

# NEW PARADIGM APPROACH ON PREVENTIVE HEALTH CARE MANAGEMENT: USER PERSPECTIVE

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## Abstract



Health problem is the biggest challenge in this new century as reported by most medical practitioner and scientist. This problem has reached the stage of “crises” as commented by the medical expert. On the other hand, all kinds of research effort on drugs, medical technology especially however still seem not able to overcome the disease effectively. In Malaysia, the statistical report of 1 of 20 person with diabetes on 1990 increase to 1 of 10 person in 2000 has shown the seriousness of health status of Malaysian citizen. This figure however did not yet include the diseases such as high blood pressure, cancer, heart attack, etc. According to the WHO and ILO, estimated 1 million workers die work related deaths each year and hundreds of millions more are harmed by their job as reported by Rory O’Neill. Levine (2000) reported that 4% of world GDP lost to work-related injuries, illness and death and the cost of occupational injuries in developing countries about 10% of GDP. He added any country could reduce this figure by half, they could easily pay off foreign debt. Therefore, as part of the effort to solve this terrible health crisis, the purpose of this paper is an attempt to introduce and present the new paradigm of Health Care Management Concept to industries in order to overcome the occupational diseases faced by most employees through a more well organized preventive health care approach.

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## **INTRODUCTION**

Health problem is the major agenda in most of countries. National budget on health expenditure increases dramatically every year. US Government for instance spent 18% of the GNP on health care expenditure in 2000 with total amount of US1000 billion yearly. This matter has forced the government try to seek new alternatives to reduce the health expenditure as well as to provide the better health care services.

Health problem is not belongs to a regional/national issue. Instead, not only the developing countries are facing a high expenditure on health care, the advance countries also could not escape from such a serious problem. Most economist, scientist and medical expert expect that the health crisis could rise to an extremely critical situation and become a major threat to any nation if no action could prevent it.

## **PURPOSE OF THIS PAPER**

As part of an effort by medical scientist to overcome the health crises, various disciplines of experts for instance economist, management gurus, NGO as user perspective also try to contribute new idea to solve the health problems from different perspectives. Such move seems extremely important instead depend solely on the medical profession only.

The whole idea of this paper is here to serve few purposes:

- To explore the critical statistic record of health crises faced by most countries in the world
- To evaluate the current health care model practice by most countries
- To present new concept idea of health care model from medical, management and information technology perspective

## **HEALTH CARE CRISES STATISTIC RECORD**

Work safety and health at work place are important. Most employers aware that any accident and illness cost huge money either direct or indirectly. For instance, Sheila Pantry (1999) reported that “BP estimate that the refinery fire at Grangemouth in 1987 cause one person died, cost 50 million pound in property damage and 50 million pound losses due to business interruption. Besides that, Piper Alpha explosion involves the loss of 167 lives and is estimated to have cost over 2 billion pound, including 746 million in direct insurance payouts”.

Moreover, “In 1997, US report states that injuries both on and off the job cost employers about USD 200 billion annually, or USD 1,700 per employee, and overall, injury accounts for 19% of employers’ health care costs and 46% of disability costs” as quoted from Sheila Pantry (2001). Besides that, “50 million Americans are not covered by health insurance and as such do not have access to health care” as reported by Economic Planning Unit (1996:18) .

Rory O’Neill reported that “in June 1999 the World Health Organization (WHO) and the International Labor Organization (ILO) estimated 1 million workers die work-related deaths world wide each year and hundred of millions more are harmed by their jobs. Globally, over one-third of cancer deaths (34%), a quarter of accident deaths (25%), a fifth of chronic respiratory disease deaths (21%) and one-in-seven cardiovascular disease deaths (15%) are work-related.” Lee (1996) informed that in 1990, the world spending on health reached US17,000 billion or 8% of global income.

On the other hand, in Malaysia context, Tham (1996) commented that based on the current trend by the year 2020 on , the forecast of total health expenditure would be approximately 7% of GNP. Malaysia government would certainly have a big difficulty to sustain such a huge expenses and therefore require a health system to be developed and implemented.

On the other hand, as reported in the Journal of the American Medical Association (1993), one of the commonest actual causes of death in the United States is lack of exercise or poor diet. Moreover, according to the Center for Disease Control and Prevention (CDC), chronic diseases such as cardiovascular disease, cancer and diabetes account for 7 of every 10 deaths in the United States each year. Although much remains to be learned about the role of physical activity and nutrition in health, a wealth of research done in the United States shows that inactivity and poor nutrition are responsible for thousands of unnecessary deaths, illnesses, and disabilities associated with chronic diseases.

As we could see that, the health crises in fact could be solve easily if people could fully understand and practice the four basic guidelines as suggested by medical scientist, “good living style”, “regular exercise”, “good diet” and “avoid bad habit”. Nevertheless, the health crises seems getting worst and making everybody start anxious the terrible cost of medical treatment that are unreasonable expensive. Cases like food malnutrition and poisoning, food genetic modification, environment pollution, etc often make we blaming the incompetence authorities. Thus, perhaps the users could begin to more proactive to counter back the issues arise and be more independently and self preventive approach to avoiding unnecessary cause of illness

and sickness. To determine the good health is own individual effort. No body or the closet relatives could do anything unless we ourselves take the self-protective move.

## **HEALTH CARE MODELS AVAILABLE**

Modeling the health sector is important for planning purposes. However, Nasaruddin Arshad (1996) found that there are, nonetheless, several difficulties involved. Firstly, the definition of health is rather vague and difficult to measure. The World Health Organization (WHO), for example, defines health as “a state of complete physical, mental, and social well-being, and not merely the absence of disease infirmity”. This definition is not only broad, but also equally difficult to operationalize.

Besides that, there has been relatively little research done on the modeling of the health sector in developing countries. As such, there are very few references in this area as commented by Nasaruddin Arshad (1996) .

Health care modeling being common practices by most countries could be view in several different perspective:-

### **1. Preventive Treatment**

According to Lee (1996:123), “Hong Kong is focusing on preventive care and the promotion of good health through intensified public education instead of emphasizing only on curative treatment in hospital which is relatively more costly.”

### **2. Health Maintenance Card**

In the case of Indonesia reported by Lee (1996:123), “they introduced a health maintenance card for each worker whereby a monthly premium of 6 per cent of salary for married worker and 3 per cent for singles is charged to cover for the health needs of the worker, his spouse and up to 3 children. The package of basic health

maintenance cover outpatient treatment, inpatient treatment, examination in pregnancy, help in labor, diagnostic support, and emergency treatment as well.”

Lee (1996:123) added that “In Malaysia context, the provision of health services is undertaken by public hospitals in districts, clinics and institutions affiliated with certain religious groups like mission hospitals. Most of this is financed through general government revenues.”

## COMMENT OF THE HEALTH CARE MODELS AVAILABLE

Basically from the three basic health care model implemented by the three nations, only Hong Kong are found more relevant with the philosophy of preventive is better than cure. The common practice health care models by most countries are mainly still on curative treatment model. As a result, most public or patients however in this case are much less expose to the awareness of preventive is better than cure.

Lets us study the main categories of health manpower distribution in Malaysia as reported by Wan Mahmud (1996) was shown in Table 2,

**Table 2**  
**Main Categories of Health Manpower in 1993**

<u>Types of Manpower</u>	<u>Number</u>
Medical doctor	8279
Dentist	1606
Pharmacists	1324
Nurses (inc JD, Bidan & A/N)	27199
Medical Assistant	3728
Radiographers	404
Pharmacy Assistant	1678
Medical Lab. Technologies	1555
Dental Nurses	1119
Health Inspectors	1119

Source: Report of the Director General of Health Malaysia, 1993

The above Table 2 shows that the whole structure of health care model is more emphasis on the treatment model. Preventive profession and support team are much less significant in this context.

Perhaps we should start to ponder whether the drugs and expensive medical technology the truly preventive practice for the sake of the public as a user. For instance, Lindsey Tanner (2001) comment that “higher-dose, short term use of antibiotics may help reduce the spread of drug-resistant bacteria that cause ear infections, pneumonia and meningitis. Streptococcus pneumoniae infections kill approximately 1 million children under age 5 world wide each year. But resistant strains have become a growing problem blamed in part on the overuse of antibiotics” Some medical researchers, Basiro Davey (1995:180) criticize the drugs treatment practice by most doctor profession are in fact cause more harmful to the people and describe them as “doctor-made disease”.

Briefly, if the drugs treatment still remain as the main source of treatment, it is not surprise to see the health crisis is getting worst.

## **IMPORTANCE OF PREVENTIVE HEALTH CARE MANAGEMENT : NEW PARADIGM APPROACH**

The preventive approach implemented so far by the government through electronic media, campaigns, as mentioned however are not consistent, direct and personal contact and difficult to measure the successful rate. Public awareness and preventive health care knowledge are relatively low and majority are still ignorance and superstitious.

This idea of Preventive Health Care Management for industries concept is an initial stage of research as part of an effort to model a preventive health care that the public could apply easily. With such model, we can see several advantages that can contribute to

companies, individual, and nation as a whole. For instance, besides the public health education through electronic media done by Health Ministry, this Health Care Management Model System will help many parties in different perspectives:

- Employee

Better monitoring of their health condition, benefit from health education program conducted by Health Ministry; avoid unnecessary medical expenses, and better health education to their family members.

- Employer

Cheaper medical cost through better monitoring and reducing the company medical expenses, allow the tracking of employees that always have health problem on a periodically basic. As a result, company profit could be use for future investment and more productive area such as better reward for healththeir staff.

- Health Ministry

Provide better assistance to individual company and better target achievement in terms of reducing health problems among employee, better monitoring health problem in different industries through such system with accurate information available; create close relation with companies. Health Ministry in role should also try to look into more traditional treatment instead of the western drug treatment. Mixture of traditional and western treatment should come along that already proof the better health recovery among patients in oversea such as in Jepun, China, Taiwan, etc.

- Integration of different medical professions



Besides physician, medical profession such as dietician, environmental health specialist, sport specialist, psychiatry, etc will work as a team to diagnose patients. The cause of disease will be better identified and appropriate treatment can be given.

- Shifting of basic medical knowledge to company's staff instead of Health Ministry staff or doctor only.

Some very basic health care knowledge should be transferred to a responsible person from each company instead of depending solely on doctor or supporting staff from the Health Ministry, which are lacking trained manpower.

Briefly, such preventive health care management for industries plays an important role and however more efficient than the current approach through electronic media and short-term campaign which seem not a lasting and efficient effort. Using companies as a platform for conveying the preventive health care program to employee seems the best way to overcome the high rise of health problem. Besides, it also serves as a best place to provide health care management and training to all levels of staff rather than doing it in hospitals or clinics.

## **A FRAMEWORK OF INDUSTRIAL'S PREVENTIVE HEALTH CARE MANAGEMENT CONCEPT**

According to the 7<sup>th</sup> Malaysia Plan as quoted by Tham (1996:12), "Greater emphasis will be given to promotive and preventive health in order to reduce future expenditure on curative and rehabilitative health care".

The driven idea of this concept is based on the several major factors causing all these modern diseases as reported by medical scientist are such :

- changing of life styles e.g., busy life style, sleeping late, lack of exercise, too long working hours, lack of social entertainment, etc.
- changing of diet e.g., more fast food as a main diet due to the fast pace of work among all employee nowadays
- bad habits such as drinking alcohol and smoking cigarettes
- high pressure in working space
- pollution of the surrounding environment due to fast development process.

As we could see the major contribute factors of modern diseases could be easily avoided if all parties are concerned and played an important preventive approached to overcome. Environmental pollution, food malnutrition, bad habits are all in fact human-made problems that finally affected all human's health.

A detail framework of health care management concept is shown in Table 4.

**Table 4: Preventive Health Care Management Concept Framework**

<p>1.0 Employee's Family Health</p> <ul style="list-style-type: none"> <li>• Family members data</li> <li>• Family members health test assessment</li> <li>• Family members treatment</li> </ul>	<p>2.0 Employee's Health History Information</p> <ul style="list-style-type: none"> <li>• Employee personal data</li> <li>• Workplace environment Assessment</li> <li>• Previous workplace environment</li> <li>• Health Record (Present workplace)</li> <li>• Residential Assessment</li> </ul>
<p>3.0 Employee's Periodically Health Assessment</p> <ul style="list-style-type: none"> <li>• Physical assessment</li> <li>• Life style assessment</li> <li>• Exercise assessment</li> <li>• Stress assessment</li> <li>• Periodically diet assessment</li> <li>• Bad habit assessment</li> </ul>	<p>4.0 Health Education program</p> <ul style="list-style-type: none"> <li>• Health care knowledge examination/ assessment</li> <li>• Health care seminar attend</li> </ul>
<p>5.0 Canteen Facilities Cleanliness</p> <ul style="list-style-type: none"> <li>• Weekly food menu intake</li> </ul>	

assessment

- Facilities safety and cleanliness assessment
- Food safety, nutrition, cleanliness assessment

The brief main ideas of this health care framework aims to provide a total health care management solutions to all parties, either individual, institution or nation as a whole in a long term basic, cheapest cost, long lasting, better control and monitoring, more efficient method. Definitely, the final goal of healthier public could be achieved and health expenditure could be reduced.

In the part 1.0 Employee's Family Health, employees' family good health condition only the ways to ensure employee best full commitment and best productivity to company without any worrying on any family's health problem. So far, only few of the world class companies or multinational companies are interested to look after employee's family members under part of their medical scheme.

In the part 2.0 Employee's Health History Information, a good record of employee's present and history health condition should be carried out as well. History earlier employer's workplace should be also taken into consideration in order to allow medical profession to have better understand the employee health condition through history record. Company in this case should not misuse this information to dismiss any employee based on their history health record.

For the part 3.0 Employee's Periodically Health Assessment, systematic and periodically health assessment is important. This idea is to prevent any serious diseases happens suddenly and causing more harmful to employee's health. Assessment on employee physical fitness condition, life style living, exercise, stress management, periodically diet

and bad habit should be recorded also in order to educate employee the idea of self awareness on daily preventive approach is forever better than cure.

The part 4.0 Health Education Program is plays a vital role to reeducate the employee and public the right preventive health care knowledge. Health Ministry could easily carry out any health care campaign to employee in a better and well measured of effort putting in. Different of preventive medical profession especially dietician, environmental health specialist, sport specialist, psychiatry, etc could play a bigger role to educate public instead of depend on physician that are more treatment service.

Whereas in part 5.0 Canteen Facilities Cleanliness, canteen facilities & utilities cleanliness, food's level of nutrition, etc could be assessed by own company's Safety and Health Officer. Such approach is much better monitoring and faster than hoping the help from Health Ministry in case of any food poisoning happens. Different employee in different job function perhaps need different food level of nutrition could also easily request by company to ensure the employee are eating the right diet.

Briefly, to ensure the successfulness of this concept implementation, a team of profession experts should comprise not only the medical profession, it also important to include the management expert as well as the information technology expert. It is because the failure of acceptance of any health care education and campaign by public is due to the poor delivery management carried out by medical staffs that are relatively low knowledge of proper management. This is the aspect we should beware of and take into consideration seriously.

## CONCLUSION

The idea of Preventive Health Care Management is totally a new paradigm approached which is mainly modeled in order to overcome the high pitfall of public health problem. This approach seems to be more personal and direct service to individual that employee's health condition could be better taken care off and thus earlier precaution and assistance could be taken. This health care concept was modeled from the combination of three perspectives: medical, information technology and management. Thus, lacking of any discipline would not be able to ensure the successfulness of this concept implementation. This concept paper was initiated and to encourages more researchers brainstorming in designing any health care model and idea sharing. Preventive health care model research area should be our major concern in this century if we want the health problem to be solved "sincerely". Statistical record of world accident and illness shown that we probably could save our time, money and effort on weapon competition among nations during World War I and II. Health care expenditure emerge the hidden threat weapon to all nations that is silently swallow all the nations wealth. It is meaningless to earn one dollar and 18 cents was wasted on the health expenses as US government does, "18% of GNP spent on health care expenditure".

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