ABSTRACT

A number of tribal groups are capitalizing on economic opportunities that are available to them, with a desire to acquire a better life style with modern life comforts. And thus many of the tribal populations of India are becoming susceptible to various metabolic risk factors that may be related to their dietary profile and physical activity. Therefore, it is worth investigating the changing perspectives of health among the tribes of India in the context of increasing life style disease in India. Precisely for this reason present paper highlights not only the prevalence of under nutrition and malnutrition among the Indian tribes, but, also their contribution of association of age, sex and Body Mass Index (BMI) with the different metabolic health risk factors using data from six tribes in Birbhum district of West Bengal and Mayurohan district of Odisha, India. Results of the present study indicate that young tribal males are showing increasing tendency towards growing body weight, against the traditional wisdom, which in turn has been found to be strongly associated with metabolic risk factors.

Introduction

The main concentration of tribal population is in central India and in north-eastern states. However tribes are present in all states and Union Territories except Haryana, Punjab, Delhi, Pondicherry and Chandigarh. The states of Madhya Pradesh, Maharashtra, Gujrat, Rajasthan, Orissa, Bihar, West Bengal and Andhra Pradesh account for around 83% of the total tribal population of India. The tribal population of India inhabits widely varying ecological and geo-climatic conditions (hilly, forest, desert regions etc) in different concentration and with different socio-economic background. Tribal groups are homogenous, culturally firm, have developed strong magico-religious health care system and they wish to survive and live in their own style. The economic practices in everyday life of tribal society is highly diverse which further varies from one tribal group to other. Many tribal populations of eastern, southern and central India (Chola Naikan, Bangiar, Birhor, Kadar, Chenchu, Hill Khadia and Makadia) and the Andaman islanders are efficient food gatherers and hunters. There are many tribal populations of north eastern, east and central region (Khasi, Naga, Kutia Kondha, Konwa, Saora, Hill Muria, etc.) that still practice shifting cultivation. There are settled agriculturists (Bhil, Mina, Santal, Munda, Oraon etc.) at par with other peasant communities in many parts of Madhya Pradesh, Gujrat, Rajasthan, Maharashatra, Bihar, West Bengal and Orissa. And there are urban industrial workers as well. It is generally agreed upon that the health status of tribal population of India is poor. The widespread poverty, illiteracy, malnutrition, problems of potable water, sanitary and living conditions, poor maternal and child health services and practices, ineffective coverage of national health and nutritional services, communication facilities, prevalence of genetico-environmental disorders, have been traced out in several studies as possible contributing factors for the dismal health conditions prevailing among the tribal population of India. Unfortunately not many tribes are studied comprehensively for the purpose of ageing, and also some studies have reported associated social, nutritional and economic factors as possible contributing factors for the dismal health status of the tribal population.

Nutrition Analysis of Tribals

Malnutrition lowers the ability to resist infection, leading to chronic illness and in the post weaning period leads to permanent brain impairment. Good nutrition is required throughout life and is particularly vital for women to continue to remain in good health and to do everyday household work. Nutritional anaemia is a major problem for women in India and more so in the rural and tribal belt. Maternal malnutrition is predominantly a serious health problem among the tribal women especially for those who have closely spaced multiple pregnancies. Such health condition also reflects the complex socio-economic factors that have serious bearing on their health. The nutritional status of pregnant women is also crucial for the infants’ chances of survival and subsequent growth and development. It directly influences the reproductive performance of the women and the birth weight of their children. Nutrition also affects lactation and breast feeding which are key elements in the health of infants and young children and a contributory factor in birth spacing. Pulses, milk and milk products and other animal products which were the main sources of protein are lacking in the diets of tribal women of Trivandrum district, Kerala. Deficits of calcium in the diets of pregnant and lactating tribal women of western and central India were reported by a number of studies. The pattern of health and nutritional status of the tribal population of India is highly varied. Nutritional problems of various tribal communities located at various stages of development are full of obstructions and very little scientific information on their dietary habits and nutritional status are available due to lack of systematic and comprehensive research investigations. As far as the child care is concerned, both rural and tribal illiterate mothers are observed to breast feed their babies. But most of them adopt harmful practices of discarding of colostrum, delaying the initiation of breast feeding and delaying the introduction of supplementary foods. Vaccination and immunization of infants and children have been inadequate among the tribal groups. Since the personal hygiene is very poor, the under 5 children are the worst sufferers and most vulnerable to infections. There are however, few studies available on Indian population that take into consideration dietary fatty acid profiles and their associated risk with cardiovascular diseases, obesity and metabolic disorders. Further, a number of studies have also been undertaken on Indian populations and Asian Indians in relation to obesity, BMI, pattern of subcutaneous fat, physical activity and ageing, and also some studies have reported associated social, cultural and behavioral variables with obesity measures. With respect to the tribal females, it was found that the prevalence of the selected metabolic variables was higher than in the males, in both the age groups. Schall, in her meta-analysis on traditional and tribal societies has shown that older women are at double risk of...
Hypertension than older men. However, the selected risk measures among the females in the present study showed significant association with low BMI, which explains the high under nutrition stress among the females in both the younger as well as the older age group. Dettwyler in his study among rural populations of Mali showed that under nutrition among adult populations is due to under nutrition stress during childhood, a low protein diet and hard physical labour.

Conclusion

Therefore, this changing pattern of health among Indian tribes needs to be addressed immediately before the situation becomes too alarming. The major focus of various studies related to health issues among tribal populations of India has been on malnutrition or under nutrition. Like all other developing countries, large scale urbanization/modernization has been taking place in India with effective changes in the lifestyles leading to appreciable increase in the prevalence of chronic metabolic conditions like cardiovascular diseases (CVD), diabetes, metabolic syndromes. The benefits of development in education, health and income generation have resulted in a significant amount of mainstreaming of Indian tribes. Tribal females are in more danger of developing metabolic risks at lower BMI, irrespective of age, clearly indicating an increasing tendency towards a double burden of disease among the Indian tribal population. A number of tribal groups are capitalizing on opportunities that are available to them, with a desire to acquiring a better life style with modern life comforts. In this process of acculturation their food habits are likely to undergo substantial changes and so does the level of their physical activity. Thus, in the present circumstances many of the tribal populations are becoming susceptible to various metabolic risk factors that may be related to their dietary profile and physical activity, and therefore, it is worth investigating the prevalence of obesity and metabolic measure and their association with dietary fatty acids among the adult males and females of the tribal groups of different geographic regions. The investigation of this nature, therefore, will help to understand the magnitude and the intensity of problems related with obesity and metabolic measures and their relationship with dietary profile in culturally heterogeneous groups of different geographical regions of India.

References