EDITORIAL:

ENVIRONMENTAL FACTORS INFLUENCING BEHAVIOURAL CHANGE AND HEALTH

There has been an increased attention paid to the understanding of the environmental factors that influence the behavioral change and vice versa. Unhealthy behavior in the modern society has somewhat resulted in the changing trend of disease from communicable to chronic disease. Chronic diseases have alarmingly become the major killers replacing the infectious and communicable diseases (with the exception of AIDS). The reason is due to the societal shift from an agrarian to an industrialized type of society. Diseases found in a given community vary with the social and physical conditions that characterize the behavioral pattern of the society at that time. A healthful behavior is an action that helps prevents illness and accidents, helps promote health and improves on the quality of the environment. With this shift in the disease pattern and the increasing cost of health care, health promotion and wellness concept is slowly being introduced through behavioral modification.

The definition of the term behavior is the interaction of the organism with the physical or social environment in space through time which results in environmental changes. Two entities have to exist, the organism and environment, where behavior cannot occur in the absence of living tissues or in an environmental void. Both have to be interdependent rather than independent

Humans' behavioral as a selfish being have an impact on the environment. This can be seen from all man's activities since we first inhabit the earth. The high population density, increased interaction, communication and mobility between individuals. However, at the turn of the century, when the population density increase, with the improved system of communications, uncontrolled environmental development, we are starting to see the impact of the environmental change in terms of development on human behavior especially from the health behavior viewpoint.

Environmental factors that interface with behavior change

Rapid economic growth in term's drastic development and industrialization does not fully guarantee a healthy society. At present, with the change occurring in the country, several environmental factors interfere with healthful living. The social and physical environment influence on the human behavioral change is long term. Term consequences of non-adherence with many preventive behaviors are not severe. For example eating a diet high in fat has relatively few immediate, discernible negative health effects. This is one of the reasons for high degree of non-adherence with preventive measures. For most people, an illness or disability must occur first before they consider health behavior change.

Mass media

Most people in this country especially in the urban areas are exposed to television, radio, newspaper, pamphlets and other media, which provide them with entertainment and daily information. However, information on relevant risk factors and methods for making behavioral changes to reduce their risks are lacking in most of the program. Instead, advertisements for product promotion have influenced the consumer in indulging risk behavior such as cigarette smoking, consuming processed food product with high fat or sugar content and drinking alcohol..

Changing lifestyle

The industrialization era has changed the values and contemporary lifestyle, which induce chronic diseases. Nowadays, the affluent lifestyle and behavioral changes are brought about by urbanization and industrialization has an impact on our health status. The socio-cultural and economic factors have an influence on the dietary habits of individual and families. Changes in dietary pattern have taken along with the development of agriculture and improved food supply. For example, increase consumption of highly processed refined food and convenient and quick to prepare "fast food" may have negative health consequences. Busy work schedule for working mother, availability of these types of food, affluence, trend and convenience has changed the dietary habits.

The busy work schedule has also prevented individuals from doing some physical activities, jogging or playing games. Sedentary lifestyle and irregular exercise pattern or minimal physical activities causes energy imbalance, overweight and obesity, and impaired glucose tolerance and insulin metabolism. High competitiveness among co-workers and increased productivity expected by employers have created stress in workplaces. In order to combat stress, individual resort alternative ways to overcome stress by becoming dependant on alcohol, drug or nicotine. Stress among other factors can lead to other chronic diseases such as hypertension and coronary heart diseases.

Factors that are associated with excessive alcohol consumption is the social environment that encourage drinking especially when alcoholic drinks are always available in various public places e. g discotheques, bars, hotel lounges and dining places. The impact is negative since there will be increased risk towards hypertension, coronary heart disease, stroke, liver cirrhosis etc.

The growth of the tobacco industries and the commercialization of cigarette have lead to an increase in cigarette smoking especially among the people in the developing countries. Smoking is associated with most types of cancer such as the lips, oral cavity, pharynx, larynx, esophagus, pancreas cancer.

Cyber age

Computer technology has given us the comfortable and easy access to information. It has given us the ability to do more in less time. The technology is widespread and is used everywhere from businesses to homes. Computers are translated with the use of hand phone which are mobile and portable. Programmers and technologists are trying to figure out a way on how to make the machines friendlier to human use. Therefore, human have more accessibility to information.

Recommendations on environmental factors to facilitate behavior change

It is proposed that national standards and goals for the prevention of illness be established at community as well as individual level. In developed nation, there are many strategies available to decrease the health problems, which range from intensive individually focused programs to large-scale community or policy-based programs.

Health education program

Health education program attempted to increase health-related knowledge, skill and behaviors, decrease death and disease among individual, and encourage agencies to promote health through environmental and policy changes. A variety of strategies were implemented which included the use of the mass media such as the broadcast media), print media (newspapers, pamphlets), community interpersonal programs (classes, lectures, talks by community leaders) and environmental programmes (environmental education in schools, green consumer campaign). In most instances different intervention strategies were used in conjunction with other, so that synergistic effects can occur when multiple strategies are used in an integrated manner.

With the cyber technology, educational programmes can be incorporated in computer or even mobile hand phones. Further development of the technology can be in the form of the interactiveness of these electronic media.

Community screening for risk factors

Screening program have the potential for reaching large number of people and often have problem of reaching individuals who are already "converted" (those who have healthy lifestyles) while not reaching those at high risk. It is important to recognize that screening is effective only to the extent that those screened take a follow-up action. Thus screening should be viewed as a preliminary step in changing the health behavior of the community.

Environmental and policy approaches to promote health and change behavior can be used in community health promotion programmers. To date, in this country, these programs have relied very little on mass media and educational approach to promote health behavior change. It is possible to incorporate the educational approach in the formal school curriculum.

Increased explorations in using community approaches to promote healthy behaviors should be undertaken. Some program may be effective for some behaviors (e. g. dietary practices) while others may be less so (dental practices). Community health promotion (behavior change) program should be comprehensive and integrated for it to be successful.

Policies and legislations

Policies may be implemented on state or federal levels (e. g food labeling, pollution control, work safety and health), others are amenable to implementation on a community level. Example of environmental and policy strategies relevant to community health promotion program include the consumer aspects in relation to the potential health effects of the product (food items, aerosol product, tobacco product), smoking policies in public places, environmental policies with regard to health related behavior (no littering or dumping). The obstacle to implement strategies that automatically protect people (passive prevention), are usually cultural, social, economic, and political rather than technological.

Changes in behavior to adapt to environmental change

Health promotion and wellness concept emphasizes health as individual responsibility. Individuals have their own accountability for their health and avoid risk factors. The emergence of spas, health clubs and exercise centers are results of the increasing individual consciousness towards a healthy life.

With regard to the concept of individual responsibility mentioned above and the intensification of environmental crisis currently, individuals began to express their concern towards environment. These slowly begin to influence the buying decisions of most individuals and have become a consumer issue. Consumer behavior has changed towards "environmental consciousness" in order to reduce the depletion of natural resources and pollution. Green consumerism is slowly gaining momentum and has added another dimension to the consumer process. Before buying and consuming a product, the environment as well as health aspects has become priority concern. This has led to a trend for eco-labelling and the consumption of environmental friendly product.

Conclusion

The environment and behavior are two interdependent components. Behavior is detected and measured by its effects on environment and environment has its influence on behavior for change. The variables that govern human behavior are often highly complex. The process of urbanization and industrialization have shifted the disease pattern from communicable to chronic disease which are mainly associated with high risk behavior in the modern living. Therefore, in order to curb the spread of these chronic diseases, healthful behavior is recommended where individual's responsibility towards health is vital.

References

- 1. Zaitun, Y. 1994. "Promoting healthy lifestyle in family environment". Paper presented at Family and Environment Workshop, LPPKN, K. Lumpur, 2nd august 1994.
- Stef PJ Kremers, Gert-Jan de Bruijn, Tommy LS Visscher, Willem van Mechelen, Nanne K de Vries and Johannes Brug. (2006). Environmental influences on energy balance-related behaviors: A dual-process view. *International Journal of Behavioral Nutrition and Physical Activity* 3:9
- 3. Susan Michie, Maartje M van Stralen and Robert West (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science* **6**:42
- Dean J Wantland, Carmen J Portillo, William L Holzemer, Rob Slaughter, Eva M McGhee (2004). The Effectiveness of Web-Based vs. Non-Web-Based Interventions: A Meta-Analysis of Behavioral Change Outcomes. *Journal Medical Internet Res* 6(4):e40