Significance of social and cultural sustainability in total health

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ABSTRACT

Modern knowledge assumes that the issues of sustainability and health are inseparable phenomenon. Multidisciplinary research conducted at different parts of the world concludes that sustainability has its direct bearing on the overall wellbeing of the society. From this point of view, the sustainability has an intertwined relationship with total health. The protection of environment is also an issue which is interdependent with what constitutes total health. The question of eradication of energy crisis and total health is not only about compatibility but they are complementary to each other. Thus, they influence our own wellbeing and also the wellbeing of the whole earth. This relationship of environmental aspect of sustainability has been discussed in many researches but social and cultural aspects have not found much space in the bank of knowledge by far. While socio-cultural aspect of sustainability plays an important role in the wellbeing of societies, culturally rich societies have many practices which are not only sustainable but affect the total health of the people. These practices on one hand make a society with less carbon footprint while on the other hand it improves people's social, emotional and spiritual health.

Key words: Total Health, Social Sustainability, Cultural Sustainability, Wellbeing, Environment

World Commission on Environment and Development defines sustainable development as "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987).It comprises the environmental, social and economical development which are inferred as three major pillars of sustainability. Environmental aspect deals with the justified use of available energy resources without overburdening the next generations, economical development includes developmental viability and social development comprises equality among people and wellbeing.While researchers have considered 'culture' as a fourth pillar of sustainability, it nonetheless seems inseparable from social aspects(Fig.1). While presenting the case of culture as fourth pillar of sustainability, the researchers argue that cultural vitality is as important as the social equity in sustainable development and compare cultural diversity to biodiversity(Hawkes, 2001). Although the debate is still on but scientific work about the effects of social and cultural aspects of sustainability over health and wellbeing going on and eliciting promising results. Taking inspiration from such findings, the present chapter will

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deal with the two interlinked but fairly distinct aspects of sustainability i.e. social and cultural sustainability and its effects on health outcomes. The current synthesis appears important in the sense that in a transiting, culturally rich but developing context like India, different lifestyles could be compared to see their sustainability in their social and cultural sense and their resultant impact on health outcomes.

Figure 1: Four pillars of sustainability

WHAT IS SOCIAL SUSTAINABILITY?

Social sustainability is a process that promotes social health and well-being of present and future generations wherein the first aspect implies an individual's social interaction with others and the latter is related to the peaceful coexistence of communities while the basic human needs are being fulfilled(Ali, 2015).According to the Western Australia Council of Social Services (WACOSS),

> *"Social sustainability occurs when the formal and informal processes; systems; structures; and relationships actively support the capacity of current and future generations to create healthy and liveable communities. Socially sustainable communities are equitable, diverse, connected and democratic and provide a good quality of life."*(McKenzie, 2004).

Chiu (2003) has also elaborated the phenomenon of social sustainability and presented it in three interconnected interpretations. The first of them is development oriented that includes social relations, customs, structure and values. Second interpretation is environmental oriented that comprises rules, values, preferences and norms. Third interpretation is people oriented that covers increased social cohesion and integrity, enhanced social stability and improvement in the quality of life. This interpretation covers the aspects of social health and wellbeing among people which is intertwined with environment and an inseparable part of cultural sustainability.

WHAT IS CULTURAL SUSTAINABILITY?

Cultural Sustainability promotes fullest participation in cultural life with the lowest impact to the environment. According to Al-Hagla (2005),"Cultural sustainability is mainly concerned with the continuity of cultural values linking all of the past, the present and the future". The Sustainable Development Research Institute defines it as"the ability to retain

cultural identity and to be allowed change to be guided in ways that are consistent with the cultural values of the people"(Zhang, 2013). These definitions provide a fair idea of the utility and potentials of cultural sustainability. It is however indispensable to understand culture here in order to appreciate the role of cultural sustainability in our health and well-being.

Culture is a complex term which includes values, customs, traditions, norms, meanings, identities, attitudes, understandings etc. It manifests the lifestyles of a group that has been developed by the people of that group and transferred from one generation to another generation. The culture as a whole covers the way of life of a particular set of human beings. It has become more relevant to include culture as an important aspect of sustainability because of human behaviour and life style that also governs the use of non-renewable sources. Culture has three aspects, values and aspirations, process and mediums, through which we develop, receive and transmit these values and aspiration and manifestations of these values and aspirations. The values and aspirations channelize the human behavior and lives and finally influence the human response to its environment. The physical, mental, social and spiritual wellbeing are the essential ingredients of quality and satisfaction of life. Human progress depends over the development of creativity and knowledge of individuals, which is eventually associated with culture. The cultural value system shapes the way of life of societies and consequently affects the attitude of people towards sustainability(Ali, 2015; Opoku, 2015).

Rigorous research in the area (Rapoport, 1969, 2000; Schusky & Culbert, 1973; Thaman, 2002) has helped to come up with three major aspects of cultural sustainability. The first is its aesthetic and artistic aspect which covers fine arts, music, popular culture, performing arts, and so on. The second aspect refers to the cultivation of mind and spirit. It includes knowledge, belief, religion and ideologies. The third aspect is the anthropological perspective: the way of life; and it pertains to the social aspect of human behaviour. It is the totality of the socio-cultural convention inherent in a specific society. It includes morals, values, laws, codes, customs, traditions, heritage, life styles and the ways we socialize within specific social structures. These three aspects overlap and influence one another in various ways. The attributes of culture in general bear relevance to the sustainability concept. First, culture is stored in collective subconscious and passed on from one generation to the next. In the process, it cumulates, and improves or evolves over time and space, but it may also become extinct. Another is the diversity of culture: there are many separate cultures and each is different from others. Culture thus gives identity to a place over different time periods (Fisher & Hajer, 1999). An important attribute of culture particularly pertinent to the sustainable development perspective is that "culture is the means by which man adapts to his environment and secures things that he needs for his survival" (Schusky & Culbert, 1973). Therefore, the culture of a place is also inseparable from the natural environment and it certainly has a role to play in the pursuit of environmental sustainability of a place.

Chiu (2003) explained the process of cultural sustainability and presented two interpretations. The first is contribution of shared values, perception and attitudes to sustainable development and cultural sustainability as a pre-condition for sustainable development. Second interpretation is the sustainability of culture itself, culture as a critical component of development and cultural development to take place within the limits of ecological capacity.

The significance of social and cultural sustainability on children's social and emotional health has its far reaching implications. The healthy development of children depends in large part on the social context in which they grow up. Neighborhoods, with high levels of social capital tend to be good places to raise children (Putnam, 2001). Connections through trusting networks and common values enforce positive standards for youth and provide them access to mentors, role models, educational sponsors and job contacts. Culture and

recreation provide the means to build social capital. They can take the form of arts or recreational programs, and community events or celebrations such as festivals, parades and block parties. Community events, in particular, help keep neighbors in touch with each other and reinforce the relationships that make neighborhoods strong. Participation in cultural and recreational programs have been found to promote social connectedness in communities and shape civic behaviour later in life. In one study, for example, respondents who played in organized team sports as children were almost twice as likely as an adult to be a member of a board or committee (Jackson, Roberts, & Harman, 2001).

On the similar grounds, Thaman (2002) also states that for development to be sustainable, it must be rooted in people's cultural values; and indeed culture is the foundation of sustainable development. Colonialism and post-colonial globalization are, however, bringing (welcome or unwelcomed) change to the values and belief systems of indigenous people, and replacing them with those of the Western society. The indigenous ways of seeing the Earth in its totality, and its emphasis on the connectedness and interrelatedness of all things and all people, are giving way to Western perceptions. The Western knowledge, skills and values have dis-empowered the indigenous people due to their own confusion between their indigenous and Western methods. Hence, the future of the indigenous people is not sustainable, and the inability to sustain is caused by the processes of "development" of another culture. Culture, in this case, is not included as a component of development, at least with respect to the subjugated culture.

TOTAL HEALTH AND SOCIAL AND CULTURAL SUSTAINABILITY

World Health Organisation (1948) defined total health as "a complete state of physical, mental and social well-being, and not merely the absence of disease or infirmity". Later, other researchers developed this concept and extended it with other aspects and thus physical, emotional, intellectual, occupational, social and spiritual were included(Greenberg, 1985). Hettler (1979)in this connection, developed an interdependent model, commonly referred to as the Six Dimensions of Wellness. The model takes inspiration fromMaslow (1943) need hierarchy theory and popularly known as Theoretical Model of Spirituality and Holistic Health.
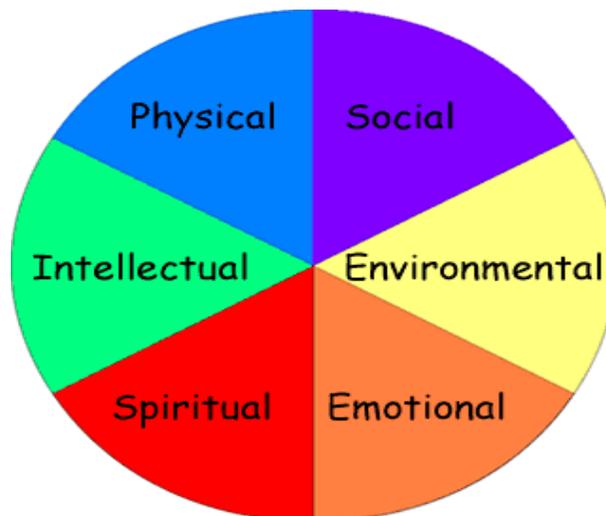

Figure 2: A Theoretical Model of Spirituality and Holistic Health

Hettler's model portrays health representations of different need hierarchies from Maslow's theory. Here, *physical health* represents very basic needs such as food and shelter or physiological needs, *intellectual health* represents second hierarchy i.e. safety and security, *social health* represents the third hierarchy i.e. love and belongingness, *spiritual health* represents the fourth hierarchy that is self-esteem, *emotional health* represents the fifth hierarchy i.e. self-actualization and *intellectual health* represents self-transcendence, a dimension which Maslow added to this theory after further research.

In order to get abreast with various facets of Hettler's model in the context of social and cultural sustainability, an assorted description of each facet has been given below:

Social health:

Social health is how well we interact with the society and our interpersonal relationship with others. It is about how we tackle different situation and how appropriately we behave in different social settings. As discussed earlier, social sustainability is a process that promotes social health and well-being. In some cultures there are several elements in built or social environment which promote social health. In India, courtyards in houses and *chowpal* (community gathering spaces) particularly in rural settings play their social role. Courtyard is a central open to sky space in traditional houses. It works as a gathering space for the family, consequently providing healthy social life and improving kinship relations(Zhang, 2013). Courtyard is meeting space at family level while *chowpal* provides a larger social interacting space at community level. In urban lifestyle, multistoried apartments do not generally provide such social space which may be a threat to social/cultural sustainability and social health. There has however been a positive change in the policies of multistory housing societies to introduce gathering spaces, playgrounds etc.

Spiritual health:

Humans' unflinching greed to exploit the natural resources has led to a grown concern towards the issue of sustainability which has taken a complex form. The greed of consuming more and more energy resources without taking into account the next generation's needs is the real sustainability problem. The improved spiritual health can make the scenario better to change the individual's sensation towards energy resources. Present approach towards materialism and merely improving economy shall not work unless a universal consciousness and a thought beyond barriers, caste, religion and creed is developed among the people. Thus the crisis of energy resource seems primarily a moral crisis which has solution in having collective thinking, oneness and sense of altruism. This brings the quality of thought at par with the quality of life. The religious beliefs in various culture and societies promote to respect the nature as a primary objective of sustainability. Therefore, attaining spiritual health is one of the prime needs which could be fulfilled through various sources such as religious orientation or affiliation to different spiritual thoughts and practices.

Intellectual health:

Creativity, knowledge and ability to learn are the components of intellectual health. Intellectual health on one hand improves our ability to solve our day to day problems while on the other hand it helps in developing our creative skills. Participation in cultural and community activities improves ones intellectual health. Socially and culturally sustainable spaces in a built environment affect the intellectual health of individual. Change is a natural phenomenon and keeps life lively but the knowledge and experiences make those changes positive.

Emotional health:

Emotional health is about how well we express and control our emotions. It is a determinant for other categories of health. Emotions influence our action and attitude towards almost every aspect of life. Social and cultural sustainability has a direct and indirect

relation with emotional health too. Insufficient daylight and bad quality of air develops a mental distress and consequently affects behaviour. Though these characteristics don't create a serious mental illness but they may elevate psychological disorder and depression(Evans, 2003).Social and cultural sustainability can affects human mind in two ways. One, it regulates their behavior and second, it may directly affect psyche of a person. Social interaction and cohesion releases metal distress. High rise multistoried apartments promulgate social isolation and consequently a psychological distress is developed among elderly people. This kind of behavior is developed among children due to limited playing opportunities for them. The insufficient space for social interaction at house level and absence or shortage of lounge, entrance lobby or *deorhi* develop the feeling of loneliness and social isolation. While different floor levels in high rise buildings discourage people for interaction while in traditional houses one level even sometime at a narrow street bring people together. Social interaction spaces may be ranged from a small intimate space at the entrance to large crowded area. Territoriality is also one of the aspects which provides an ability to monitor and control the spaces or feeling of ownership. Absence of territoriality also often results in depression, irritability and under satisfaction.

Physical health:

Sustainability has direct health implications at micro as well as macro levels. While sustainability affects our daily lifestyle such as current sanitations, most of the climate driven catastrophic events are also directly related to sustainability. At a larger scene, unsustainable industrial practices release many environmental residues which are absorbed by our body and affect our body system. This puts a huge burden on our bodies as well as on the public health system. Such problems are also managed through the practices of social and cultural sustainability. For example, courtyard in the house enhances the ventilation in the rooms around and allows fresh air to come in. At night, cool air due to heavy mass settles in to courtyard and warm air moves up providing more oxygen saturated air to the household. A courtyard with garden also improves its microclimate in hot climates and consequently effective for physical health. *Therapeutic horticulture*, has therefore become an important health area in which people are encouraged for backyard gardening. This has multifaceted health and sustainability benefits. One, people get personal supply of organic food and vegetables. Second, they are also encouraged to grow plants of medicinal importance. Third, gardening is a good outlet to an engaging physical exercise. Fourth, gardening provides more oxygen saturation to the household air. Fifth, the practice reduces carbon footprints as there is reduced usage of vehicle fuel, polythene, chemical fertilizers etc.

Mental health:

Mental health is all about how we feel, think and react to different stressing and frightening situations. It affects psychological, emotional and social wellbeing and helps us to handle stresses. Though, not directly related but social support has a very strong relationship with mental health. For instance, when the entrances of houses are adjacent or opposite to each other, or directly connected to a meeting space in housing, the probability of social interaction is higher and consequently improves the mental health of the residents(Evans, 2003)).This is evident by the fact that people living in isolation are less likely to be mentally healthy as compared to those who prefer to live in commune and garner cooperation or social support. The aspects of social and cultural sustainability promote the sense of commune thus helping to prevent mental disorders ultimately.

Housing, habitability and health:

This chapter so far indicates that housing and habitability are quite potential outlets of social and cultural sustainability in our lives. Therefore, researchers studying the impact of housing and habitability on health outcomes provide us an opportunity to assess the impact of these two aspects of sustainability on health. Researchers in this connection have tried to

establish a relationship between habitability and health with the hypothesis that the degree of adequacy of the dwelling's design has an effect on health, directly through comfort, and indirectly through its effects upon family's life(Landázuri, Lee, Terán, & Mercado, 2008). The study finds the effect on gastrointestinal diseases (gastritis, colitis, ulcers), with a moderating role of stress and also on the respiratory diseases. The authors finally conclude that stressful environments reduce defense systems and increase infections. There were other external factors active such as contamination, contagion, and temperatures, prevail in the determination of these diseases; however, there is a distinct effect of housing on this kind of incidents. On the similar lines, while studying blood pressure in terms of residential environment, Landázuri and Mercado (2013)substantiate that if residential environment is not manageable, it seriously affects blood pressure due to emotional factors related to over stimulation, perception of lack of control of the home's environment, and loss of the capability to operate efficiently within it. Their results demonstrated that when there is an adequate architectural design, it brings about relaxation; when there it is absent, the person remains stressed, affecting several health spheres. Likewise, another study by Corral-Verdugo, Barrón, Cuen, and Tapia-Fonllem (2011) shows that stress is affected by the levels of habitability. Similar results were founded in the study of Cantarero and Potter (2012), andLederbogen, Haddad, and Meyer-Lindenberg (2013) study related with mental disorders.

Conclusions

This chapter has enabled us to realize that social and cultural sustainability are important aspects to understand the relationship between health of the inhabitants and their dwelling. This understanding develops direct connection with variables of architectural and environmental design and with social variables that have a direct impact on sustainability. This also allows to assess the quality of housing in terms of social sustainability, which has implications for potential assessment and development programs of both governments and non-governmental organizations. There are a number of environmental and design variables that affect it, and have been able to demonstrate that habitability affects family life (Mercado, Urbina, & Ortega, 1987) and overall total health. Social sustainability depends on the fact that the milieu provides the conditions for a good quality of life and thus a healthy life. Housing habitability is an adequate measure of how residential environments provide for family's life standards and, the family being the main primary group, it provides for the quality of living conditions for the individual's health, contributing in a significant way to social sustainability. Good housing design provides for habitability and through it, quality of family relations and well-being. AsBuys, Barnett, and Miller (2005) mention that the ideal house also allows occupants to move around easily, feel safe from accidents, such as slips and trips on dangerous flooring surfaces, secure in the knowledge that entry points are protected, and that monitoring devices can detect visitors and potential intruders outside. Thus, having less anxiety about household risks and security, it can provide a sense of satisfaction and wellbeing for the residents. As a concluding remark one should not lose sight of the fact that modes of social organization and cultural belief and value systems change in parallel, with both beneficial and harmful outcomes for population's health and wellbeing.

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