

Environment and its Importance in Association to Health and Education among Adolescents School Children

Dr. Gour Sundar Ghosh

Assistant Professor

Department of Education, Ananda Chandra College,
Jalpaiguri, W.B., India.

Abstract: This paper highlights on symbolic relationship between environment, education, and health. The relationship between them is somewhat related but this paper highlights only some possible issues which if taken into consideration can help to achieve a healthy environment that would increase the achievement of goals among the growing children and the transition adolescents. It reveals that the socio-demographic parameters should be taken into consideration where school authorities can develop the process of counselling the students to dissipate the importance of health and the environment.

Keywords: Environment, Education, Health, Adolescents.

Introduction

The place where a population lives depends on the surrounding environment and the availability of essential components for survival. 'Man, and health' is the area of broad terms where the everlasting relationship is always noticed among them, such a similar term is 'Man and environment' which considers the diversified effects of the environment on the health of man, in terms of both positive and negative effects. Man, health and environment together are the main areas of education where different environmental conditions with various causes and consequences give rise to various social developing features among the growing adolescents and school children. School children and the adolescence are the very groups who attend their school for approximately eight hours during a day, thus a peaceful mind and environment shall help them to attend their attention span which would, in turn, help them to develop the intellectual skills. The children and the adolescents are the transforming groups where various underlying factors determine their health as well as their educational grasping capabilities. Adolescents lie between childhood and adulthood which is known as the transient group (Debnath et al. 2017; Bose et al. 2016). According to WHO 1995, adolescents are the very group who belongs to the age of 10-19 years, thus the age where rapid growth occurs in close association to both social as well as environmental factors (Sagbo et al. 2017; Min et al. 2017). The hormonal, as well as the biological changes, frequently occur among adolescents which further demands highly nutritious foods more than the average of an adult. The phase of adolescents is a very important phase of an individual as at this very phase they are influenced by their peers to the fullest. Adolescents health remains a prime concern issue as due to various issues insufficiency of proper nutrition misbalances the balanced diet which gives rise to malnutrition, where deficiencies cause under nutrition whereas an excess of nutrients in the body with high calories and fats causes overweight and obesity, giving rise to various non-communicable diseases such as pre-diabetes, cardiovascular diseases, hypertension and several types of cancers (Regma et al. 2015; Debnath et al. 2017; Bose et al. 2016). Further, the intake of junk foods and canned items contribute to the consequences of malnutrition. India being a developing country is always under the boon of malnutrition where during the last few years a successive decrease in under nutrition has been recorded but on the other hand the emerging increase in overweight and obesity continues (Debnath et al. 2017). Thus, health being a criterion that directly depends on the environment as environmental influences such as social, political, cultural, demographic, and economic factors contributes to the health of a growing individual. Health, as it is influenced by environmental causes similarly education, is directly related to health. Education can only be achieved when the body mind and soul remain in a state where positivity can be solely attained in terms of learning skills. The teaching-learning process constitutes different processes and methods to achieve the goal of development but if the health condition does not meet the appropriateness then different methods are used but the outcome of understanding remains zero. The level of education dealing with the understanding and reflective level directly depends on the intake capacity of the adolescents.

Environmental Factors Affecting the Children and Adolescents

The society serves as an underlying factor that determines the surrounding environment. The components that reside around the adolescents and the children are the important criteria of the environment (Roy et al. 2016; Tigga et al. 2017). The biosphere which includes the atmosphere, hydrosphere, and the lithosphere through makes the whole ecosphere but the living, as well as the non-living things that an individual is surrounded with, serve the crucial factors in shaping the modality of the growing phase of the individual. The factors vary according to the place, society, and the culture to which one belongs. Thus, at school, the school teachers play a role model in shaping the morality of the students. The infrastructures of the school further determine the environmental conditions were classroom with enough open spaces and light helps students to increase the attention span and also makes one more active to perform the school-related task with fewer difficulties. Home is the very first place where morality begins so the family becomes more important where the culture, behaviour determine the environmental effect on the growing children and adolescents. The parents and the siblings are the components that help the transitional group to uncultured their thinking capabilities and built their attitude

accordingly (IOM and NRC, 2011). The students as they remain inside their house for the maximum period, learn from the home environment in tackling a situation that they are unaware of, they further learn the personality building process, as well as they, learned well as well as bad habits from their surroundings who encircle them which mainly consists their relatives, neighbours as well as the society in which they belong.

Social and demographic factors are very much important as it consists the main part of the environment in which the students belong. The socio-demographic factors consist of the type of house, sanitation facilities, clean drinking water, hygiene, use of tube wells/wells, family incomes, education level of the parents, mothers place in the house in terms of decision making, occupation of the parents, birth order, birth type, eating habits, presence or absence of electricity and consumption of types of meals (Bose et al. 2016). These are a few of the associated factors which determine the health status contributing to the environment in relation to socio-demographic factors.

Environment and Health

Health is an important status of life where it relates to the sustainability of life. The health of an individual is important as the environment in which an individual lives determines the status. The school, as well as the home environment, is a very essential criterion for a healthy body, mind, and soul. The growth and development of the body are directly associated with healthy living habits. There lies a close association between the environmental factors which includes the political, economic, social, physiological, psychological, and socio-cultural factors (Wafa and Ghazalli 2015). The environment at school influences child and adolescents related health disorders. The main issues lie in the canteen-based foods which contain the junk foods with aerated drinks and fried stuff, which contribute to the unhealthy diet patterns among the students. The consumption of these unhealthy food habits is the main cause of overweight and obesity. Thus, this lies as the main reason for the increase in over nutrition at an alarming rate in both low and middle-income countries. India being a developing country has shown an increase in the rate of malnutrition which includes over nutrition with successive decreases in the rate of under nutrition. A study by Wafa and Ghazalli 2015 showed the association among the environmental factors in school which directly is associated with the Body Mass Index (BMI) of the school children. Environmental factors that showed close association were the consumption of calories and physical activities were absent and presence of high-calorie diet foods were the rise in overweight among the school children and adolescents (Marin and Brown. 2008; Bose et al. 2016). The influence of school environment is closely associated with behaviours, in tackling the healthy habits to maintain the weight and combating the emergence of obesity.

Malnutrition is the prime area where both excesses, as well as insufficiency, cause both under nutrition and over nutrition. The environmental determinants play a vital role in maintaining the nutritional balance of the body as the socio-economic factors determine the health of the individuals. Environmental factors that determine the nutritional status encircles the family status and condition in terms of accessibility and affordability. The social group or the society in which one belongs culturally determines what customs and norms to be followed in terms of different nutritional values. The tribal children and adolescents, as well as the Particularly Vulnerable Tribal Group (PVTG), are more prone to nutritional diseases that mainly relate to the different types of micronutrient deficiencies. Micronutrient deficiencies are quite an emerging issue which is increasing in high ratio among the growing children and adolescents. The deficiencies of certain micronutrients such as iodine, iron, zinc, vitamin A and folic acid are some of the main essential micronutrients which show a high increase in nutritional deficiencies diseases due to lack of the required amount for the body according to the ages.

School education and health are interconnected to the nutritional status as this can be depicted through the introduction of mid-day meals at school levels. The nutritional requirement is the area of concern where appropriate nutritional values are maintained so that exact nutrition is provided to the exact age groups. Mid-day meal scheme enhances the exact nutritional value which includes carbohydrates, proteins, fats, vitamins, and minerals (Debnath et al. 2017). Thus, the scheme has filled the gap of nutritional deficiencies to some extent which has further increased the enrolment as well as has increased attendance ratio of students in the school.

Environment and Education

Society changes rapidly so the environment which also relates to the change in educational settings (Roy et al. 2016). Education as it serves as a teaching-learning process; the adoption policies should accompany both creativity as well as flexibility. The various situations arises during the educational settings which include self-confidence, creativity, and motivation that further can cause hindrance or increase the ability of the attention span both at home as well as school environment (Besancon et al. 2015). The learning environment plays a vital role for both children and adolescents as learning and grasping the lesson taught is a very important criterion of education, thus the environment should be peaceful for mindful study. Environmental factors such as challenges and stress increase emotional as well as behavioural distress which affects the learning capabilities of the children and adolescents. The environmental distress if follows within the families of the children as well as the adolescents causes difficulties which in turn decrease the productivity of the learning process.

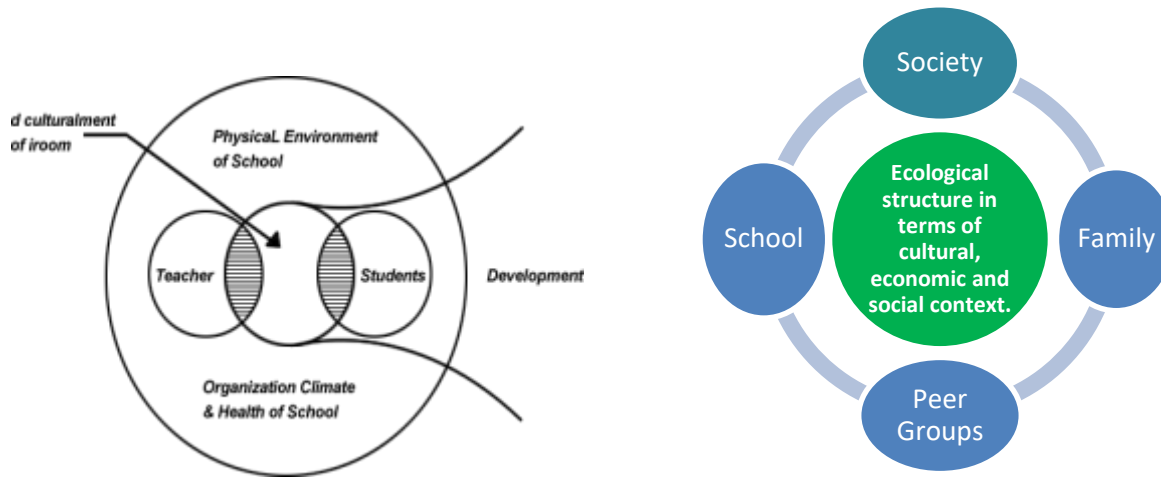


Figure 1. The relation between education and environment

The individual-level characteristics which encompass the personal, social and demographic factors differ variably on the different levels of the environment (Marin and Brown, 2008). Environment and education within the school environment depend on the school infrastructure which includes the position of the classrooms, the teacher-student ratio, the quality of education as well as the quality and quantity of teachers (Eds and Broich 2016) who directly contribute to the development of the school environment. Literacy can be increased with a better environment to continue the educational accessibility with a high level of awareness like changing the methods of the teaching-learning process where lecture methods can be used with demonstration method, where also other methods can be applied simultaneously, that further would change the learning environment making the process better. Hands-on activities i.e., learn by doing encourages the active participation of the students, making the environment more joyful. Role-playing, as well as brainstorming, also deals with the active participation of the students thus making the teaching-learning process successful which further contributes to the high quality of educational resources.

The ongoing relationship between education and environment can be very well understood by the interdisciplinary course "Environmental Education" where the importance and relationship of the environment with the various phase of education are dealt with, and the relationship between man and the environment are studied. Environmental education in turn helps the growing children and the adolescents to actively participate in developing the conditions for better protection which shall further help to attain the sustainable development goal.

Causes and Consequences of the Overlapping Scenario of Health, Education, and Environment

Environmental awareness creates a better place for living thus the educational areas where the importance lies in the appropriate health status of an individual consider his or her surrounding environment as the principal cause which helps to make a healthy living. Various issues related to the ill effects of the environment on an individual as well as the population to which he/she belongs. The living conditions in the mode of types of house, food habits, access to quality and quantity of foods are some of the primary causes which affect the growing age. Population living in remote areas are more prone to diseases that are both infectious as well as non-infectious thus the risks of survival rate decreases when the society in which the children, as well as the adolescents, lives come under the effect of such diseases (Roy et al. 2016). The hazardous environment such as environmental conditions where it remains under a harsh condition for survival, which is mainly seen among the poor household who might be living beside industries where mostly dust, smog formation takes place, unhygienic condition of living where open defecation occurs as well as unclean drinking water is provided. The diminishing of physical activities due to the development of technologies is the most emerging cause among the urban areas where children and adolescents always move around with gadgets to cherish their leisure time thus, physical exercises are rarely done. The sedentary lifestyle pattern with no activities contributes to unhealthy consequences which intentionally creates hindrance towards the healthy development of the body (Debnath et al. 2017; Bose and Sen 2016). Educational context relates itself towards the school environment with the teaching-learning process, teaching materials, hands-on activities. The peer group and their association in the classroom activities directly influence each other's as they help to inculcate values and helps to manage the developmental skills in terms of behavior, learning, stress management as well as cognitive skills (Marin and Brown. 2008). The teacher's role is one of the influencing causes for increasing the attention span. Thus, the method in which the teacher teaches, the environmental settings in which the class is conducted are several reasons which can either increase the learning possibilities or else can decrease the student's attention for both learnings as well as understanding.

Conclusion

Education, Health, and Environment are three interrelated terms where the absence of one does not complete the other, similarly, the appropriateness of these three are very much necessary for healthy development. Environment both positive and negative causes influence the nutritional status of the children as well as the adolescent's group, whereas healthy mind with adequate nutrition makes healthy living thus contributing to attaining the learning capabilities. Depletion in the environmental structures further distracts the educational areas. Health being an important criterion not only hampers the environmental factors but in total it affects the economy as well as the social development of the low and middle-income countries. The educational areas encompassing student's health as well as environmental education shall help in increasing the overall performance in all the related fields. As various interventions have

been put forward by the government of India to tackle malnutrition, these should be fully implemented among all the population equally so that the risk can be optimized and proper development can take place.

Recommendations

The paper here highlights the symbolic relationship between environment, education, and health. The relationship between them is somewhat related but this paper highlights only some possible issues which if taken into consideration can help to achieve a healthy environment that would increase the achievement of goals among the growing children and the transition adolescents. Some of the following recommendations can be taken into considerations. The socio-demographic parameters should be taken into consideration where school authorities can develop the process of counselling the students to dissipate the importance of health and the environment. The importance of environmental education should be given attention where its application must be made in real-life situations. The governmental, as well as the non-profit organizations, shall work together in organizing campaigns to provide all necessary information regarding the nutritional initiatives. Society, as well as the family members, should help to minimize the intake of unhealthy diets whereas the students should be taught about proper sanitation and hygiene care.

REFERENCES

1. Besancon, M., Fenouillet, F., Shankland, R. (2015). Influence of school environment on adolescents' creative potential, motivation and well-being. *Learning Indiv Diff*, 43:178-184.
2. Bose, A, and Sen, J. (2016). Some observations on malnutrition among Indian preschool children. *Hum Biol Rev*, 9 (3):219-237.
3. Bose, A., Sinha, I., Lata Tigga, P., Mondal, N., Sen, J. (2016). Socio-economic and Demographic Determinants of Double Burden of Malnutrition among Rajbanshi School-going Children aged 9-14 Years from North Bengal, India. *Antrocom J. Of Anthropology*, 16(2):141-152.
4. Debnath, S., Mondal, N., Sen, J. (2017). Prevalence of thinness among rural children of West Bengal, India. *Hum Biol Rev*, 7(4):362-385.
5. Debnath, S., Mondal, N., Sen, J. (2017). Double burden of malnutrition among adolescents in India: A Review". *Hum Biol Rev*, 8(2):155-178.
6. Edsand, H.E., and Broich, T. (2016). The Impact of Environmental Education on Environmental and Renewable Energy Technology Awareness: Empirical Evidence from Colombia. *Int J Sci Math Educ*, 18:611-634.
7. IOM (Institute of Medicine) and NRC (National Research Council). (2011). *The Science of Adolescent Risk-Taking: Workshop Report*. Committee on the Science of Adolescence. Washington, DC: The National Academies Press.
8. Marin, P., and Brown, B. (2008) *The School Environment and Adolescent Well- Being: Beyond Academics*. Child Trends Research Brief. Washington, D.C.: Child Trends.
9. Min, J., Yan, A. F., Wang, V. H. C., Yang, Y. (2017). Obesity, body image, and its impact on children's eating and exercise behaviors in China: a nationwide longitudinal study. *Preventive Medicine*, 106:101-106.
10. Rengma, M. S., Sen, J., Mondal, N. (2015). Socio-economic, demographic and lifestyle determinants of overweight and obesity among adults of North-east India. *Ethiop J Health Sci*, 25(3):199-208.
11. Roy, S., Barman, S., Mondal, N., Sen, J. (2016). Prevalence of stunting and thinness among adolescent girls belonging to the Rajbanshi Population of West Bengal, India. *J Nepal Paedtric Soc*, 36(2): 147-155.
12. Sagbo, H., Ekouevi, D. K., Ranjandriarison, D. T., Niangoran, S, Bakai, T. A., Afanvi, A., Dieudonné, S., Kassankogno, Y., Vanhems, P., Khanafer, N. (2017) Prevalence and factors associated with overweight and obesity among children from primary schools in urban areas of Lomé, Togo. *Pub Health Nutr*, 21(6):1048 -56.
13. Tigga, P. L., Debnath, S., Das, M., Mondal, N., Sen, J. (2017). Prevalence of undernutrition and overweight or obesity among the Bengali Muslim population of West Bengal, India". *Anthro Open J*, 3(1):1-10.
14. Wafa, S. W., and Ghazalli, R. (2015) Association between the school environment and children's body mass index in Terengganu: A cross-sectional study. *PLoS ONE*, 15(4): e0232000. <https://doi.org/10.1371/journal.pone.0232000>.
15. World Health Organization. (1995), *Physical Status: The Use and Interpretation of Anthropometry*. Technical Reports Series No. 854. World Health Organization: Geneva.