

Dietary and Eating Practices and their association with overweight and obesity in Urban and Rural areas

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Abstract:

The Nutritional status directly refers and influences the children who are in the growing stage by means of mental development. In the slums of urban areas, the children who are underprivileged lag behind the basic necessities, amount of food and the nutrition that is likely to further the ill development. This basic study was performed to investigate the consumption of dietary food among the slums in urban areas dwelling children and the association are also studied with the other social various factors. The diets of urban slum areas were insufficient for micronutrients and macronutrients, which is considered as a danger for the implications of nutrition and health. The need to produce the supply of healthy food and habits is focused. The researchers studied the anthropometric status and the growth of adolescents who lives in the challenging conditions. Various researchers have used the method of comparison in which they have compared the adolescent growth using WHO with the Indian reference population.

Keywords: dietary practices, urban slum dwelling children, adolescent growth

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Introduction

The elimination of hunger and the nutritional deficiency is considered as one of the major challenge that the humanity in today's scenario is facing. With the increase in migration of humans in large scale from their native area to cities for getting a better livelihood, as the expansion is also occurring in cities and towns but maximum volume of individuals compromising the ability of the city to see their basic requirements. Then at last the major part of this population that migrates to cities ends up living in slum areas which are having inhuman conditions. According to the surveys, by 2020 half of the population resides in urban areas and about one third portion of this urban population will be of slum occupants. Special kind of health problems are posed by an urban slum because of the unhygienic premises, absence of organized infrastructure of health and poverty overpopulation. The developing countries are surrounded by Urbanization that results in changing ratios from urban to rural population. At the first time in 1988, the urban poor people percentage surpasses the rural poor people percentage. The urban poor population is at the transitive stage industrialization and development. The slums present in the urban health presents concern for the critical public health and various challenges which are prime among them. The Urban slum areas also faces some major problems that there is absence of predicted Primary Health Center which are having its planned network and health services are administered by multiple health authorities (Hassan and Shukla, 2013).

Urbanization – In many high, low and middle countries, these countries are affected by the process of globalization. By using the migration of individuals to cities and the investment to the infrastructure, the peri-urban and the rural population are slowly integrated to the urban regions. For the transitions in food habits, the main drive force is change in the lifestyle which are somehow closely linked with the Urbanization. The individuals residing in urban areas are more money dependent and the activities of income earning , higher education are prioritize in order to meet the expense of food , transport, rent and the products of consumer. The livelihood is determined by wage-employment in urban areas. The socio economic status such as employment level, income and education, the life of the urban areas becomes less demanding physically in comparison to the rural life.

The Urban regions are basically affected by the process of Globalization and Urbanization, and their diet mainly comprises of processed foods that are easily accessible at each and every Grocery shops, vendors. Most of the food which are readymade and processed often contains high percentage of fat, sugars, low vitamin, and low mineral and low fibers. Most of the advantages of the food products has been destroyed while processing and then provides foods which are having attractive costs, taste and texture but the nutritional value is poor.

In Urban areas, there are availability of health care and sanitary services, motorized transports, opportunities of education and supplying variety of foods. The lifestyle in the urban areas is totally different from the rural. The diet of the urban region population is influenced by their socio-economic status: the proportion and the share of diet energy from the foods of animal, vegetable oils, fruits and sugar rises with the level of per capita income (Hurtig 2009).

The incidence of obesity factors is increasing in both countries which are having high-income and low income population and among adolescents, the prevalence of obese individuals or overweight individuals have shown a drastic increase for over 20 years. The patterns of lifestyle factors such as diet, sedentary⁷ behavior and physical activity are also changing time to time. At the time of adolescence, the overweight or obese individuals are considered as responsible to increase risk for developing Non-Communicable Diseases (NCDs) in adulthood time. According to the various researchers, the development of dietary habits and practices in childhood are basically sustained into adulthood and this factor disposes individuals to the risk of obesity and increased metabolic disease. The association present in between a high BMI i.e., Body Mass Index and a self-esteem that is low is inter- related to each other. Researches showed that the obese rate in girls is inversely correlated to their physical self-esteem level. The similarities and the differences in the practices of diet and their linkage with the risk of overweight and obesity in urban and rural areas are not known very much. The objective of this paper is to study the various dietary practices in urban and rural areas in a particular environment (Sedibe, 2018).

Adolescence phase is considered as the essential part of the growth and the status of nutrition in adolescent girls can be directly related to the community's

nutritional status. The requirement of the nutrition increases at the time of adolescent and adolescents who consumes less than three meals in a day is considered to have insufficient nutrient intake especially iron and specifically susceptible to deficiency of iron i.e., anemia due to the rise in the demand of iron for myoglobin, hemoglobin and to make the iron loss because of poor dietary practices and menstruation. In Adolescent girls, Anemia contributes to fetal mortality and morbidity for their future goals and there are some other factors associated with anemia which are meat low intake i.e., fortified food with the presence of iron, dieting frequency, eating styles of vegetarians, skipping of meals, heavy menstrual period, major loss ion weight, rapid growth and intensive physical training. In adolescent population, the major problems related to nutrient worldwide involves the deficiency of calcium, iron, iodine, vitamin A, obesity and other nutrient deficiencies such as zinc. In Adolescent girls, the incidence of malnutrition is major in India among the rural population. In case of adolescents, the short stature of results in chronic condition that is under nutrition which is linked with the lean body mass that is reduced and having deficiencies in muscular strength and the capacity of working affects the health includes the CVDs Cardiovascular Diseases, gall bladder disease, diabetes and some sex hormones related to the cancers. As Obesity is the epidemic globally which has its major part in children and adolescents. The children who are overweight have twice the chances to become obese in adulthood than any normal children. In adulthood several risk factors for the obesity diseases forms association with the overweight and obesity. The weight status in adolescents is a result of the economic and urban development worldwide along with a decreasing trend is seen in the prevalence of under nutrition.

According to World Health Organization (WHO) in 1995, the anthropometrics are the sensitive indicators that indicates health, growth and infant or children development and specifically the anthropometry is used at the time of adolescence in relation to the nutritional index. The final intention of WHO in the assessment of nutritional status is to improve the health of human (Borkar 2017).

Recently, organizations related to health introduced various interventions that helps in promoting the eating habits of young generation, which may be characteristic to inadequate understanding of dietary

practices and important intrusions which are implemented as according to the children's age. As defined by Shephard et al, the impact of dietary practices vary according to the age and not all intrusions are appropriate for all age groups (Naeeni, 2014).

As per Chopra et al, the intake of micronutrients by young women of India is considerably lower than the Indian Council of Medical Research (ICMR) that recommends allowances for per day basis. Before pregnancy, the diets of poor quality are considered to be an important parameter that contributes to the retardation of intra-uterine growth. The diets contains the larger quantity of micronutrient rich foods which are green vegetables, during pregnancy fruit and milk products associated with favorable outcomes related to Infant that includes the birth weight (Chopra et al 2012).

The distribution of food patterns within the family contributes to malnutrition in certain fixed populations. The prevalence of malnutrition that is widespread among children who lives in the developing countries, the feeding programs which have supplemented become widely endorsed strategy that helps in the promotion of health and in disease prevention. In developing countries, the evaluation that concludes about the food supplementation programs are generally not available. Most of these programs without requirements that must met that derives the strong conclusion from program examination perception. During the recent decades, the urbanization has occurred with a rapid speed worldwide and about 80% of the large cities in the world are now located in the countries which are in the state of developing where 60% of inhabitants are slum dwellers. In the case of Geographical migration that occurs from rural to urban areas will expose these migrants to new environment. Some of the slum dwellers in the urban areas are exposed to the poor conditions of environment such as overpopulation, poor quality of drinking water and absence of waste removal. The slums have ignorance and their life have difficult conditions that likely to be results in food habits which are not proper, use of low health care and awareness about the hygiene, absence of knowledge from sickness and appropriate measures for cure. Due to the lack of health centers, medication, vaccination and personnel of health care, the situation gets worse. The children who lives under above defined conditions have major risk factors for

problems related to health and nutrition (Turin 2007). The anthropometric data helps in evaluating the nutritional status and the major health risk factors among adolescents. The measurements are recommended for the assessment of the nutritional status in school children are height for age and BMI for age. Thinness is classified under low BMI for age and overweight and obesity for high BMI. Stunting is a low height for age which is a prime demonstration of malnutrition in cases of early childhood and considered as an indicator of chronic undernutrition whereas thinness denotes to the current malnutrition. The morbidity risk increases with stunting that impairs the cognitive development and the work productivity is reduced in future. Both the factors childhood obesity and thinness are associated to the underachievement in school and having lower self-esteem (Khopkar, Virtanen and Kulathinal 2014).

Various researchers have used the cross-sectional epidemiological study. The volunteers or the participants were selected and after the selection of the particular field of study, carry out the survey that helps in gathering the information of the backgrounds on households, number of members in the family and the number of boys and girls. At the same time, written consent was also determined. All the data on the household attributes, socioeconomic indicators and habits of eating were collected using questionnaires that is structured by using house to house survey. The adolescents individual or children who have given consent were interviewed and the data is collected on the basis of their demographic and life style parameters, physical activity, and dietary practice. Then the questionnaires were administered by teams that consists of trained surveyors. Then some members of the team collect the data on height, weight and Blood Pressure.

Anthropometric Measurements: Collect the data on the basis of height and weight. The measurement of height was done using a measurement tape that is non elastic to the nearest integer and recording of weight is done by scale to the nearest integer. Then BMI was calculated which is defined as the ratio of weight (in kilogram) to the square of the height (in meters). In case of Stunting and Thinness height for age and BMI for age is calculated through which Z-scores were determined using the WHO criteria.

Independent variables: These variables were examined in household per capita income, education of mother, size of household and the consumption of

protein diet within the population of slum that were linked with the variation in the status of anthropometric measurements. At last, the data analyzed by using all the basic attributes of households and adolescents. Then overall mean, standard deviation was determined for height, weight and Body Mass Index then the observed percentiles of height, weight and BMI by WHO is compared with the Indian standard population (Khopkar, Virtanen and Kulathinal, 2014).

Literature Review

Skreblin and Sujoldzic 2003 have worked on the process of Acculturation and their effects on the dietary practices, nutritional behavior and the image of body in case of adolescents. A major differences are observed in anthropometrical variables of Body Mass Index (BMI) as according to the status of immigrants. In host, the intake of regional and traditional diet is much stronger and the generation of adolescents in comparison with the generation of first immigrant. The dietary style or the practices are restricted among the immigrants and this particular group scored low on the body image scale. Higher level of vulnerability is shown by the psychological functioning immigrants. The above research concludes that the environmental attributes have a vital impact on the dietary practices in adolescent populations.

Johansen 2008 worked on the changing food behaviors, perceptions and motivation for healthy eating. According to this research, major part of women in both the regions recognized vegetables as the important part of a healthy diet whereas sugar was mentioned that increases the risk factor for DM2. In the group of intervention, the consumption of the soft drinks and fruit drinks in which sugar is added and the consumption of entire fat milk and yoghurt are reduced from the baseline to the post test. This study has shown the findings that the in a women's group who usually are not much educated, having high degree of illiteracy and poor skills of language.

Cohen and Garrett, 2009 studied the crisis in the food prices and the security in the urban food. The measures used in this study are UN CFA. The monitoring systems and the information should be good enough through which governments and civil society know like what, where and when to apply the measures of deploy response. Furthermore research work should also be done for the formulation of the

properly planned policies that ensures the sustainability in the securities of urban food and helps in building the resilience against any further shocks. Knowledge should be more needed about the employment's nature and the labor markets present in the urban populations of developing countries. More studies are also focused where the higher food prices in the urban areas likely to volunteer in violence and protests. Such type of studies would help the makers of the policies to understand how to design programs and policies that helps in reducing the political instability that results from the prices.

Vinod et al 2011 proposed the study to determine the Nutritional status and the pattern of diet of under-five age children in urban slum areas. A cross sectional study was performed where a house to house survey was done. The participants were selected by systematic random sampling method. This research concludes that the rehabilitation centers for nutritional requirements should be started in the society and associated with the centers of health to treat less affected children who are undernourished. But in this particular study the association between the per capita monthly income and status of nutrition was not found important. The researcher also recommended that the community's family should be cheered for the activities which are home based for the alternative income source that helps in enhancing the purchasing power.

Ottesen and Wandel 2012 researched about the changes in the dietary practices after the migration of individuals to cities and the health consequences in South Asians. PubMed is used for the systematic searches that helps in the identification. According to the researchers, most of the studies have done on change in dietary practices and its health consequences. As the change in dietary habits is compound and it depends on the several parameters which are country's origin, residential of urban or rural area, socio economic and cultural factors. The major trend in the dietary after the process of migration is an extensive increase in energy and the consumption of fat, reduction in the quantity of carbohydrates that results in a low fiber consumption. The data generated by this research indicates in increase in the meat and dairy product consumption. All the findings from this data recommends that they all have contributed to the risk factors of cardiovascular diseases and obesity.

El Mounty 2016 suggested a research topic on exploring factors that affects the dietary practices of Mansoura University Students. A cross sectional was used and the results of this study reveals that the rate of dietary habits among the students in order to prepare and plan meal, habits of eating, choice of food habits and the practice of food safety. The study at last concludes that students have practiced various dietary habits which are not healthy within the university surroundings and there are many other kinds of parameters that characterize their dietary habits, which can be individually or environmentally related to each other. The researcher suggested to develop a new kind of strategy that creates an environment of healthier food that encourages eating habits.

Musaiger, Nabag and Mannai 2016 worked on the obesity, dietary practices and the life style behaviors among adolescents in Sudan. This paper concludes that the practices of poor diet because of the insufficient intake of the nutrients is considered as the major public health problems. The current study shows the westernized habits of diet such as the low consumption of fruits, dairy products and legumes, the intake of fat food and drinks which are sweetened among the adolescents of Sudan. The life style behaviors, low physical activity and the short span of sleeping is mainly prevalent among these adolescents. A program should be established to reduce the incidence of all the risk factors that are given priority.

Conclusion

In early and mid-adolescence, the findings identified the similarities and the differences in the dietary and eating practices across the gender from the sites of rural and urban areas. As according to the various researchers that in case of the slum women, the prevalence of thinness and anemia is high which shows that the dietary practices is affecting the status of anemia, vegetarians are more prone to anemia and the dental problems (caries) which is more prevalent across the women in slums. Malnutrition and nutritional anemia are considered as the major problems related to health and an proper nutrient intervention package to improve the situation of intervention of the slum communities.



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