authors believe that current technology is insensitive to the needs of local people, especially those in Third World Countries (for example, Ullrich, 1992, pp.275-287). The establishment of the customised indigenous technologies system will enable the Human-in-Need and the Supportive Personnel Systems to have effective communication, so as to fulfil the needs of people with disabilities and hence the promotion of their health.

Individualistic and holistic approaches of Individual-Rehabilitation-Society model

The future of the rehabilitation process will be dependent on the interactions among the three systems of Human-in-Need, Supportive Personnel and Technologies, and their respective environments. With reference to these interactions, attention to needs of people with disabilities (whether they are basic or felt) can be achieved by considering the abilities and capacities of people with disabilities, environmental limitations, and constraints in terms of information and resources. In a wider perspective, the needs of any individual with a disability will be related to the needs of other people with disabilities, the rehabilitation teams (including both the Human-in-Need and Supportive Personnel Systems) locally, nationally and/or internationally. This represents a combined individualistic and holistic approach in rehabilitation which is congruent with the three levels of the Individual-Rehabilitation-Society model. Internationally, Rehabilitation International (a federation of national, regional and international organizations and agencies, involving 150 members in 89 countries) engages in the improvement of the quality of life of people with disabilities throughout the world (Seton, 1993, p.10). At the grassroots level, Disabled Peoples' International represents a consumer, grassroots organization of people with disabilities fighting for human rights, justice and social change in all corners of the world (Malinga, 1993, p.11). There is virtually no formal cooperation between Rehabilitation International and Disabled Peoples' International in tackling disability issues. However, in New Zealand, the formation of Disabled Persons Assembly brings together both people with disabilities and the able-bodied in a collaborative effort to promote the health of the former nationwide. It has been advocated that the strategy for success in the future will be "think globally, act locally". In my opinion, the term local can be related to any individual with disabilities, or any rehabilitation team or may simply refer to any rehabilitation process in an area. Global action is related to the rehabilitation of people with disabilities in a society, a

country or worldwide. Hence, "acting (and thinking) globally is increasingly necessary in order to make the very notion of locality visible. Locality is to put it simple, globally institutionalised" (Robertson, 1992, p.172).

> Although the principle of human rights [as related to needs] is in one sense applied to individuals, its general significance has to do with the consolidation of the conception of humanity. In recent years the issue of the future of the human species has been increasingly thematized via controversies about the relationship between that species and its environment and the quality of life of the species as a whole. Increasingly, these kinds of issue have been made relevant to the lives of individuals, [people with disabilities], the affairs of societies and relations between societies (ibid, 1992, p.184).

The basic unit of a society is a human being. In order to ensure the efficient flow of the rehabilitation process, there must be an the optimum management of people and available resources, this means the recognition of differences, similarities, and relationships of the rehabilitation system.

SECTION II: DEVELOPMENT, HEALTH, REHABILITATION AND TRADITIONAL HEALING

Development, health and rehabilitation

Being part of the world system, rehabilitation has been closely related to other components of the system. "Think globally, act locally" is essential for any rehabilitation process in the contemporary and future world as the rehabilitation system is an open system. Attention to the linkages with other systems is thus necessary for the fulfilment of needs and hence the survival of the rehabilitation system. In the following, I first examine two issues of the world system, development and health, that are closely related to rehabilitation. Then connections of the rehabilitation system with these two issues are discussed so as to illustrate the importance of managing the traditional healing system for the benefit of people with disabilities. Furthermore, the related implications to the development of a country are presented.

Development and health

In any system, development is characterised as a process of change. British philosopher Nigel Dower argues that development is a process of change which ought to take place (Dower, 1985, p.3 as from Crocker, 1991, p.460). Hence, it is a process likely to occur or may be simply a spontaneous process (as followed the evolutionary approach of biological development). The notion of likeliness involves value judgement and human intervention. Following the evolutionist approach, development has long been coined as a Eurocentric, monolithic branching and economic strategy for the survival of any country. However, current theories in development have much criticism of this one-sided strategy in development which was based solely on the viewpoint of its inventor, the United States.

According to Esteva (1992, p.6), the era of development started on January 20, 1949. Development was based on the concept of

democratic fair dealing which employed scientific and industrial advances for the improvement and growth of under-developed areas. Since then, the notorious modernization theory came into dominance in the 1960s. Modernization theory identifies change as occurring in a progression from traditional societies to modern, economic and industrial ones. It assumes that underdeveloped societies should follow the same patterns of evolution in development as industrialized societies. Although, modernization theory attends to the cultural and societal diversities in modifying the impacts of modernization, it nullifies the importance of these diversities (except some of the Western ones) in shaping society in the development process. In addition, its Eurocentric bias and the assumptions of international uniformity have rendered it largely unacceptable in its original form, particularly in Latin America. In the health perspective, modernization theory initially did not consider adequately or explicitly the possible detrimental effects of Western innovation or the widespread emergence of Western diseases. In many countries there have been increases in life expectancy and the emergence of new disease patterns for the population concerned. These changes and the accompanying new health needs, however, are not met with adequate health resources (for example, Boudon and Bourricaud, 1989, p.116; Hettne, 1990, pp.60-74; Phillips, 1990, p.5). Much of such discrepancy is reviewed in new health problems. A rapid and often poorly planned industrialization process exposes many people to new hazards. Casual and unorganized labourers are often poorly protected from industrial and polluted wastes. In the area of occupational health, the occurrence of occupational diseases, for example, dermatitis, byssinosis and silicosis, is related to the lack of or inadequate preventive care provided for workers in workplaces. Little advice, guidance or safety equipment is currently available to help these workers. Many Third World industries also pose dangers to the community as a whole. The leakage of toxic chemicals from the plant at Bhopal in India in 1985, where environmental legislation was weak and maintenance of equipment was lax, resulted in disastrous outcomes of death

and permanent disabilities of many local people.

Dependency theory, which criticizes the drawbacks of modernization theory, gained popularity in the 60s and 70s. It is characterised as an "eclectic, historical structuralist perspective on spatially-bounded socioeconomic and political inequality" (Kuper and Kuper, 1985, p.191). This theory rejects the dualism of traditional and modern societies as suggested by modernization theory. It views the "relationship between the industrial core and the Third World periphery as a grossly unequal one in which the periphery is reduced to dependent subservience in the global capitalist system" (Phillips, 1990, p.6). This suggests that the linkage between developed and under-developed societies involved exploitation by the developed ones rather than promotion of development of under-developed societies. The Third World thus becomes dependent on developed areas for health care, as for other improvements. This theory gives special attention to disadvantaged target groups such as marginal farmers and urban unemployed. These disadvantaged groups are exploited by the national bourgeoisie, with foreign links, who control the distribution of economic and social resources, including health resources (Navatto, 1974 as from ibid, p.7). However, dependency theory is criticised as being of little value on cultural aspects and positive role of the periphery, and some authors feel that it becomes an explanatory cul-de-sac. Nevertheless, it reminds us that health as an indicator has often been ignored in classical modernization theory (ibid, p.7).

Development historically, in the general sense, carries a positive meaning of improvement; a means to "good life". In order to meet these ends, different authors have derived theories for desirable directions of development and enormous efforts in development have also been made by grassroots, national, international and trans-national organizations.

However, development which follows development theories is often

met with controversies. For instance, the adoption of modernization theory has resulted in alarming problems of environmental pollution and cultural conflict in India and Brazil. This has led to a devastating effect on the health of the nations. Over the years, reports have been accumulated which show that development does not work, and grows obsolete (for example, Sachs, 1992a, p.1). Negative aspects of development have worked in opposition to the desire of the majority of people. The terminology and practice of development are ambiguous. This bring about the query: Can development really achieve human ends or bring about favourable outcomes?

Moreover, development has brought about both gains and losses over time. Among the major gains achieved by development are the improvement in parameters related to health and life style for large numbers of people: material well-being, standards of living, levels of comfort, consumption and amenities. The World Bank's 1990 World Development Report stresses these accomplishments of the last 30 years: "large numbers of people have more food, more comfort lodgings, a greater variety of clothing, access to books, and numerous other material goods than before" (Goulet, 1992, pp.470-471). There is an increase in freedom of choice, especially for women, children and other marginal groups, for example, people with disabilities. Such gains are notably due to technological advances accompanying the progress of industrialization and greater worldwide inter-dependence. Despite the improvements, conflicts over values are common. Value conflicts over the meanings of "good life" and foundations or bases of a society are prominent (ibid, pp.470-472). With the rise of various competing development theories, large numbers of people are caught in the dilemma of choosing whether to follow traditional or modernized values. This generates an increase in anomie or social alienation and role ambiguity among members of many societies. The system of meaning in numerous societies, philosophical, religious, and cosmic symbols and codes providing explanations as to the significance of life and death, is endangered or evacuated. The loss of such

meaningful systems has led to the tragic destruction and dilution of culture. Especially affected are nomadic and semi-sedentary cultures which depended on extended families, local networks, and ranged over a wide territory for food. There are controversies about the availability of limited familial resources and the expanding large population resulting from a lowering of death rate. Members of large extended families are forced to enter into circuits of hired labour in order to earn money. Ignorance about modern ideas has led to the destruction of tradition. The fragmented patterns of living and ways of being do affect the integrity of their culture. All these changes through development, to various extents, shatter the dynamism of desire of people which kept all societies in cultural equilibrium.

In spite of the negative aspects, development has still been advocated by various organizations around the world, for example, the United Nations and OXFAM. Seers (1979 as from Phillips, 1990, pp.6-7) considers development as the normative concept of satisfaction of human needs and social justice almost synonymous with improvement. However, Seers' theory has the drawback of too much emphasis on economic fulfilment while having no mention of human psychological or spiritual needs.

In my opinion, development is a process of dynamic change which has spontaneously occurred and which leads to the efficient management of available resources for the fulfilment of basic needs and ultimately the maintenance of a state of well-being or health for the people of the world. Basic human needs are biologically determined for the survival and health of human beings, but the form they take results from social relations operating in society (Ramsay, 1992, p.81). The Conference on Employment, Income Distribution and Social Progress, organized by the International Labour Organization in June 1976 called for a new basic needs approach for development which aimed at a certain specific standard of living before the end of the century. Basic needs within the new approach include the minimum requirements for adequate food, safe drinking water, shelter,

sanitation, public transport, health, education, clothing, household equipment and furniture (International Labour Organization, 1976, p.32). These criteria for the fulfilment of basic needs are similar to that of the United Nations (1954) cited previously in Section I. Among the criteria, health is one of the essential components for the fulfilment of basic needs. However, it is not possible to provide health directly. Health can only be provided through successful health care processes. Hence, provision of efficient health care processes is one of the strategies in the fulfilment of basic needs. In other words, in order to fulfil basic needs and ensure development, a health care process should be provided. As related to my definition of development, development is a way to achieve a state of health of individuals or nations. That is, development and health are mutually-reinforcing agents (Fig. 7). Successful development program will lead to a promising state of holistic health for the individuals concerned. In order to pursue health, it is necessary to focus on the basic needs criteria. Over the years, basic needs criteria have been modified, particularly due to changes in the environment, leading to changes in norms and values of the individuals for their successful survival. For example, the basic need of clothing, which is necessary for every person in contemporary modern societies, is not of importance for native people living in the forest areas of tropical region. However, the acquisition of enough thick clothing is especially invaluable for the native Eskimo living in the Arctic region for maintenance of constant body temperature necessary for survival. In modern societies, clothing has an important role to play in social interaction apart from the maintenance of body temperature. Furthermore, individuals have personal aesthetic considerations in clothing. This raises the idea of felt needs.

Humans may mistake the determination of needs. The famous Maslow hierarchy of needs (1943), including fundamental physiological needs, safety needs and the hierarchy of needs of a sense of belonging and love, esteem, and self-actualization, is criticised as incomplete. Despite the drawback of the stress on the

Fig. 7: Development and health: The mutually-reinforcing agents.

hierarchial nature of needs, enormous and lasting impacts on human development has resulted. Based upon Maslow's criteria, development strategies have been directed towards the satisfaction of basic physical needs of food, water and shelter. Various development aid programs for under-developed or developing countries are directed towards these goals. However, such approaches towards personal needs satisfaction pay little attention to the social role of individuals in their societies. This leads many of the donors to direct development aid towards the provision of basic physical needs to those regarded as "inadequate" recipients rather than focusing on combining the collective efforts of these people in establishing their own needs fulfilment. Such development aid can only be viewed as similar to some sort of spoon-feeding strategy which can have little or even no impact in benefitting the recipients and innovative changes or breakthroughs in development are hardly possible. The failure of some of the poultry and vegetable garden projects in Zimbabwe in benefiting people with disabilities, according to Alexander Phiri, Chairperson of The National Council of Disabled Persons of Zimbabwe, owes to the discrimination about actual needs of people with disabilities by the funding agencies (Charlton, 1993, p.52). Consequently, development aid is often criticised as an "evil deed" of delaying or even impeding the achievement of development goals or the maintenance of health of the individual concerned.

The development aid agreements have favoured decisions and benefits for donor agents rather than the actual good of recipients. As for health-sector aid, Jeffery (1986 as from Phillips, 1990, pp.290-293) has criticised two problems: the extension of dependency relationships and inappropriateness. Dependency on development aid has led to the development of a Western type of medicine which dominates the legal health system of the world. Traditional healing strategies have been discouraged and excluded from the share of health funding in many of the countries. Only the establishment of Western health care is advocated by donors. Furthermore, recipient countries have

to follow decisions of donor agents. Western-orientated medical care tends to perpetuate dependency relationships through Western-trained professionals who use and buy foreign-manufactured medical technology and drugs. These are usually not produced locally. The training of medical personnel of such a health care system has led to the replacement and alienation of traditional or local health norms. Foreign health resources are favoured over local ones. The western style of training of medical personnel in India has subsequently resulted in the brain drain of such medical personnel to work in positions in the United Kingdom and Europe. These moves cause further dependency of recipients on donor countries, through development aid agreements, as more Western types of medical personnel or resources have to be established so as to satisfy the Western medical care system. Furthermore, health-sector aid is criticised as inappropriate in nature and scale. For example, much of the health care aid has gone in the past to large-scale, prestige projects. Maintenance costs for these are often beyond the budgets of the poor recipient countries and staffing levels cannot be maintained. In addition, their benefits reach relatively few of the population. Care has thus tended to focus on urban elites instead of catering to the needs of the bulk of people.

Rehabilitation and development

The word rehabilitation is commonly used in the context of socially handicapped person or deviant "to describe the process by which the deviant is brought to conform to society's norms and values" (Franks, 1991, p.213). In the connotation of restoration to original state, rehabilitation has the additional meaning of reform and improvement; no change or change. To a lesser extent, which has gained more attention and importance, rehabilitation is being applied to many other fields. For example, in the soil science field, rehabilitation has become a specialty dealing with the re-juvenation of soil. In the development field, rehabilitation has the same connotation of "restoration to proper condition...effectiveness or normal life" (ibid). In his article

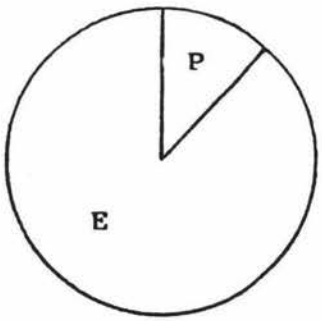
Institutional Change and Project Development (ibid), Franks discusses the old and new meaning and the implication of rehabilitation on projects in the development field. While all development efforts imply planned change and improved conditions, rehabilitation, in its original sense, is designed to restore the *status quo*. In addition, a policy of renewal may follow such rehabilitation, leading to a state of change and improvement. The new meaning of rehabilitation, by contrast, carries the connotation of change and improvement. There has been growing interest in project rehabilitation so as to avoid the wastage of existing assets in abandoning a project (Kirkpatrick, 1992, p.i). Rehabilitation has the advantage of re-use of existing assets, thus reduces the apparent level of investment required to achieve a desirable level of benefit (Franks, 1991, p.216). The new meaning of rehabilitation involves the notion of "reform". Reform does not refer only to the process of development, but it also means changes in the structuring and/or functioning (new and improved) of related organizations or institutions. For example, institutional reform programs are common in developing and developed countries, and also for international agencies (ibid, p.213). As a result, the rehabilitation approach to projects involves the decreasing of constraints and enables more flexible actions. This definition can be applied to people with disabilities. Rehabilitation, as related to people with disabilities, can be considered as the process of use of a previously abandoned human resource, people with disabilities, for the benefit of or reduction of burden on the community and the country in a wider sense. The functioning and structuring of rehabilitation care teams is free from the undue constraints of a rigid bureaucratic administration so that they can come up with new innovative actions for the benefit of people with disabilities and related people. Such new approaches to the rehabilitation of people with disabilities give attention to inevitable changes that occur in constituents and interactions of individual systems at different levels of the rehabilitation process. It stresses the importance of change that ought to take place. These involve changes in norms and values with time for

any person related to the rehabilitation process. It also negates the requirement of strict adherence to previous concepts, which brings about new strategies. For example, with the advance of technology the function of a limb can be taken over by a machine. Rehabilitation as related to the amputee will involve the institution of the new norm on the concept of a limb.

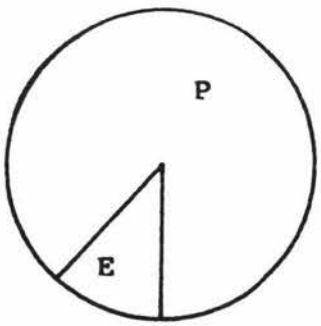
Rehabilitation, health and development

Being understood as tertiary health care, rehabilitation constitutes part of the health care system (a combination of primary, secondary and tertiary health care). Hershenson uses the term prevention instead of health care as equivalent to disability prevention. He stresses that the difference among the three levels of prevention lies on the relative attention given to the individual and to the environment (Fig. 8). Primary prevention, which includes public health and occupational health and safety, functions in preventing the onset of disease or disability. It focuses heavily on the environment (for example, air pollution, potable water supply, sewage system, worksite safety, automobile seat-belts) and pays attention to the individual only as he or she is influenced by that environment. Secondary prevention is the arena of medicine and psychotherapy which prevent or, when it is impossible, limit the effects of disease or disability in case primary prevention has failed. In contrast to primary prevention, it weighs heavily towards the individual (for example, curing or limiting the pathology that exists within the individual) and looks at the environment only as it facilitates or impedes the curative process within the individual. For tertiary prevention, there is an equal balanced focus on the individual and the environment as disability may stem as much from environmental barriers as from internal limitations. It includes all the rehabilitation fields (Hershenson, 1990, pp.269-271) which prevent disabling conditions from having any greater disabling effect than necessary. The relative attention to different levels of prevention within the health care system depends on local health conditions, on which appropriate development strategies are based. In addition, it

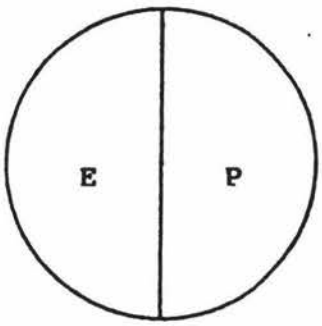
PRIMARY PREVENTION: PUBLIC HEALTH



SECONDARY PREVENTION: MEDICINE



TERTIARY PREVENTION: REHABILITATION



E = Environment and P = Person

Fig. 8: Relative emphasis on person and environment in the three levels of prevention.
(Source: Hershenson, 1990, p.271.)

is necessary to attend to the information or resources available in the environment. Desirable development should balance attention to both the individuals and the associated environment for promotion and maintenance of health of all people, especially those marginal groups.

"Think globally and act locally" is the key phrase in development, and hence in health. The term "health care development" has long been used by a plethora of authors. However, most of them pay too much emphasis on the first two words in a Western sense, leading to a development process in health care that is alienated from norms and values of the majority of local people, especially in the under-developed or developing world. Although I have mentioned before that norms and values are in a state of continuous change, it does not mean that they should follow the Western ones. This has been the discrepancy in the development of health care system in many countries nowadays. A Westernized way of development has led to losses that cannot be regained. For the health care system, many healing methods have been in a state of endangerment or extinction as a result of the monolithic hegemony of Western medicine (i.e., biomedicine). What is the value of biomedicine for every person of the world? What is the desirable way of development of health care system in every part of the world? Which is the unoffensive way of development that can promote and maintain health of the people of the world, especially those marginal groups? Such conceptual queries must be solved before the state of health can be achieved. In the following two subsections, I am going to make comments as related to these queries in the discussion of health, rehabilitation and traditional healing, and traditional healing and development.

Health, rehabilitation and traditional healing

Health and ethnomedicine

The popular World Health Organization criteria for the definition of health, that is, health is a state of physical, mental and social well-being, is related to the philosophy of biomedical practice. In contrast to this World Health Organization definition of health, positive health in the sense of traditional practitioners of Ayurveda is the "blending of physical, mental, social, moral and spiritual welfare" (Bannerman, 1982, p.9; WHO, 1978, p.8). The moral and spiritual aspects of human beings are stressed in addition to the World Health Organization criteria. Furthermore, there probably have been differences in the interpretation of the physical, mental and social parameters of health between Ayurvedic and biomedical practitioners due to cultural differences. Such variations in the concept of health have led to differences in the conceptualization of frameworks of illness, disease and disability. The differences in the interpretation of health are further complicated if other forms of traditional healing are also considered. Based upon the various definitions on health, I would like to raise the questions - "Is biomedical practice the best means to health?"

Health for All by Year 2000 has been the goal of the World Health Organization in response to the widespread dissatisfaction with the existing health services in promotion and maintenance of health (Tarimo and Creese, 1990a, p.1). Many people in the contemporary world are still living in sub-standard health conditions (no matter which standard of health is used). Marginal groups, for example, women and people with disabilities, are even more pressed in the struggle for health. In many parts of the world, rehabilitation services for marginal groups are virtually non-exist. These findings call for the scrutinized examination, hence, the re-organization of the current health care system so as to achieve the ultimate goal of improving the health of mankind (for example, Mahler, 1977, November, p.3).

"Health care system" probably derived from "healing systems". Healing is the action in "the restoration to health; recovery from sickness; curing". It also can be viewed as the "mending, reparation; restoration of wholeness, well-being, safety, or prosperity; spiritual restoration, salvation" (The Oxford English Dictionary, 1989, p.53). Thus, it can be said that healing systems are the collection of useful components for the maintenance of health. Hufford (1992, p.23) comments that complexity (that is, the numbers of parts they contain) and integration (the number of orderly relationships among these parts) are the most important characteristics of systems. In order to maintain these two characteristic features, interactions within and among individual healing systems are essential. The healing strategies within individual healing systems are termed ethnomedicine.

Ethnomedicine - biomedicine and traditional healing

1. Traditional healing

Ethnomedicine is the total health care resources that are available to, and might be used by, a community and society, including traditional and biomedical forms of therapy (for example, Foster, 1983, pp.17-18; Phillips, 1990, p.71 and p.74). Traditional means the belonging to, or handed down by or derived from tradition (The Oxford English Dictionary, 1989, p.354). Tradition survives as the process of handing down of knowledge or passing on a doctrine, but "there is a strong and often predominant sense of this entailing respect and duty". Although the word tradition tends to move towards age-old and towards ceremony, duty and respect, it is considered as an active process. The varieties of knowledge that have been handed down have been subjected to both betrayal and surrender (Williams, 1983, pp.318-320), or simply they can be described as being modified. In the following, traditional healing not only encompasses traditional healing itself, but it also includes the meaning of indigenous healing. Indigenous means "born or produced naturally in a land or region; native" (The Oxford English Dictionary, 1989, p.867). Indigenous healing is the

healing employed by native people of the country and has the characteristic feature of relating to the culture of the locality in which it is practised. For example, Ayurveda is the indigenous healing method employed by the Indians in India. However, for the Ayurvedic medicine that is employed by the Indians in Malaysia, it can only be quoted as traditional medicine. For the sake of simplicity, traditional healing has the connotation of both traditional and indigenous healing whenever appropriate for various healing strategies (except biomedical health care strategies) used by different native, ethnic, immigrant, refugee and migrant workers groups.

Modifications contribute to the changing complexity and integration, and hence, the stability of traditional healing systems. For example, the achievement of the present system of traditional Chinese medicine is the result of scrutinized examination through time. Tradition is an integral part of all human cultures (World Health Organization, 1978, p.9). This means that traditional healing is related to the culture of the area where the healing is practised. In other words, it is necessary to look into the culture of the people concerned to understand the picture of a particular traditional healing system. Culture is a set of social mechanisms, of life-style, social patterns, beliefs, attitudes and the accepted organized ways that permit a group to have a sense of itself as a unit, to comprehend its situation, and to adapt to changing circumstances. This does not imply a romantic *status quo* but rather the maintenance of those mechanisms that permit the group to achieve a new life equilibrium or to adapt successfully to change. Cultural change and development take place with the acquisition of new knowledge or with a change in the environment of the people. In this context of cultural change, traditional medicine has always developed and preserved its role of providing health care in all communities (Anon, 1992, Spring, p.73; ibid). Commonly cited as traditional Chinese medicine, Confucian medicine (this name more accurately describes the contents of the healing system) is closely-related to the philosophy of the

people. Healing methods employed by traditional Chinese medical practitioners are largely based on Confucianism which dominates the thinking of the Chinese people. In one of the oldest and most prestigious Chinese medical texts Huang-ti-nei-ching (or The Yellow Emperor's Inner Classic), which is actually a description of the dialogue between the emperor and scholars concerning the strategic ruling of the country, simulated strategies for governing the country were considered and used in the treatment of body ailments. Confucian medical scholars did not challenge the fundamental premises set forth in their fundamental texts. Rather, they attempted to build upon these premises (Trawick, 1992, p.20). The classification of the body into *yin* (the dark side of a hill) and *yang* (the bright side of the hill) is another good piece of evidence that Chinese medical practice mingles with the philosophy of the people. The notion of *yin* and *yang* originated from Taoism which contributes to the norms and values of the Chinese people. Chinese medicine also, to a wide extent, relates to nature or the environment. The metaphoric use of the concept of wind (*feng*) and essences (*ch'i*) demonstrate the association of life and the external environment. A state of bodily harmony or balanced totality, both within the body and with the surroundings, is necessary for the proper functioning of the body, to be healthy. Chinese medicine is a holistic type of medicine. In treatment of diseased parts it is not possible to look only at the affected hand or the eye without relating to the other parts of the body. The Chinese medical practitioners must perceive the disease "as a system of relationships, where disease consists of disarrangement or disruption of the pattern, and treatment is proper rearrangement of the relationships so that they form an orderly pattern once again" (ibid, p.29).

2. Biomedicine

By contrast, biomedicine does not employ a holistic view like that of traditional medicine. A holistic way of health care in biomedicine is only a recent event which basically attends to the physical, mental and social relationships of the person concerned. Moreover, it lacks the concept of metaphoric

interrelationship among various parts of the body and bodily harmony unlike traditional healing. It focuses on scientific empirical evidence and "actual" anatomical make-up of the body. Biomedicine has its theoretical base firmly fixed in Western culture. Over time, the political power of biomedicine has been demonstrated. Parallel with many of the traditional medicines, for example, Chinese medicine and Ayurvedic medicine, the biomedical system is a political system in which a small number of people have acquired tremendous power over a large number of other people. Political control takes place through various methods of domination and subjugation - including confinement, surveillance, totalitarian legislation, and authoritarian indoctrination. One realizes the enormous power of biomedical practitioners on others by looking through the legal responsibilities they have in law books. Although the legalization of the practice of biomedicine in all countries is regarded as a matter to protect people from unsafe healing practices, it does exclude other healers from practice. In other words, the types of healing resources available for those in need of health care facilities are limited.

3. Power struggle between biomedicine and traditional healing

The dominance of biomedicine in many parts of the world is, nevertheless, an outcome of the expression of a power struggle and ignorance. During colonial times, biomedicine, with the back-up by governments of colonial powers, ventured into different parts of the Third World in an ever victorious manner. In order to control the colonies, biomedicine-orientated doctors were given the legal right to practice in colonies by colonial governments under the recommendation (which was supposed to be accepted by local people) of colonial powers. In some countries, it was the prime legal health or healing system. The local government acceptance of biomedical health care was primarily a replication of that practised in the mother countries. This monopolistic scientific health care system, for example, in the Belgian and French territories, was generally administered by licensed professionals (for example, Phillips, 1990, p.85).

Local or traditional healing systems, like local governments, were deprived of the "formal" right to practice. Traditional healing systems became the so called un-orthodox, unscientific, superstitious or simply illegal health practices. Turshen (1984 as from ibid, p.77) comments that the reasons for the historical suppression of traditional medicine at the instigation of Christian missionaries was attributed to misunderstanding and fear. In my opinion, the fear and misunderstanding is related to the ignorance on the side of these missionaries who lacked cultural consideration of local people. Although they probably knew that cultural differences did exist between them and the traditional healers, they were unable to conceptualize healing ideas in terms of local norms and values. They only held a view which was firmly akin to their religion. This led to, I would say, the mis-management of the traditional healing system by colonial powers. In extreme situations, it led to the prohibition of traditional healing practices by governments and later, the extermination and extinction of local healing methods, and sometimes the valuable culture of local people, too. Today, some governments still continue to regard traditional medicine as "backward, non-modern, and as not fitting in with the competitive, especially capitalistic, societies" (ibid).

4. Drawbacks in biomedicine

With the superimposition of Western culture on the Third World, especially during the colonial era, local healing systems are viewed as out-dated, or even unreliable. Biomedicine has gradually become established in every country around the world, with the promise of providing health care to those in need. However, many of the areas are still under-served or even unserved by the biomedical health care system. There is also a spatial imbalance in the distribution and availability of biomedical health care between countries and between urban and rural areas within a country. In addition, these discrepancies impose serious negative effects on disadvantaged groups, the poor and people with disabilities, for example.

The availability of funding for health care affects the types and distribution of health care facilities. It is the limiting factor for the development of health care facilities. Many studies show that Third World countries, as for example, India and Sierra Leone, often suffer from severe regional imbalances in the distribution of formal biomedical health care provision. Regional inequalities in health care, as in Nigeria, are expressed as discrepancies in distribution of health care relative to population for different states (ibid, p.117). In the health manpower shortage area of the eastern 32 counties of North Carolina in 1980, the distribution of physicians in the population varied dramatically from a ratio of 1 for every 539 people in the urban-nucleus counties, to 1 for every 3,550 in many counties, to 1 for 9,486 and 16,117 and none for 25,000 in the three most isolated counties (Wilms and Powell, 1990, p.A4 as from Mathews, 1992b, p.7). These neglected counties were mainly inhabited by blacks. A long history of geographical isolation in largely rural areas, coupled with extreme poverty, low educational levels of the population, and a lack of infrastructure to attract new industry, have led to a massive emigration of younger and more able-bodied people. Consequently, the percentage of elderly and people with disabilities is rising. This further strains the existing meagre health care resources. In addition, the health profile of the region is poor and in 1988, it had one of the highest infant mortality rates in the United States (12.6 per 1,000 live births), a rate far worse than that found in all industrialized nations of the West and in many Third world countries (Mathews, 1992b, pp.6-7).

Maldistribution of biomedicine is suggested as due to an urban-bias. For example, in Kenya, it has been estimated that only 10 percent of the country's doctors serve rural areas and that some 70 percent are working in urban private practices. The ratios of distribution of doctors ranges from 1 for every 990 people in the cities to 1 for every 70,000 people in the rural areas (Good, 1987, as from Phillips, 1990, p.122). However, some authors choose to explain the maldistribution not so much in terms of

urban versus rural but rather as the outcome of the class structure and alliances within (and outside) any country. Zaidi (1985, p.474 as from Phillips, 1990, pp.139-140) comments that "there is no urban conspiracy against the rural population", but rather that of the various classes, whether urban or rural, have tended to strive for their own benefit. This urban bias phenomenon stems from the spatial imbalance in concentration of wealthy and ruling elites. As a result, the rich are concentrated in the cities. These places have political power, and they are favoured in service provision.

The biomedical system is "aggressively technology dependent and resource consuming" (Good, 1987, p.30 as from Phillips, 1990, p.122). The adoption of high-technology-orientated biomedical health care systems has deprived the general public of many countries of access to health care facilities. According to the World Bank, governments of the developing countries that spend too much on high-technology medicine are largely to blame for the ill-health of their poor (Miller, 1993, p.8). Advanced biomedical treatment helps the rich countries instead of the poor, as huge sums of money are channelled from the latter to the former in the pharmaceutical trade. In many situations, foreign health care resources have been used instead of local ones. For example, in Nigeria, despite an increase in its own drug production, it remains about 90 percent dependent on imports (Phillips, 1990. p.263). The domination of curative medicine (or secondary health care), with the emphasis on high cost hospital care, has drained much of the health care funding. This results in an inappropriately smaller share of funding for other health care sectors (primary and tertiary health care). As a consequence, there is only a minimal contribution to the majority of the people.

Although politically dominant, the spread of biomedicine has met with obstacles on many occasions. Stone (1986 as from Sharma and Ross, 1990, p.348) notes that in Nepal primary health care fails to appreciate villagers' values and their perceived health needs.

It has tended to look at Nepali culture as a barrier to health care and mistakenly assumes that rural people indiscriminately follow traditional practices. While primarily concerned with health education, Stone found that villagers value modern curative services and feel little need for new primary health knowledge. From this study, the issue of necessity of provision of culturally-sensitive health care for the needs of local people can be raised. In order to promote health, the health care system has to be presented to the people in an acceptable and inoffensive way.

5. Culturally sensitive health care

Culturally-sensitive health care means that the health care provided is coherent with the culture, life-style, society patterns, beliefs (including norms and values) and attitudes, of the recipients. People acquire cultural baggage as they are socialized into their societies. As people grow up, they learn about appropriate behaviour and about health and illness from all their contacts, parents, teachers and healers, (for example, Fitzgerald, 1992, p.39). In most traditional communities, patients and healers may be culturally more closely integrated, sharing the same values and viewpoint, and often joining with families and friends to undertake the healing processes. The curandero, shaman, herbalists, or even the local pharmacist, although they lack technical sophistication as compared with biomedical practitioners, have the same cultural language as their patients (Basch, 1990, pp.96-97). Arising from similarities and differences in culture among people in different parts of the world, people perceive the concept of health differently, and hence, expect and use health care differently. Consequently, medical pluralism exists in many places around the world. This may take the form of pluralism in the coexistence of multiple systems of health care (biomedical and traditional), giving multiple choices to individuals, or it may be pluralism within a particular system, allowing access to various levels and types of health care (for example, Minocha, 1980 as from Phillips, 1990, p.75). For example, the Hausa in Nigeria may be

open-minded about various types of treatment, but certain types may be preferred and others regarded as inappropriate. The patient may also use two or more appropriate types of therapy concurrently or sequentially, as noted in "modern" settings such as in Singapore or Hong Kong (Phillips, 1990, p.186). The choice of biomedical therapy may follow failure of a traditional remedy or vice versa. In Nigeria, Ojanuga and Lefcowitz (1982 as from ibid, p.187) identified four types of health care consumers: those exclusively used, either biomedical or traditional medicine; those who used traditional medicine first, and then when dissatisfied, followed biomedicine; those who went from biomedicine to traditional medicine; and those who used both types simultaneously.

6. Health care coverage of traditional healing

Owing to the wide geographical distribution and cultural consistency of traditional medicine as compared with biomedicine, over two-thirds of the world's population are employing traditional medicine (for example, World Health Organization, 1978, p.36). The well-served nature and extended coverage of traditional medicine, especially in the rural regions and in the areas of the poor or lower-class disadvantaged people, where biomedical health care may be deficient, has tempted many countries in the world to consider the traditional health care system as a valuable source of formal health care. More important, it is looked upon as a promising solution, in addition to biomedical health care, to the health problem of mankind. The conceptualization of such ideas is also related to the recent trends in the human rights issue for indigenous people, and the conservation of their culture and indigenous healing. In 1977, the 30th World Health Assembly adopted a resolution to urge interested governments to give "adequate importance to the utilisation of their traditional systems of medicine, with appropriate regulations as suited to their national health systems". From an operational point of view, the most cogent reason for the radical development and promotion of traditional medicine is that it is one of the surest means to achieve total

health care coverage of the world population, using acceptable, safe, and economically feasible methods, by the Year 2000. Since then, both developed and developing countries are showing greater interest in using traditional health care resources in implementing their national health programmes, particularly at the primary and secondary health care levels. In developed countries, the renewed interest in traditional herbal medicine stems from the motive of using natural biological products rather than synthetic ones (Akerele, 1983, p.3; Lozoya, 1983, p.5; World Health Organization, 1978, pp.13-14).

In the development of traditional medicine, China, India and Sri Lanka represent the few successful government-backed health care systems of traditional medicine and biomedicine. Medical pluralism has been recognised in China for thousands of years. The adoption of biomedicine in the formal health care system has been a relatively recent issue. Although with the official ban to all traditional medicine in order to enhance the development of biomedicine in 1929, traditional medicine still remains the health care regime for the majority of China's population. Since the taking over of China by communists, Chinese medicine has been revitalized with political support to meet the desperate and disparate health care needs of its huge population. The integration of Chinese medicine and biomedicine has brought light to the health care problems of the country. With the introduction of barefoot doctors in the past and with the tightening of qualifications of health care personnel recently, China has been achieving a better integrated and higher standard of health care quality for its people, especially as measured by the coverage of its predominately rural area. The integrated system of health care is culturally-miscible with the philosophy of the contemporary Chinese people. In many other countries, use of traditional health care personnel within the biomedical system has occurred. For example, in the Philippines, India and Indonesia, traditional birth attendants have been retrained in a biomedical fashion and integrated as part of the biomedical health care system (Phillips, 1990, p.78). In the Philippines,

traditional healers have been retrained to provide safe health care to the people (Caragay, 1982, pp.159-163). However, too often these people are trained in a way that is coherent only with biomedical concepts. Any traditional therapy known about or used by the trainee which is biomedically unsafe is discouraged during such training courses and is supposed to be discarded. Sometimes, it may lead to the loss of valuable traditional health resources (for example, traditional approaches and practices which possess very high cultural and psychological values) due to the failure of the biomedical training personnel to perceive the related therapy as a culturally-sound procedure. They misinterpret the traditional therapy in their biomedical framework.

Another commonly found system of health care is "tolerant systems". Here, while only activities based on scientific medicine are recognised, the practice of various forms of traditional medicine is legally tolerated, at least to some extent (Phillips, 1990, p.85; Stepan, 1983, p.292). In West Germany, physicians, in addition to their training in a primary medical specialty, opted for additional training in psychoanalysis and psychotherapy, homeopathic medicine, naturopathic medicine, or even chirotherapy. These plural therapeutic modalities are fully covered by government and private insurance. In contrast, the acceptance of traditional therapies in the United States is less than that in West Germany. This influences how functional disorders are conceived and treated in the two countries. In the United States people with these disorders typically receive psychiatric and/or psychosomatic treatment. Although, in West Germany the psychological component is generally acknowledged for these disorders, a range of traditional somatic therapies is often prescribed, even though these remedies are disparaged in some sectors of academic medicine (Maretzki, 1989, pp.24-25).

In contrast with the tolerant systems, inclusive health care systems include the legal recognition by governments of both

traditional medicine and biomedicine. These inclusive systems are widespread in South Asia where practitioners may practice their forms of healing in conformity with certain standards under state regulations. Inclusive systems generally occur where the traditional systems, for example, Ayurveda, Siddha and Unani, have a long and popular history (indeed, much longer than biomedicine), and they have formal medical traditions, literature, training and research (Phillips, 1990, p.85 and p.87; Stepan, 1983, p.292).

7. Appropriate health care

Traditional medicine exists in every culture because of its successful contribution to the health-giving process. It survives on the efficacy of empirical knowledge, skills and practices, and on the faith of the local community (Lantum as from Bannerman, 1982, p.17). Faith in healing processes and healers is fundamental to bring about effective treatment of the sick. Traditional healing processes provide socially-acceptable routes for the release of stress and strains of the sick according to the norms and values of societies concerned. Healing of illness is often considered as the alignment of the sick, that is, the process for the rescue of the sick from excessive and inappropriate deviation from social norms. In examining the query of "why patients turn to alternatives at all", Stern (1991, p. 219) suggests that one of the main reasons is that patients desire more control over their health, which is a direct outcome of growing awareness of the people concerning their health. In my opinión, it is the actual realisation of the need for a health care system that is akin to their philosophy and the right to health for the people. Over the past decade, there has been a qualitative decrease in the faith of patients in their physicians. "The orthodox physicians are not able or not interested in rising to the expectations and the wishes of their patients because of lack of time, lack of knowledge, lack of experience, etc." (ibid). The disease-focused management of patients rather than a holistic view of the patients as persons suffering from disease or having difficulties within the social

setting has resulted in physicians' neglecting the feelings of patients, particularly so as for those presented with physical illnesses. On the contrary, traditional medicine is based on the relationship of the person with his/her surrounding. It is whole-patient centered rather than only disease centered. For example, in Nigerian medicine, the herbalist or *babalawo* is at one with his patient in focusing attention upon his client's personal relationships and the detailed organization of his life. The kinds of causes that are central to both this traditional healer and patient "concern the possibility of danger from ill-disposed persons, or from malignant spiritual powers, or are related to deficiencies and defections in the intimate life of the individual." Through magical rather than material means, the "real reasons" for the illness are divined rather than defined. In the case of a simple fracture, the African patient will tend to look for personal reasons and persons responsible for his/her accident, even while he/she accepts the superficial application of a plaster, the biomedical therapy. The Haitian mothers are not generally concerned about what the biomedicine is based upon, but they are concerned about supernatural-magical power for the etiology of their children's illnesses (DeSantis, 1989, p.76). Although there has been a growing awareness of the psychological and social factors in the disease-process by biomedical doctors, both by virtue of their training and by inclination, biomedical doctors still pay little attention to the state of mind which accompanies or precedes their patients' complaints. The difference in disease concept and interest between biomedical doctors and the sick results in difficulty in communication or even misunderstanding. On the contrary, traditional healers "show intensive interest, concern and sympathy, as well as a willingness to talk and listen to the patients" (ibid; Maclean, 1971, pp.27-28). In addition, traditional healers use more familiar and more comprehensible procedures in the management of patients' ailments (Caragay, 1982, p.159).

Scientific studies on traditional medicine have come up with efficacy in many of the traditional therapies, for example, as

in acupuncture and herbal medicine (for example, Bannerman, 1982, pp.9-11; Lozoya, 1983, pp.6-7). However, the efficacy of some other kinds of traditional therapies are open to question (for example, Lashari, 1984, p.176). In the study of complications upon traditional healing in Sweden, Bostrom and Rossner (1990, p.111) found that patients with disease, known to respond well to treatment within the biomedical system, may be adversely affected if treatment with traditional medicine is given instead. However, I think they only realise one-side of the story. Recent research (Sharma, 1992 as from Tovey, 1992, p.337) has indicated that "in virtually every instance the first visit to an alternative practitioner is made to alleviate problems which orthodox approaches have been unable to resolve." In my belief, there is the possibility that complications due to biomedical therapies may be treated by employing traditional therapy. Therefore, in the management of illness, there may be benefits or drawbacks in using either biomedicine or traditional healing.

Traditional medicine, in many situations, is relatively less expensive than biomedical health care, partly due to their local availability. As mentioned previously, many of the countries are caught with the burden of paying a huge portion of their health care funding to Western pharmaceutical companies. The official employment of traditional healing strategies facilitates savings on pharmaceutical budgets. However, some of the rare traditional medications, such as ginseng, are very expensive, even more expensive than many of the Western drugs. In addition, healing rituals or ceremonies are sometimes very expensive to perform. This fact raises uncertainty in the employment of some of the high cost traditional healing resources.

In order to achieve the goal of health for all, both traditional healing and biomedicine health care are of valuable. It is important to guard against drawbacks of these health care resources, although harmful practices must be tactfully discouraged and hopefully eliminated. Growing interest in traditional healing is not restricted only to ethnic groups who

traditionally use traditional healing therapies. Many other people are following as they realise the efficacy of some of the traditional healing strategies. For instance, the effectiveness of acupuncture has been documented and widely accepted as an alternative therapy among many biomedical practitioners in the United States. It has been estimated that a Western-trained physician may require no more than three months' training to learn acupuncture in theory and practice (Bannerman, 1983a, p.83). Although Westerners can only practise traditional healing at a "relatively superficial level" as compared with the traditional healers (as the former usually has an incomplete or even a lack of cultural understanding of the traditional healing systems), their adoption of traditional healing contributes to the removal of cultural barriers for the benefit of health achievement. In the long run, with better understanding of traditional healing philosophies, non-native healers will certainly practise traditional healing efficiently. This in turn adds to the wealth of traditional health care resources.

As with traditional healing, traditional healers inevitably undergo modification through time, in response to changes in the environment and the thinking of people. Mama Lola, a Vodou priestess in the United States, for example, has made a continuous effort to extend her traditional treatment processes as related to the changing environment and client categories. This enables her traditional treatment strategies to meet the need of the dynamic world. "She is not afraid to incorporate elements from other cultures into her own worldview...Her whole life is about movement between cultures and about understanding and coping with cultural difference" (Brown, 1991, p.13).

Traditional healing and rehabilitation

Within the health care levels of biomedicine, there has been a growing tendency to incorporate traditional healing or personnel in primary and secondary health care levels (for example, Fendall, 1982, pp.90-94; Fulop, 1986, p.197; Hiegel, 1982, pp.231-235). However, the application of traditional healing to

the tertiary level, rehabilitation, appears restricted to indirect advocacy of disability prevention through primary and secondary health care strategies. The use of traditional healers for rehabilitation is limited. With improvements in standards of living, many people, particularly people with disabilities, are not satisfied with the type of health care they receive. People are concerned with the quality of life both with respect to their thinking and their culture. Traditional healing, with its culture-sensitive nature, can provide a suitable quality health care for people. In the rehabilitation area, traditional health care can be a valuable resource to help people with disabilities attain health. In the following, I am going to illustrate the benefit of using traditional healing in the rehabilitation process as related to the Individual-Rehabilitation-Society model.

1. Individual-Rehabilitation-Society model and traditional healing

Similar to the Individual-Rehabilitation-Society model, the health care system can be considered as composed of subsystems of Human-in-Need, Supportive Personnel and Technologies (Fig. 9). The Supportive Personnel System involves both formal and informal personnel. Formal personnel, in the sense recognised legally by governments, are biomedical practitioners such as doctors, nurses, physical therapists, counselors as found in Hong Kong, Singapore and the United States. In China and India, formal personnel include both biomedical practitioners, and some healers who are traditional Chinese medical practitioners and Ayurvedic practitioners respectively. Informal personnel may include bone setters, acupuncturists, herbalists, homeopathic medical practitioners, osteopathic medical practitioners, traditional birth attendants, spiritual healers or magico-religious healers. Instead of using the concept of formal and informal personnel, it is easier to conceptualize the system of Supportive Personnel into two Systems of Traditional Healing Personnel and Biomedical Personnel in explaining the impact of traditional healing on the process of rehabilitation. Thus, as for the Individual-

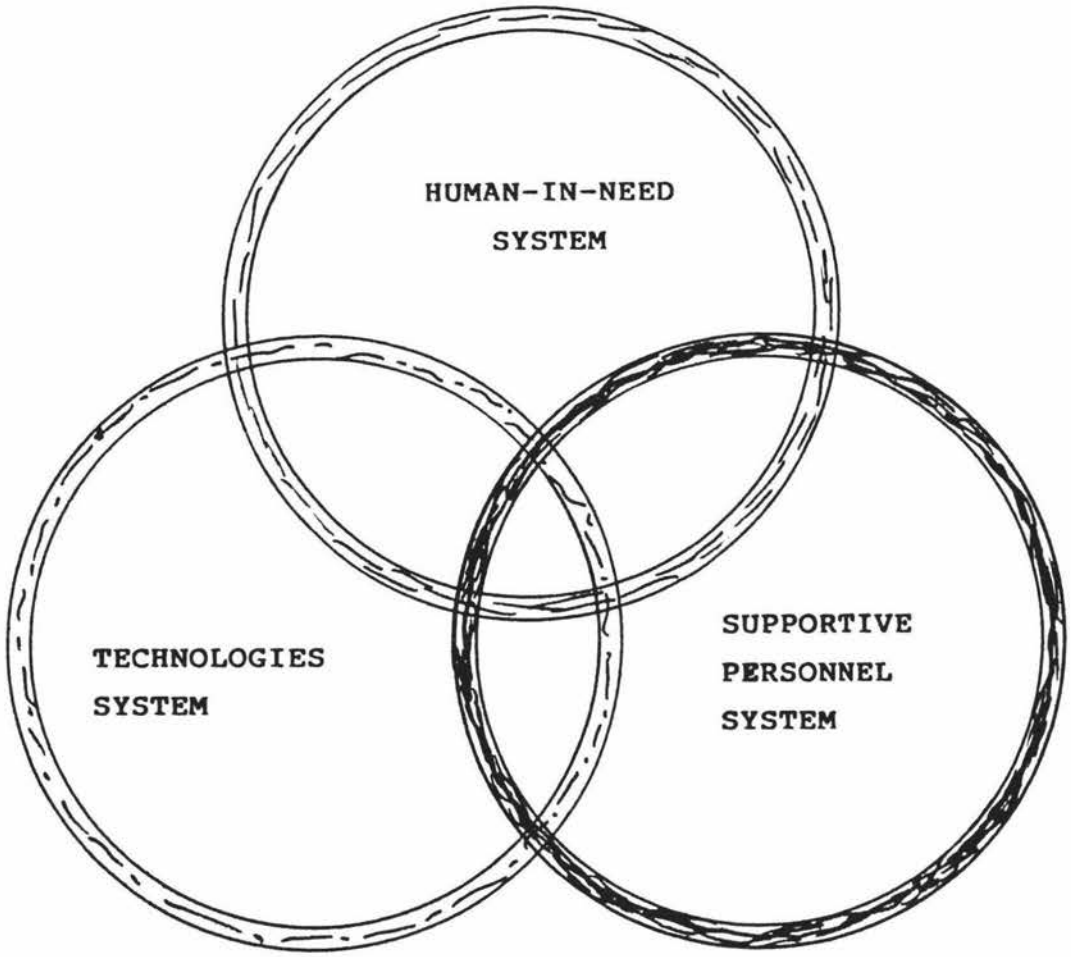


Fig. 9: The three subsystems of the health care system: Human-in-Need, Supportive Personnel and Technologies.

Rehabilitation-Society model at the rehabilitation level, there are four systems: Human-in-Need, Traditional Healing Personnel, Biomedical Personnel, and Technologies.

a. Individual level

At the first individual level of the Individual-Rehabilitation-Society model, the Human-in-Need System consists of any individual in need. The human in need or people with disabilities are the main focus in the rehabilitation process. As related to the differences in historical and cultural background, therefore, the concept of health and the criteria for disabilities, different humans in need have different needs. Although, their basic needs are the same, there are differences in the way they pursue these needs. In many situations, there is the need to promote independence among people with disabilities. This may mean learning job-related skills so as to ensure economic self-sufficiency for people with disabilities. However, only a few Navajo (American Indians of the United States) parents stressed work-related skills for their offspring. This is related to the fact that there are only limited job opportunities for able-bodied within the Navajo reservation. Hence, the usefulness of job-related skills for people with disabilities is not deemed of overriding importance. There is also less emphasis on correcting the "deficiencies" of people with disabilities, because these deficiencies are not necessarily considered significant (Connors and Donnellan, 1993, p.272 and p.274).

The concept of rehabilitation, moreover, is not restricted to Western thinking, most of the constituents of rehabilitation are of Western origin. For some of the ethnic groups of the world, there are no equivalent words for handicaps, disabilities, or physical or mental impairments. Notions of disabilities and rehabilitation are imported. For the Navajo Indians, there is only a derogatory term, *digiis* (with the connotations of incest) to label a "crazy" person. The Navajos are more concerned with the identifying and treating of external causes than with

symptoms and disease. Connors and Donnellan found that it does not mean that disabling conditions did not exist in the past, but disabilities are not perceived as problems as suggested upon their interviews with elderly Navajos. With increasing contact with Western culture and political advocacy tied to the United States federal legislation on disabilities, the concept of disabilities is gradually building up among the Navajos. (ibid, pp.274-277). The learned concept of disabilities is a concept that has been acquired through life. The modification or change in such concepts is related to traditional thinking and the acquisition of new knowledge. Even with an advance in technology, traditional thinking, to a certain extent, still persists among all people around the world. However, with the persistence of traditional belief and cultural barriers, biomedical concepts of disabilities or rehabilitation are difficult for many people to comprehend. According to Kiev (1986, p.16), the persistence of traditional beliefs and practices among the Mexican-American is that they make sense in terms of Mexican-American values, norms and conflicts. As for most of the Navajo, they will seek their own traditional causes of disabilities rather than adopting the Western notion of causes.

b. Rehabilitation level

The rehabilitation level of the Individual-Rehabilitation-Society model consists of four systems: Human-in-Need, Traditional Healing Personnel, Biomedical Personnel, and Technologies (Fig. 10). Owing to the differences in concepts of health and disabilities with the traditional healing personnel and biomedical personnel, health is achieved in various ways. Recent approaches to holistic rehabilitation for biomedical practitioners have promoted consideration of people with disabilities as persons having interactions with the surroundings rather than a focus only on the disabilities. This represents the importance of attending to systems which interact with the Human-in-Need System. However, this biomedical holistic viewpoint is narrow, in the sense of having deficiencies relating

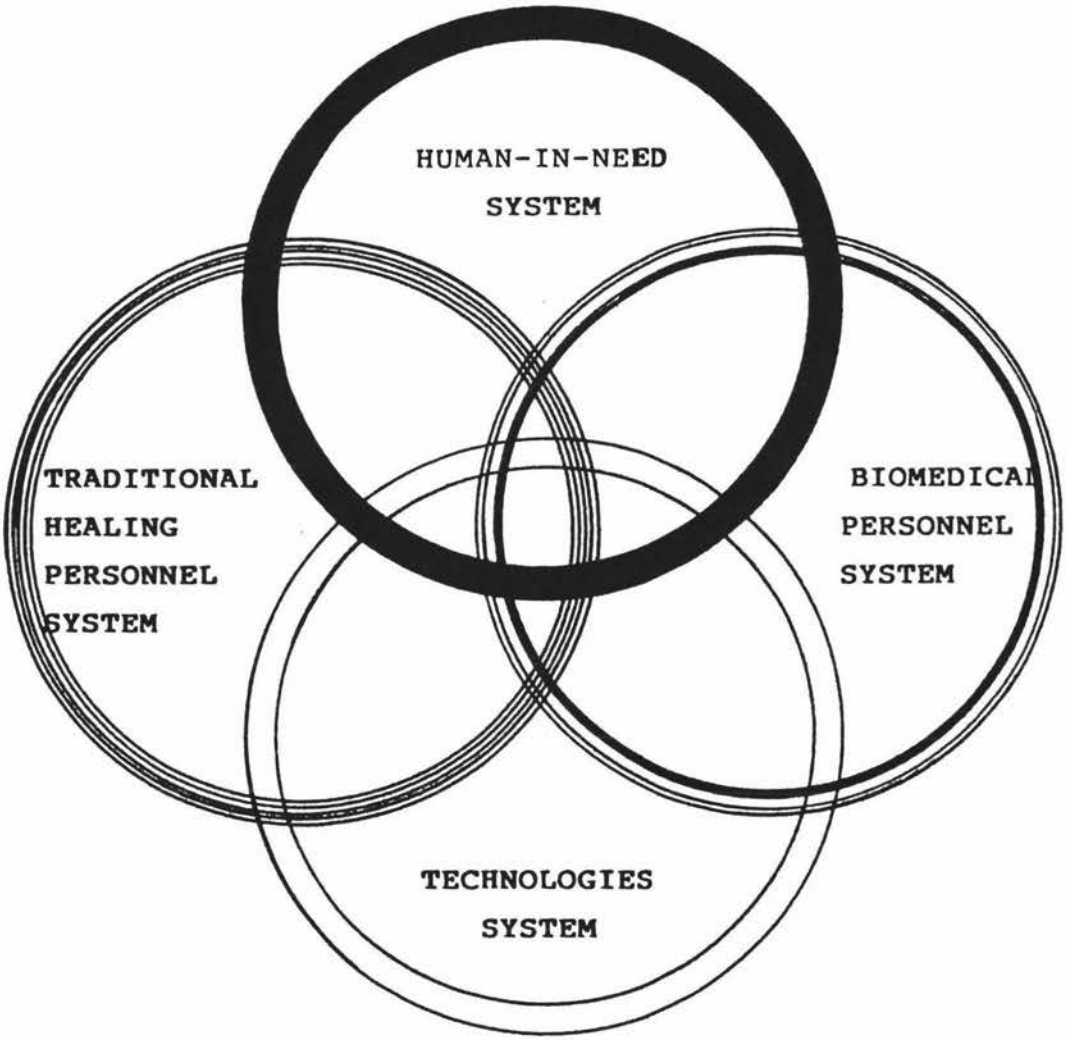


Fig. 10: Rehabilitation level of the Individual-Rehabilitation-Society model including the Traditional Healing Personnel System in the interactive process.

to the thinking of traditional healing practitioners and also many people. For example, in the world view of the Navajo, mind, body and spirit cannot be separated, nor treated without regard to the whole person and his or her relationship to nature, spirits, and all living beings. This is in contrast with the biomedical notion, in which mind and spirit are often relegated to a second place or ignored. Most Navajo will seek biomedicine for a broken leg, spinal meningitis and other discrete diseases, but as a complement to their own traditional healing ceremonies. They are not satisfied with a biomedical explanation of their diseases. In addition, their concept of curing disabilities is also markedly different from the Western biomedical one. For example, a blind person who has had the proper ceremony performed is viewed successfully cured although the blindness remains. In the Navajo culture, harmony has been restored that allows the person to live without sight; the person is once again made whole (ibid). Hence, rehabilitation should be culture-specific. The lack of understanding of diverse Native American cultures, which are widely disparate from the Euro-American culture, contributes to the difficulties encountered by both biomedical counselors and their Native American clients. Communication styles, social structures, and value systems unique to Native Americans usually contrast with the orientation and modes of operation of rehabilitation programs and biomedical professionals. These factors affect the use and efficacy of the services (Clark and Kelly, 1992, p.23). There is a need for emic (description of a culture and/or disabilities as understood by a insider or "native" of that culture) rather than etic (analysis of a culture and/or disabilities as understood by an outsider) approach to rehabilitation, an approach which is free from ambiguity, confusion, and self-contradiction in its stated objectives and practising policies. The degree of acculturation of the clients must be taken into account by the rehabilitation personnel. The culturally akin nature of traditional healing enables people with disabilities to receive culturally-consistent care.

The importance of culturally-consistent health care in the

present health care system has been related to the recent social movement of indigenization, "the act of rendering indigenous or making predominantly native" (The Oxford English Dictionary, 1989, p.867). There is a re-emphasis on indigenous or local ways of thinking, including traditional therapies. This also indicates the recognition of the existing cultural diversity around the world. In recent years, the Indian Health Service of the United States has allowed traditional healing "Singers" into hospitals to treat patients. The Songs of these Singers are based on Navajo myths and stories and have the effect of possible restoration of harmony between the patient, the illnesses and the spirits. The acceptance of traditional Singers into hospitals represents the recognition of the deeply-held belief in traditional healing (Connors and Donnellan, 1993, pp.274-275). In Canada, although the Medical Services Branch of the federal department of National Health and Welfare has provided funding in a few provinces to allow Indian patients to have access to traditional healers and traditional healers are allowed into urban hospitals to undertake the healing of Native patients, the actual acceptance of traditional healing by biomedical personnel is still unclear (Waldram, 1990, p.343). A recent Manitoba (of Canada) study by Gagnon (1989 as from ibid) suggests that some biomedical practitioners are willing to consider collaboration with Indian healers. However, general biomedical opposition to such practices remains. Uncertainty about the efficacy of the role of traditional healing therapies among biomedical practitioners and many people, especially those with Western education, persists. The attitude of traditional healing practitioners towards other health care practitioners, biomedical practitioners or even other traditional healing practitioners is also an important issue as related to the acceptance and incorporation of traditional healing in rehabilitation. It is generally true that there is no one single therapy that can heal all ailments or disabilities. This means that neither traditional healing systems nor the biomedical system can provide solutions to all health problems. Therefore, health can best be achieved by cooperation between the two systems.

It is argued that the formal cooperation of traditional healers and biomedical practitioners can result in the practitioners of the former as "auxiliary" to the latter, transforming the former into "second-rate paramedical workers". It has been suggested that such cooperation will lead to changes in the philosophy of medical treatment of the traditional system, which will in effect alter traditional medicine to the extent that they are no longer "traditional" or recognizable as alternative to "native" patients (Asuni, 1979, p.33, Bichmann, 1979, p.178 and Green and Makhubu, 1984, p.1077 as from Waldram, 1990, p.343). Past experience has shown that cooperation is possible through compromise which does not affect the integrity of any of the medical systems when practitioners prepare "to enter into dialogue" and both have the primary concern of the well-being of their native clients (for example, Waldram, 1990, p.344). The kind of cooperative system in the provision of health care can be the integrated mode as in China, the inclusive way as in India, or the tolerant one as in Hong Kong and the United States. The preferable type of health care system for a country should make reference to their resource availability, that is, the various kinds of health care personnel and types of technologies, and the disease and disability patterns of the country, for example. Common to these three types of cooperative systems is the right to practise for the traditional healing practitioners, either formally or informally. The attainment of legal rights to practise is seen by many traditional healing personnel as a great move towards the recognition of their efficacy in healing. This has the added advantage of controlling unsafe or quack practice. However, the institutionalization of traditional healing is seen by other traditional healing practitioners as a restraint to their freedom of practice. Conforming with legislation, to the fear of some of traditional healers, may lead to the loss of some of the valuable traditional healing concepts or practices, or even an "unreasonable" drastic change in the philosophy of the traditional healing system, resulting in the loss of connection of the therapies with the "native" concept of disabilities and/or health. If that were to occur, then traditional healing

practitioners cannot satisfy the health needs of the people concerned. The type of rehabilitation system, integrated, inclusive or tolerant, for a country must meet the health needs of people with disabilities and other people. The monopolistic system of biomedicine which does not take into account non-Western cultures or even the diversity of Western cultures, should be abandoned.

In terms of access to resources, conflicts exist between the traditional healing system and the biomedical system. In health care funding, traditional medicine usually receives little or even nothing relative to biomedicine. This necessitates consideration of increasing the share of traditional medicine. This is especially relevant for poor countries or those with great "brain drains" of biomedical personnel. However, this may mean the "unreasonable" decrease of health care funding for the biomedical system. The problematic situation has been occurring in the biomedical system in the Philippines. Most of the doctors, nurses and midwives in the Philippines either work abroad or in cities. Its biomedical health care system suffers from a serious lack of manpower, especially in rural areas where more than 70 percent of the population live (Caragay, 1982, p.159). The formal use of traditional healing by the government could be a solution to the drastic shortage of formal health care personnel, especially in the rural areas. Many of the traditional healing practitioners live and work in the rural areas, and they have a good knowledge of the beliefs, norms, values and traditional ways of healing of the sick, or people with disabilities. Frequently, traditional healing draws on resources that are not used by the biomedical system. This can ensure, to a certain extent, that the limited resources available to health care do not suffer from severe shortage.

Within the Technologies System, the kinds of resources employed by biomedical practitioners include the well-renowned medications, syringes, surgical equipment, psychoanalysis sessions, and may even include needles (for those practising

acupuncture). As for traditional healing practitioners, the types of equipment or resources may include herbs for the herbalists; poultice and bandage for the bone setters; songs, chants, dances, images of the altar, rosary, thimble, Bible or Koran for the magico-spiritual healers. The employment of these resources by traditional healers must meet with the social, economic or political standards of the area or the country concerned, thus safeguarding people with disabilities from "unreliable" care. Devices produced in a high-technology society may not suit the developing countries, where the environment, customs, needs and skills are different and funds are less. For the Biomedical Personnel System, little has been done to design devices specifically for a developing low-technology society, for there are only a few centres where such work is carried out (James, 1984, pp.256-258). The best technology for the healing or care of people with disabilities must match the skills, knowledge, costs and the conceptual thinking of the people involved, no matter whether they are biomedical or traditional in nature.

The lay-referral network of relatives, friends, neighbours and other associates who act as brokers or intermediaries between healers and people with disabilities are shared between the Traditional Healing Personnel and Biomedical Personnel Systems. They contribute to the concepts of disabilities, healing and health, and, to a certain extent, influence the choice of healing system(s) by people with disabilities.

c. Society level

At the society level, people with disabilities are exposed to the wider aspect of society, the country or the world. Issues that arise in other parts of the world may have an immense impact on the local rehabilitation system. In the United Nations Assembly in October, 1992, the Secretary-General of the United Nations Boutros Boutros-Ghali commented that "disability issues have gone beyond the category of humanitarian concerns. They are now recognized in the dimension of human rights and development".

The Assembly also called for intensified efforts to improve the situation of people with disabilities around the world and urged the governments to establish appropriate policies, "providing preventive and rehabilitative measures to facilitate the integration of people with disabilities into society, supporting the development of organizations of disabled persons, and using their own knowledge in decision-making" (Flynn-Connors, 1993a, p.85). With recent efforts on improvement of quality of life of people with disabilities, disability awareness has turned into action programmes which aim not only for the benefit of people with disabilities, but also able-bodied. "Disability policy has moved from charity to integrated social development planning" (ibid). There is a recognition of people with disabilities as a society's resource rather than as beneficiaries. In many societies, traditional healers with disabilities often (or traditionally) contribute to the health of others through their healing therapies. Many of the Navajo still rely on traditional healers for the curing of their disabilities even if they have been treated with biomedical medicine. Navajo believe that only traditional healers can provide real remedies for disabilities and make a person whole again (Connors and Donnellan, 1993, pp.275-276). In such cases, biomedicine can be interpreted as responsible for the physical components of the disabilities, while traditional healing provides for healing of the Navajo's mind and spirit. Thus, in order to provide culturally sensitive care, the practitioners should realize that they too have a culture (Fitzgerald, 1992, p.42), which may differ to a certain extent. The lack of shared knowledge may not be a trouble, as this can be overcome. More often, it is the lack of awareness or willingness to accept alternative beliefs, values, and attitudes, and even medical systems. This can lead to a lack of empathy and an inability to see the problem from the client's point of view. Consequently, there may be an inability to devise solutions which are satisfying and sensible to all the people (ibid, p.40) involved in the rehabilitation process. There is a need for closer communication between biomedical personnel and traditional healing personnel for the benefit of people with

disabilities and the prevention of disabilities. It is essential for individual practitioners to have a knowledge of the other healing systems, for example, as well as the cultural variation about responses to illness and disability, so as to enable them to communicate with their clients more effectively. Information dispatch or short training courses on concepts and practices about individual healing systems can be provided so that practitioners can have a knowledge of other healing systems.

2. Expanding role of traditional healing

Traditional healing can be a promising means for the rehabilitation of people with disabilities. The concepts and the practices of rehabilitation services are new or still lacking in many societies. In order to have a smooth implementation of rehabilitation services for the benefit of people with disabilities, a culturally-unalienated approach should be used. The use of traditional healing strategies with incorporation of the basic concepts of biomedical rehabilitation can serve the purpose. As Marfo notes: "Disability specialists...with interest in disability issues must respond to the challenge of finding meaningful ways of interfacing indigenous care and habilitation [or rehabilitation] practices...that make sense in the context of Third World environments" (1993, p.77). In my opinion, the latter issue is not only relevant to the Third World, but is also applicable to any other part of the world. In so doing, people with disabilities will not be embarrassed or alienated within the rehabilitation process. Traditional healers can act as members of the interdisciplinary rehabilitation team so that the traditional culture needs of people with disabilities can be met whenever appropriate. In addition, native concepts of people with disabilities and other people involved should be respected and Western notions of disabilities should not be imposed unnecessarily in my opinion. Rehabilitation can be done in a modified approach as related to biomedical rehabilitation. This strategy is in response to the alienation and the break down of family culture to the Navajo Indians following the "invasion" of the biomedical rehabilitation, for example. This affects both

people with disabilities and their family (Connors and Donnellan, 1993, pp.268-269). The modified approach to rehabilitation should incorporate the philosophy of the people involved in the rehabilitation process, people with disabilities, their family, friends and neighbours, the traditional healing practitioners (particularly in areas where traditional healing is popular among the people), for example. A referral network between the biomedical personnel and traditional healing personnel can be set up whenever appropriate so as to encourage interaction between them. This enables people with disabilities to receive the best available care.

Traditional healing has much to offer to the expanding population of people with disabilities. This presents a new role for traditional healing practitioners in rehabilitation in addition to the prevention of disabilities. In a wider perspective, healing of people with disabilities is actually akin to "healing" of a society or a country. With more extensive application of the term rehabilitation to areas other than health care, the contribution of the rehabilitation process is enormous. In my view, rehabilitation of people with disabilities, to some extent, is the rehabilitation of a society (or a country). This suggests that rehabilitation is very important in any society. With wider and better adoption of traditional healing strategies within the rehabilitation area, positive impacts of traditional healing systems on people with disabilities, the society or the country would be promising. In the next part, I will discuss the relationship of traditional healing and development with a focus on the political control of traditional healing towards development.

Traditional healing and development

Traditional and modern issues

> The peoples described are the contemporaries so-called 'modern' medical practice.....[The traditional health care system] vibrantly color[s] the estimations of health and sickness for large numbers of patients and practitioners in today's world.....The Aztec empire of Meso-america was sacked and levelled by the first wave of Spanish conquerors.....[I]n spite of the ravages of history, its theories have survived to undergird contemporary Mexican folk medicine.
>
> (Sullivan, 1989, pp.5-6)

Misleading flaws mar the interpretation of traditional and modern societies. The notion that these two societies are separate, with different and contrasting features, does not correlate with actual reality. Such thinking can only be viewed as a postulate. However, the advocacy of these ideas in the development field has contributed to the down grading of ideas of traditional societies and the upholding of ideas of so-called modern societies. Originating in the Western world, the term modern carries the connotation "of or pertaining to the present and recent times, as distinguished from the remote past" (The Oxford English Dictionary, 1989, p.947).

> The assumption that modernity and tradition are radically contradictory rests on a misdiagnosis of tradition as it is found in traditional societies, a misunderstanding of modernity as it is found in modern societies, and a misapprehension of the relationship between them (Rudolph and Rudolph, 1967, p.3).

Studies of American political behavior suggest the persistence of traditional forces as due to local history, ethnicity, race, and the ties of religious community. The dichotomous notion of modern and traditional societies is erroneous (Rudolph and Rudolph, 1967, p.4). Traditional forces are essential

constituents of many modern societies if not all. Every society has its own historical and cultural basis upon which policies are formulated. Rudolph and Rudolph (ibid) suggest that "there may be certain persistent requirements of the human condition that tradition, as it is expressed in the past of particular nations, can and does satisfy."

Over the past, the cumulative effect of misdiagnosis of traditional and modern society has produced an analytic gap between tradition and modernity (ibid, p.6). Traditional thinking, as well as traditional healing, is considered as out-dated, and not coherent with the contemporary or modern life-style. This idea is further enhanced with the perversion of modernization theory, as urged by Western powers. Modern healing practice nevertheless refers only to what Westerners promoted as biomedicine while traditional healing has no place in the modern world. However, biomedicine has its own traditional Western base. The essential differences among the various systems of health care is not related to the goal or effects, but rather the cultures of the peoples who practise the different systems. If the meaning of the word modern were traced again, the pluralistic health care system of the contemporary world would be seen as a modern health care system including both biomedical health care and traditional health care. People employ varieties of healing strategies in response to their health problems. The persistence of traditional healing signifies the promising role of traditional healing in the fulfilment of health care needs of people in the modern world. The exclusion of them from the health care system eliminates their possible help and benefit to the human in need. In other words, traditional healing can contribute to health care, or solve the persistent requirements, of human beings. Many authors suggest that traditional healing provides patients or clients with a culturally coherent and expressive framework in which healing can occur. Traditional healers not only battle the ailment or disease, but they also confront the cultural views of sickness or health, that is, the beliefs moulded in personal development, social events, and

cultural history. The cultural nature of traditional healing facilitates the successful management of diseases which biomedicine has often found difficult or even impossible to treat. Thus harmony for the affected persons can be restored and the wholeness of the society can be enhanced.

The United Nations Conference for Environment and Development (1992, p.35) recommends that health ultimately depends on ability to successfully manage the interactions between the physical, biological and social environment. The condition of the health sector determines and is dependent on overall conditions of social and economic development. Owing to economic advantages and extensive geographical coverage, traditional healing is advocated by the World Health Organization as a promising solution to health care for the people of the world, and especially for those of poor countries. The World Health Organization has actively promoted traditional healing as an integral part of primary health care through its technical cooperation programmes with Member States. Such action aims at promoting and strengthening various systems of traditional health care in different parts of the world and providing active support for the exchange of information and experience among Member States (for example, Mutalik, 1983, p.288). Traditional healing is recognised by and sometimes is the only available health care, for local or indigenous peoples.

In order to provide a sound and supportive environment to promote or improve the quality of life of the people, traditional healing must be promoted and strengthened by governments and other professional bodies. This guards against impressions of traditional healing as out-dated and not correlated with contemporary thinking and norms of the world. Discrimination against traditional healing must be removed, for it is not just "superstitions, old traditions lingering on a redundant, ineffective practices. Rather they should be seen, as being adaptive and relevant to contemporary living" (Parsons, 1985, p.xi).

The dissemination of traditional healing

The practices of various indigenous healing strategies by immigrants and their descendants are the result of immigration waves and shifts in immigration patterns. These indigenous healing practices are not native to the new land. Indigenous healing thus crosses geographical restraint and spreads to other parts of the world. Improvement in transport networks, for example, establishment of road access to health care posts, is essential to increase accessibility of health care facilities and hence promote their use. Improvement in communication and information dissemination systems can facilitate acquisition of "proper" traditional health care knowledge and quick decision making on how to take advantage of the changing local or global structure of health care. In such ways information technology can improve the images, services and ultimately the way of functioning of each traditional healing system in society.

Revitalization of traditional healing

The resurgence of traditional healing has brought new implications for cultural awareness and pride in traditional values for various ethnic groups, including immigrant groups. For many countries, particularly for those economically poor, the resurgence signifies the re-discovery of valuable health care resources, the richness of their traditional philosophies and healing care, for the fulfilment of health needs of their people. Consequently, these countries are no longer considered deficient in health care resources.

Traditional healing strategies, to a certain extent, give an indication of the thinking of the respective ethnic groups. Traditional Malay medicine, for example, recognises that physical and supernatural causes of illness are often preceded by predisposing factors, among which is the loss of *semangat* (the soul-substance). It is believed that the *semangat* leaves the body during dreams and may be lost should the individual wake up too suddenly. Loss of *semangat* leaves the individual defenceless against evil spirits. Culturally incorrect behaviour is also

identified as another disposing factor. For example, the husband must not fish with hook and line during his wife's pregnancy lest the child be born with a hare-lip. These traditional concepts of illness reflect the Malay cultural perception of the universe. The Kelantanese form of psychotherapy - *main puteri* - is effectively used as therapy. It liberates the sick individual from his/her morbid self-absorption and heightens feelings of self-worth. The involvement of his/her family, relatives, and friends tends to enhance group solidarity and reintegrates the sick individual into his/her immediate social group (Chen, 1981, pp.127-128). Consequently, traditional healing is a social event in society rather than a practice relevant to only a sick individual. In such ways social integration of the society is enhanced.

The return or revitalization of traditional healing enables people to use healing methods that correspond to their philosophies. This idea is very important as a means to avoid any unnecessary care or incomplete healing of sick individuals. It is especially so for people in countries where biomedical health care ideas of healing dominate and suppress local healing methods. All too often, this results in official provision of culturally inappropriate health care. The re-examination of traditional healing also includes the exploration or re-discovery of constructive ways to approach illnesses, especially those which do not fit in the domain of biomedicine. The effectiveness of traditional healing may not be related only to the cultural aspect of the healing. Studies have found that Chinese medical approaches by themselves or in combination with Western medicine have resulted in more effective healing strategies than a Western approach alone in the prevention and treatment of some diseases (for example, Lee, 1982, p.305; Shang, 1983, pp.86-89). In China and Sri Lanka, the integration of traditional and biomedical health care has not only led to innovative and constructive ways of caring for the sick, it also increases the acceptance of medical care by people and reduces or breaks cultural barriers against the use of organised medical services (for example,

Aluwihare, 1982, pp.450-451; ibid, p.306) which is helpful to the development of the country.

Manpower development in a country should correspond with the trend to re-focus on traditional healing. In many countries, the number of traditional health care practitioners greatly exceeds those trained in biomedicine. The legal advocacy for biomedicine in these countries, especially the poor ones, does not correspond with the health care need of people. It is recommended that "each nation should study its own peculiar situation and develop approaches, techniques and methods that would best satisfy its particular needs and solve its local health problems" (World Health Organization, 1978, p.28). There is a need, then to make the asset of traditional health care practitioners more useful by incorporating them in the development of health care services of the country. People can then have a better choice of available health care strategies to deal with their sickness. With the active participation of the sick, their families and friends in the healing process, the individuals, either directly or indirectly, can benefit with a reasonable amount of control over their health. In many situations, people regard their own traditional healing as being complementary to, and not in competition or contradiction with biomedicine. This does not mean that non-Westerners (or Westerners) should choose traditional medicine instead of biomedicine. The choice of an appropriate health care system is related to the efficacy of the selected methods, the cultural thinking of the people involved, and the availability of resources.

However, I am not advocating that all traditional healing strategies should be valued or that they should have a place in the future health care system. Nicholls (1993, p.29 and p.79) differentiates between pragmatic spirituality that reflects knowledge and unity, and blind superstition which is in bondage to ignorance. Pragmatic spirituality is positive and blind superstition is negative. For example, attributions pertaining to witchcraft or ancestral retribution can be considered as

negative if, as a result, people with disabilities are blamed or ostracized. By the same token, attributions concerning reincarnation of deities can be considered as positive if, as a result, people with disabilities are treated with kindness and gentleness. However, the distinctions between pragmatic spirituality and blind superstition are sometimes quite controversial, especially when people from different cultures are involved in the interpretation process. For the Khmer therapy, rubefaction is indicated when patients complain of feeling generally unwell, with a dull ache all over, difficulty in breathing and raised temperature, in other words, the symptoms of influenza. It involves the rubbing of the skin with a coin dipped in paraffin or camphorated ointment but the resulting marks on the body from this therapy have sometimes been misinterpreted by foreigners as an act of child abuse (Hiegel, 1982, p.234). There is a need to promote understanding and cultural acceptance for effective methods of traditional healing so that deterrents are eliminated.

There is also a need for a more competent way of presenting traditional healing to people. It is important that traditional healers and related personnel should take advantage of current technological advances so that traditional health care services are delivered to people in need more efficiently. For instance, industrial approaches to large-scale production of standardised packages of over-the-counter traditional herbal medicines in China has facilitated the easy availability of these medicines for local and international users (for example, Phillips, 1990, pp.98-99). This promotes the usage of these herbal medicines by an expanding consumer market.

The principle users of traditional healing methods are typically individuals most culturally affiliated to the system in consideration. Many members of other cultural groups do practise these healing methods. For example, despite existence of fundamental differences between the concepts of life, health and disease of the non-Chinese and the underlying philosophies of the

Chinese medicine, a fair proportion of non-Chinese employ Chinese medicine in Malaysia (Chen, 1981, p.131). Another interesting issue is that a differential use of particular healing methods is related to illness categories. Also, there are differential preferences in choosing methods of a particular healing system for health care practitioners. In Sudan, traditional medicine is extensively and successfully used in the control of neuroses and alcoholism (World Health Organization, 1978, p.11). Lee (1982, p.304), for example, finds that within the integrated Chinese and biomedical health care system of China, doctors are more likely to use Chinese medicine in treating chronic illnesses and Western medicine in dealing with acute diseases in general. Hence, a systematic examination of various traditional healing strategies existing within the locality, the society or the country, is required, including not merely the types available but also the patterns of use by the people. Only after detailed documentation and examination of strategies for the management of the health care systems and the health of people, can understanding be achieved. Similarly, the formulation of rehabilitation strategies should be culturally relevant to the people, particularly people with disabilities. Traditional healing, as discussed above, can provide a culturally coherent system of care in rehabilitation processes. Understanding the patterns of use of traditional healing for people with disabilities is essential in prevention of disability and alleviation of effects of disablement. In addition, the systematic examination of the existing local healing systems, not only the biomedical, also recognises the strengths and weaknesses of various health care processes so that appropriate regulations can be established to eliminate unnecessary hindrances or harm. For example, some forms of traditional healing may provide a more culturally appropriate environment for the rehabilitation of people with mental handicaps as compared with the conventional biomedical psychiatric approach. Successful examples of the use of traditional healing to meet the health needs of people can be a prototype for other countries. However, there is serious doubt about the transfer of these accomplishments to other cultures.

The achievements of traditional healing in today's China and India are the result of considerable political and economic support. These sorts of support may not be realistic in many other countries.

In the article Technology, Ullrich (1992, p.283) remarks that the import of Western technologies into Third World countries resulted primarily in monocultures (the Western ones), large scale slums, destruction of traditional cultures and human ruination. In addition, the price of imported health technology is likely to rise for most developing countries. In many areas, including the health sector, local technologies and resources are being investigated for their potential help or potential for substitution for foreign technologies. Appropriate technology for health care improvement is and should be based on simplicity, safety, efficacy and availability at low cost (World Health Organization, 1978, p.38). There is an urge to formulate an ecologically acceptable form of health care; on many occasions it may mean the establishment of an ingenious new formula, a new principle, or a technological revolution. The health demands of the future require closer relationships between and better targeting of, the needs of people and more efficient methods of health care delivery. Traditional healing contributes to the genuine health needs of people and hence aids in the development of every country. The use of traditional healing is not primarily related to the choice of the old or the trendy values but the preference for a practical way of achieving health care.

The health care of people, for instance, is commonly provided by self-care, or through family and friends, or through religious and voluntary groups. Only a small proportion of health care is provided by health personnel. Community decision makers, therefore, have considerable responsibilities for promoting good health (Levin, 1992, p.10) through their investments in education and social resources. Traditional health care norms and values should be incorporated in the process of health care provision and added to community health programmes. The changing pattern

of use of traditional medicine (for example, Kan, 1990, pp.42-43) calls for the need to tighten the quality of service offered by traditional healers. To ensure the fitness of traditional health care systems with the community and the people, traditional healing practitioners must be in line with the changing pattern of health needs of the people concerned. Creative healing strategies can be valuable as a means of overcoming difficulty in development processes of a country. Professional health care planning and services should be brought into clearer alignment with societies' priorities and preferences. This approach may meet with obstacles, causing stresses and strains on health personnel who in the past may not have been included in the sharing of the community's resources. The adoption of traditional healing involves the mutual learning and understanding for both the biomedical and traditional healing personnel. Through this approach, it can enhance community recognition of the care provided by health care personnel. The active participation of traditional health care personnel, especially those local ones, in health care provision or out-reaching of health care services to the people is invaluable in the development processes of the country.

The usefulness of traditional healing in the provision of health care services in the future depends on its degree of flexibility. That is, any traditional healing system should remain as an open system. In terms of political support, in my opinion, it does not matter whether traditional healing systems are accepted as part of the legitimate health care. That means the legalization of traditional healing is not of major concern. The concern is that whether it is supported or not, advocacy by the government to remove deterrents to its practice is essential. As cited previously, institutionalization or legalization of traditional healing may lead to the loss of some of its valuable concepts. If traditional healing systems are not legalized, they may have the advantage of developing on their own without undue external restrictions. Legal or political control of traditional healing systems will thus affect the types of traditional health care

received by people. It is important that legal or political interventions be kept to a low level so that no undue distortions of traditional health care result. It is essential for any traditional healing system to attend to changes in other healing systems or its surrounding so that beneficial issues which are appropriate can be incorporated as innovative changes. The notion of change is vital for the survival of individual healing systems. By so doing, traditional healing strategies can meet the changing presentation of health needs of the people over time. This is to say that dynamic and interactive transformation is crucial. This ensures that a culturally appropriate health care is provided for the physical, mental, social, moral and spiritual needs of the human in need.

Dependence, interdependence, dependable and independent nature of traditional healing

The interactive nature of traditional healing is important in understanding its characteristic dependence, interdependence, dependable and independent features. Dependence denotes the reliance of any traditional healing system on its environment as the source of resources and information. Interdependence addresses the fact that systems are interrelated in certain ways, that is, no healing system can exist alone without referring to other systems. This also reveals the reality that no single healing system, whether it is traditional or biomedical, can provide solutions to all ailments on health. Dependable refers to the efficacy of traditional healing systems which people can depend on for preventive, curative and rehabilitative care as related to their ailments. This also requires the setting up of an efficient referral system among and between the traditional healing systems and the biomedical health care system. As more and more cooperation between traditional healing systems and the biomedical system or among traditional healing systems occurs, the quality of being dependable occurs. This marks the promising abilities of traditional healing systems to contribute to the healing of the sick in a cooperative process. Independent distinguishes individual traditional healing systems from others

in the care of ailments. This quality focuses attention on the distinctive nature of the philosophy of each individual traditional healing system, including its cultural framework and healing approaches. To be effective, and for assessment, traditional healing systems should not be under the control of practitioners of the biomedical health care system. This avoids potential misunderstanding of traditional healing by biomedical personnel. Emphasis on traditional healing, may inevitably lead to the rise of the status of traditional healers. Care should be taken to limit the tendency of traditional health care to replicate the drawbacks of biomedical health care, namely, for example, high-budget-orientated health care strategies, the favouring of urban rather than rural populations (especially for countries with predominately rural populations) and provision of culturally insensitive care. It is vital to direct traditional health care to satisfy what people really need rather than what they are supposed to have. More research on traditional health care can enhance understanding and use of traditional health care by people, especially for those people from other cultures. Attention to traditional healing signifies the attention to needs of local people, especially minority groups. However, what are the implication of this attention for the worldwide issues of globalization?

Traditional healing, globalization and indigenization

Globalization to a certain extent means the homogenization or oneness of the world. "What links the people of the world together is not the rule of civilization any more or the interplay of demand and supply, but their shared dependence on biophysical [and social] support systems" (Sachs, 1992b, p.108). Although individual cultures are indispensable to ensure the cohesiveness of a group, it becomes less significant in the global scene. The current change in development language from people to population, needs to requirements, and welfare to survival is indicative of a growing negligence towards cultures in favour of mere existence (ibid, p.108). However, the negligence in attention to the cultural aspects of people may

lead to inappropriate orientation or even disorientation, to the thinking of people and result in inappropriate development strategies for individual areas or countries. Hence, attention to different local healing systems and health care generally is necessary as a suitable way to promote development of any country. This means that "a dialogue of civilizations is imperative as for peaceful and sustainable coexistence puts the challenge of self-examination before each culture. A simultaneous process of confrontation and synthesis can lead to coherence, while avoiding the pitfalls of homogeneity" (ibid, p.113). The emphasis on traditional healing in health care provision represents an indigenized approach to the development of health care services so as to accommodate and respect the need for individual, local, and ethnic identity. For traditional healing, there must be the maintenance of a state of balance or harmony which represents an ecological approach to health. The matching of the sick with their environment must take place with respect to the abundance or constraints of resources. To sum up the argument as related to health care provision and development, at the local level, it is essential to attend to the needs of the local people with reference to their surroundings. At the global level, there should be recognition of individual local needs. Development will not be the same for all people in all places at all times. The policies implemented must be appropriate to people, at least at the basic needs level. Both indigenization and globalization approaches to the development of health care facilities are needed - think globally and act locally. With reference to General Systems Theory, it is important to give attention to potential or existing interactions, or regulations of individual systems. In the rehabilitation field, local means the attention to local needs of people with disabilities and people involved in rehabilitation. Traditional healing, as referred to previously, can be a promising means to fulfil this latter issue. In other words, provision of traditional health care in rehabilitation represents an indigenized approach to health and, therefore, development. Traditional healing should be considered as being adaptive and relevant to contemporary

living. The pluralistic approach to health care, the same approach as to rehabilitation, is a positive new and dynamic form of localism.

Do individuals with disabilities rely on traditional systems of healing or are they more likely to turn to biomedical health care related to their disabilities? To what extent do the two system interrelate? The follow section is a research proposal directed to provide an answer to these questions. It aims to reveal the pattern of use of various traditional healing systems by people with disabilities. The research result will provide a trustworthy base from which innovative health care reforms in rehabilitation can be made to meet the health need of people, especially people with disabilities, that also contributes to the achievement of the goal of development.

RESEARCH PROPOSAL

A SURVEY ON THE USE OF TRADITIONAL HEALING BY PEOPLE WITH DISABILITIES

Introduction

The provision of a culturally sensitive service is essential for the successful rehabilitation of people with disabilities. Traditional healing has long been the most if not the only accessible health care for people in the Pacific Basin. This is largely related to local availability. Even now, traditional healing is more readily available to people in need among the scattered islands or the mountainous terrain of the Pacific Basin as compared with Western-based biomedical health care. The use of traditional healing in the rehabilitation of people with disabilities can provide a promising remedy to the existing shortage of rehabilitation services in this area. In such a way, culturally sensitive rehabilitation services can be provided to people with disabilities in this area.

This proposed research project will assess the extent of use of traditional healing by samples of people with disabilities. The research project will be done in areas of the Pacific Basin: Hawaii of Polynesia, the Federated States of Micronesia of Micronesia and Papua New Guinea of Melanesia. There are distinctive local cultures in these areas, which are dissimilar to Western cultures. The concepts of diseases and disabilities for the local people in these areas are different from those of the West (for example, Keck, 1993, p.3). This poses the question of the suitability of adoption of Western ways of rehabilitation in these areas. In addition, the provision of rehabilitation services in these areas has been hindered by the geographical conditions. In both Hawaii and the Federated States of Micronesia, the islands are scattered across wide ocean areas. Transportation among the islands in these two countries, in terms of time, frequencies of provision, and cost, poses problems in the development of rehabilitation services. In Papua New Guinea,

the mountainous terrain and the budgetary constraints impede smooth expansion of rehabilitation services. Multi-ethnicity with cultural diversity, further coupled with flourishing of different languages pose difficulty in communication between and among various ethnic groups. In this proposal, the focus is on Hawaii so as to illustrate the way of conducting the research to obtain the desirable data.

Aim

This survey aims to explore the extent of use of traditional healing by samples of people with disabilities.

Literature review - Hawaii

This research is to be carried out initially in Hawaii. Hawaii is a meeting place for the cultures of the East and the West. In addition, there is also a thriving indigenous Hawaiian culture. Traditional healing methods are practised by various ethnic groups. The understanding of various interactive forces as related to rehabilitation is important for this research. The following brief account explains the historical, demographic, geographic, cultural, economic, political, and administrative factors influencing the use of traditional healing in rehabilitation in Hawaii:

1. Historical background

   Historically, Hawaii has been under the rule of local Hawaiian monarchies, the British and later the United States (the current controller). The contact of Hawaiians with foreigners has effected and changed the culture and beliefs of the Hawaiians. The first missionaries reached Hawaii in 1820, they "won [Hawaiian] friends by treating the sick." The growing influence of the missionaries on local Hawaiian monarchies led to many of the local Hawaiians converting to Christian belief. With the growth of plantation industries, sugar cane and pineapple, there was a great surge of plantation workers from China, Japan, the Philippines, Portugal and other Pacific islands. Some of these plantation workers remained in Hawaii and their

descendants form the basis of today's multi-racial population (Douglas and Douglas, 1989, pp.240-243; Hunter, 1993, p.1471). The number of Caucasians has been increasing during the more recent control by the United States. However, the number of Hawaiians and part-Hawaiians has dropped drastically from their previous number through time as they were exposed to new foreign diseases and lifestyles. Moreover, traditional Hawaiian beliefs, to a certain extent, still persist nowadays; with modifications to "fit" the current local environment. Hawaiians together with other immigrant ethnic groups were distinguished as subordinate races by the Caucasians. Under the rule of the United States, English becomes the official language and is generally spoken by people living in Hawaii. The American ways of life have successfully penetrated Hawaii at religious, economic and political levels (Trask, 1987, p.161). With the prosperity of the tourist trade in recent decades, rapid modernization of Hawaii has occurred as compared with other Pacific Island States. However, this rapid development has resulted in controversy with some residents wanting to preserve more of the traditional island lifestyles.

2. Demographic transition

The total population of Hawaii is 1,135,000 (Year 1991) (U.S. Bureau of the Census, 1992, p.24), and is characterised by multi-ethnicity. Caucasians account for the majority of the population (24.5 percent). However, the Japanese, by far, are the dominant ethnic group, accounting for about 23.2 percent of the total population. 27.3 percent of the population consists of persons of mixed race, mainly part Hawaiians (17.9 percent) (Douglas and Douglas, 1989, p.225). The population is young but in recent years there has been a rapid increase in the number of older persons, while the number of children has declined. As these demographic transitions take place, there will be a larger proportion of older persons. These older persons will account for an increase in the number of

people with disabilities. The improvement in biomedical health care has also resulted in the survival of more people with disabilities. The transition from infectious to chronic diseases and an increase in traffic accidents have contributed to the changing pattern in the causation of disabilities. These people generally require psychological and social, as well as spiritual supports, related to their disabilities.

3. Geographical barrier

Hawaii lies in the tropics of the North Pacific (between 18° 56′ and 28° 25′ N. and 154° 49′ and 178° 22′ W.). The chain of islands forming Hawaii amounts to 16.641 sq. km with inhabitants in seven major and eight minor islands. Most of the inhabitants are on the main island of Oahu. Transport within Oahu is reasonably served by various transport facilities. However, inter-island travel, mostly by air, is costly. This creates difficulty for those who are poor, particularly for many people with disabilities, who seek Western biomedical health care in urban areas for their diseases or disabilities.

4. Cultural diversity versus monoculture

The population are mainly Christians, though there are many Buddhists (Hunter, 1993, pp. 1472-1473). The multi-ethnic nature of Hawaii has given rise to a plurality of traditional beliefs. These beliefs have encouraged the use of different styles of traditional healing by these ethnic groups. The advocacy of biomedical health care by the governmental, state and professional agents has not resulted in a monopolistic approach to the care of disabilities of people. This is due to the fact that a biomedical approach to disabilities will create a loss of information as related to traditional concepts of diseases or disabilities for many of the ethnic groups. This would result in inappropriate care for the different ethnic people with disabilities. The common and growing practice of inter-marriage between races in Hawaii, especially in recent years, has brought about a transformation of

traditional concepts among the young and potentially, for the future generations. This emerging issue has important implications in the development of a culturally sensitive rehabilitation programme.

5. Economic constraints

Natural resources are scarce in Hawaii, and many of the goods consumed locally are imported. In addition, with the growth of the tourist trade, living costs have reached an unacceptably expensive level for local residents. Health care expenditure is directed mainly to biomedical care services. Funding for traditional healing is minimal, and is restricted mainly to private practices.

6. Political advocacy

The Americans with Disabilities Act, 1990, has marked an ever increasing government role of the United States in providing and securing basic needs for people with disabilities. In addition, in recent years different ethnic groups, including the Hawaiian, have sought to attend to their cultural needs. There is also a growing pride in the diverse and unique cultures of these people. As a result, research interests in issues relating to these cultures are expanding, including traditional healing. Minority groups, including people with disabilities, are gaining a greater say with respect to satisfying their basic needs from their own perspectives rather than accept that which is offered to them. More funding, although still small in amount, has been allocated to services and care, for example, vocational rehabilitation and counselling for people with disabilities. In the Report of the Governor's Congress on Hawaii's International Role (Li and Simone, n. d., p.55), the necessity of expanding treatment options to meet the needs of people with disabilities is advocated.

7. Administration

Better coordination of rehabilitation in Hawaii has been advocated so as to avoid the waste of limited resources and to increase the efficient delivery of services. A

decentralized approach has been achieved by some of the rehabilitation agents so that people in other islands apart from the densely populated Oahu, can receive rehabilitation care in their locality. This ensures that rehabilitation is more readily available to those in need.

8. Rehabilitation in Hawaii

Hawaii generally follows the biomedical rehabilitation approach as in Mainland United States. It includes the hospitals, clinics and other agents serving people with different disabilities. In the rehabilitation hospital, an interdisciplinary team approach among the personnel serving people with disabilities is practised. Traditional healers will be beneficial in rehabilitation if they can act as member of these teams or if people with disabilities in need of traditional healing services can be referred by the team whenever appropriate. This ensures that those people in need of rehabilitation services will receive culturally sensitive care.

In order to achieve the latter goal, knowledge concerning the use of traditional healing by local people is essential. This can ensure that proper services are provided according to actual conditions in society.

Subjects

The subjects include samples of people with disabilities residing in the five main islands of Hawaii: Hawaii, Maui, Molokai, Oahu and Kauai. Subjects will be identified with the help of the Rehabilitation Hospital of the Pacific, the Pacific Basin Rehabilitation Research and Training Center, other local rehabilitation agencies and traditional healers.

The subjects will be divided into two groups. The first group consists of three persons with disabilities from each of the islands, making a total of fifteen, to form a preliminary research subject group. The subjects from individual islands must be of different ethnic origin with different forms of disabilities. This allows the sampling of information from

people with different characteristics. A second group will be formed by another 150 individuals with disabilities. The number of subjects from each island will be judged by the relative proportion of the island population to the total population of Hawaii. Subjects will be spread among different ethnic groups of Hawaii so as to sample information of various cultures.

Researcher

The author is the only researcher for this survey. The author, a foreigner to Hawaii, is an ethnic Chinese residing in the Westernized environment of Hong Kong. Chinese is his mother tongue and English is his second language. The use of only one researcher in this survey can eliminate the problem of inter-researcher differences in data collection.

Methods

A survey approach will be employed to conduct this research. Statistical data and information cited above will be updated as far as possible to reveal the actual local situations of people with disabilities. The research will be carried out according to the ethical considerations of Massey University Ethics Committee and related local Hawaiian organizations. English will be used throughout the research in formatting questionnaires and as the means of communication between the author and the subjects. It is important to have a discussion with local people as related to local concepts of disabilities for different ethnic groups as they will be the subjects. Local people to be contacted include: rehabilitation professionals, members of disability groups, local traditional healers and biomedical health personnel. The researcher will discuss with these people the plan and approach to gather information on concepts of disability for different local ethnic groups, types and geographical coverage of various rehabilitation services available to people of Hawaii, types of traditional healing in Hawaii, and which types of traditional healing are more likely to be used by people with disabilities. In addition, the author will also ask these people for possible sources of subjects for

the survey.

After the discussion, a more generalized definition of disabilities will be stated in operational terms for use in this survey. The establishment of this generalized definition is important so that the responses of every respondent will be based on the same concept of disabilities to eliminate any misinterpretation of the questionnaire.

Then a semi-structured questionnaire will be prepared. The questions will consist mainly of open end ones so that more information can be gathered for the necessary revision of this questionnaire. The questionnaire will include information about:

a. personal characteristics of subjects: age, ethnicity, English language proficiency;
b. biomedical rehabilitation care employed by the individual respondent in the past six months, one year and two years;
c. traditional healing employed as related to individual respondent's disability/disabilities: type(s), reason(s) for choosing a particular type of traditional healing, to which culture group(s) does (do) the traditional healing belong, frequencies of use of traditional healing within the past six months, one year and two years;
d. biomedical rehabilitation versus traditional healing as related to disabilities: any preference for either biomedical rehabilitation or traditional healing, whether a combination of biomedical rehabilitation and traditional healing is used, any switching of rehabilitation care between the latter two types of rehabilitation care, whether there is any preference for any particular one of the two strategies for certain disability conditions;
e. the respondent's opinion about the usefulness of biomedical rehabilitation and traditional healing as related to his/her disability/disabilities; and
f. the respondent's comment on the questionnaire and any additional information that the respondent would like to be included in the questionnaire.

This questionnaire will be administered to subjects of the preliminary research subject group in a quiet room of a local non-religious organization on individual islands. Transport to the organizations will be arranged for those subjects in need. Any stimulant or disturbance that will affect the completion of the questionnaire by subjects will be avoided or removed as far as possible. The subjects will be informed about their rights in the research by the author and informed that data collected as related to the subjects will be kept confidential and will only be used for this research purpose. The author will remain in the room during the survey time to assist the subject in the interpretation of questions as required. However, any leading question or answer will be avoided by the author. After completion of the questionnaire, the questionnaire will be collected by the author. The respondents will be asked not to disclose any detail of the questionnaire to anyone else before the conclusion of the entire research project.

The information collected from the semi-structured questionnaire will later be used to design another questionnaire with both closed and open end questions. This revised version of the questionnaire will be completed by the respondents (excluding those participants of the preliminary research subject group) in the same places as for the preliminary research subject group. Similar procedures as for the preliminary subject group will be followed.

Result

The research settings and findings of this survey will be used as a guide for further similar studies to be conducted in the Federated States of Micronesia and Papua New Guinea. Data will be examined for the extent of use of traditional healing and the associated cultural factors contributing to the practices. Findings from these three locations in the Pacific Basin will be compared whenever appropriate to identify any similarity and difference as related to the use of traditional healing by local groups within and between the countries. Any unique cultural

practice of traditional healing by the respondents will be noted.

Comments as related to the development of traditional healing concerning this survey

The findings from this research will be invaluable to the development of a culturally sensitive rehabilitation programme. The importance of traditional healing in the role of care of people with disabilities will be revealed. The collected data can form the basis of further studies on the relative effectiveness of provision of traditional healing as compared with biomedical rehabilitation for particular ethnic groups of people with disabilities in the three areas. The findings can also serve as a reference point for comparisons with data from other countries in the Pacific or even other parts of the world. Rehabilitation strategies using local traditional resources can be formulated, thus promoting self reliance in rehabilitation services for individual countries. The total dependency of the Federated States of Micronesia has eroded "respect and generates ambivalent feelings of gratitude and resentment" among its local people (Crocombe, 1989, p.68). The short-term pay off of culturally inefficient biomedical rehabilitation creates long term psychological, moral or spiritual deficiency for people of the Pacific. The acculturation of Hawaiian with Western "civilized" cultures is really a deculturation, with the "uprooting, enslavement, and collapse of [the Hawaiians'] social system" (Trask, 1987, pp.160-161). Sorcery has functioned in the reinforcement of the Melanesian social order (Meleisea, 1987, p.145). The advocacy for traditional healing in the management of disabilities not only promote the cultural pride of different people with disabilities but it also recognises the invaluable role of a traditional practice.

CONCLUSION

Development is not only the responsibility of the government, but it also needs the contributions of each individual. The rehabilitation team, including people with disabilities, has much to offer in the development process. Rehabilitation represents the identification/re-identification of valuable resources for the benefit of any individual, society or country. However, the availability of rehabilitation services is quite limited or even non-existent in many parts of the world. The use of traditional healing in rehabilitation can give promise to, and further promote the health of people with disabilities. Following the general systems approach, the Individual-Rehabilitation-Society model of rehabilitation explains the necessity for attending to interactions within and among different systems for the successful rehabilitation of individuals with disabilities. It is the cultural make-up within these interactions that adds to the fulfilment of needs of people with disabilities. Every system is in a state of dynamic change, no matter if it is modern or traditional. Being culturally associated with the thinking of people, traditional healing would be a desirable strategy in the rehabilitation of people with disabilities. Health and development are mutually reinforcing agents. The greater use of traditional healing in rehabilitation would mean the employment of precious indigenous/traditional resources to facilitate the health of people (both people with disabilities and the able-bodied), and hence, the development of a country.

EPILOGUE

For those who are interested in conducting the research in Section III, they can contact the author through the Institute of Development Studies at Massey University, Palmerston North, New Zealand (Phone: 356-9099).

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