



Original Article

Food Habit and its impact on Nutritional status of preschool children of Chhat. Sambhaji Nagar district

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Abstract

Children are high risk population. Food habit and food safety are the most important factors that determine the health of a child is a full and regular supply with all the necessary macro- and micronutrients, vitamins and minerals (Michadsen 2003, Gidding & et al 2006, Normy zywnienia 2012, Normy zywnie2012) Two hundred and fifty preschool children in the age of 3 to 6 years from anganwadies of chht. sambhaji nagar district were selected. Nutritional status of preschool children were assessed by anthropometrical, dietary & Clinical measurement. To study the food habit & safety with the help dietary survey & personal hygiene and safety measures maintained by mothers at home. The hygiene level, sanitary condition and microbial quality of food & water, examination of mothers were assessed with the help of questioner cum interview method. Results of the study show that the nutritional and health status of preschool children was very poor. Food habits acquired during childhood persist into adulthood and form the basis of either good health or ill health, as the case may be, in the coming years. Hence there is a need to educate parents regarding correct dietary habits for their children to ensure that they can live healthy and productive lives as adults. Many of the mothers were not aware of general knowledge and hygiene practices to follow during food preparation. An intervention programme of education and importing training at work places have shown a positive impact on the outcome of food practices and safe hygienic practices of food handlers/mothers at work place and it may improve the health status of preschoolers.

Keywords: Food Habit, Nutritional Status, Food Safety, Preschoolers

Introduction

Children are the valuable assest of a nation. Food is necessary for the proper growth and development of children. Nutrition is one of the most important factors that determine the health of a child is a full and regular supply with all the necessary macro- and micronutrients, vitamins and minerals (Michadsen 2003,Gidding & et al 2006, Normy zywnienia 2012, Normy zywnienia 2012) The younger the child, the more important is adequate, balanced food for child's further development and health, especially for the first 3 years of life. At this phase of human ontogeny which is characterized by rapid growth and development, adequate nutrition needs and balanced intake of nutrients and energy is a key factor in the full realization of genetic potential, ensuring optimal mental development, formation of imune competenyand long-term health. Respectively, inadequateor poor nutrition during the first years of life may lead to significant negative consequences for health, including delayed psychomotor and mental development, behavioral problems, lack of social skills, disorders of attentionlearning problem, etc. (Hasschke & et al (2013) Adequate provision of basic nutritional needs of a child who is growing and rapidly developing is an important medical and social task for Pediatrics and Family Medicine. Children are the valuable asset of a nation. Food is necessary for the proper growth and development of children. Nutrition is one of the most important factors that determine the health of a child is a full and regular supply with all the necessary macro- and micronutrients, vitamins and minerals Michadsen 2003, Gidding & et al 2006, Normy zywnienia 2012, Normy zywnienia 2012) The younger the child, the more important is adequate, balanced food for child's further development and health, especially for the first 3 years of life. At this phase of human anatomy which is characterized by rapid growth and development, adequate nutrition needs and balanced intake of nutrients and energy is a key factors in the full realization of genetic potential, ensuring optimal mental development, formation of immunity and long-term health, respectively.

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Inadequate or poor nutrition during the first years of life may lead to significant negative consequences for health, including delayed psychomotor and mental development, behavioral problems, lack of social skills, disorders of attention learning problems, *etc.* (Hasschke & et al (2013) Adequate provision of basic nutritional needs of a child who is growing and rapidly developing is an important medical and social task for Pediatrics and Family Medicine.

It has been proven today that features of early life nutrition not only play an important role in the formation of optimal physical health and intellectual development of a child, but may even determine a substantially higher risk of chronic disease in adulthood Agostoni & et al 2011, Hoyman & et al 2007, American dietetic asso 2008, Koletzko &et al2009) About 35% of diseases in children aged less than 5 years are associated with certain nutritional disorders. WHO estimated that globally in 2012, 162 million children under five were stunted and 51 million had a low weight-for-height ratio, mainly as a consequence of improper feeding or recurrent infections while 44 million were overweight or obese. Few children receive nutritionally adequate and safe complementary foods. In many countries only a third of breastfed infants aged of 6–23 months receive complimentary feeding which is appropriate to their age criteria of dietary diversity and feeding frequency WHO (2014). Consumption of fruits and vegetables by all children aged 6 months – 4 years remained insufficient also. Specifically, 30% of them did not eat any vegetables and 25% – any fruits on the survey day (Fox & Reidy (2010). At the same time, fried potato was the favourite vegetable dish in children older than 2 years. The diet of many children aged 1–3 years did not contain enough vitamin E and dietary fibre, but too much sodium, and some of them did not consume enough iron and zinc Dwyer & Siega-Riz (2010)]. The ratio between separate nutrients was broken, in particular, the diet proportion of fat did not provide 30–40% of energy needs, primarily due to excess protein intake. (Butte & Dwyer & Siega-Riz (2010) . In children older 12 months the diet diversity was becoming narrower with a negative tendency to increase the proportion of nutritionally inadequate snacks, sweets, sugary and carbonated beverages.

Food habit & safety is an also important public health issue to prevent or control food-borne illnesses. In response to the increasing number of food-borne illnesses, governments all over the world are intensifying their efforts to improve food safety [Subba et al 2007]. According to the WHO [Henson &Reardon 2005], contaminated food contributes to 1.5 billion cases of diarrhoea in children each year, resulting in over three million premature deaths. However, these deaths and illnesses are shared by both developed and developing nations. Approximately 10 to 20% of food-borne diseases outbreaks are because of contamination by food handlers /parents[Munday et al 2010The role of food handlers in homes, usually mothers, in ensuring food safety at the household level is well accepted but an understanding of the status of their food handling knowledge and practices is needed [Chekolet et al 2019]. It is very important to understand the interaction of the prevailing food safety, knowledge, and practices of food handlers in reducing food born outbreak (Abdulla & et al 2016) Most of the studies showed that food handlers/mothers were directly involved some stage of food processing (Ragini 2004) and food contamination can reduced drastically by wash their hands.Taking into account the importance of balanced nutrition in early childhood, its impact on the subsequent formation of the body tissues and maintaining health. The rural and urban population of chht. sambhaji nagar was not aware about the food safety & good food habit, therefore a study was planned to asses food safety measures maintained by food makers/mothers at personal level at home of chht. sambhaji nagar district.

Objective:

1. To study the impact of nutrition education and training programmes of food habits & food safety on mothers & their childrens of chht.sambhaji nagar .
2. To know the food habits of preschool children of selected anganwadies of chht.sambhaji nagar .
3. To study the health problems of anganwadi prschool Children of chht.sambhaji nagar District.
4. To observe the food safety rules at work place by mothers of preschoolers of chht.sambhaji nagar .

Methodology:

For assessment the food habits of preschool children of chht.sambhaji nagar district a questionnaire and check list were used to elicit the socioeconomic data. A data was collected on knowledge, attitude and practices in two phases, Before and after imparting education and training on food safety and security to parents/mothers of the preschoolers.

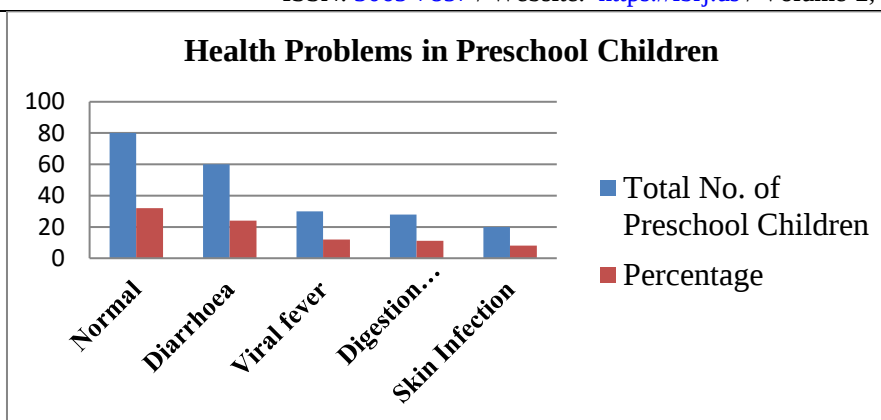
To assess the food habits of 250 preschool children at chht.sambhaji nagar district. A diet survey was carried out, with the help of 24 hrs. Recall method. For the above survey fifteen anganwadies from Beed were selected randomly. A clinical health of preschoolers were assessed with the help of Physician.

Result and Discussion:

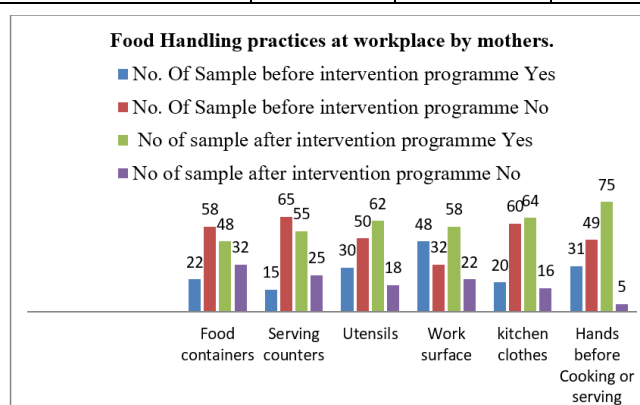
The Dietary pattern of preschool children of different anganwadies of chht.sambhaji nagar reveals that the intake of cereals and pulses were quite satisfactory, but their diet were lacking green and other vegetables, i.e. 63% and 53.42% deficient respectively. Therefore the mean nutrient in take were lacking in protein, calcium nutrient. A majority of the rural preschool children had clinical signs, which may attributed to protein energy malnutrition (PCM), i.e. luster less skin, and B complex deficiencies. Moreover majority of children facing diarrhoea and digestion problem. i.e. 24% and 12% respectively.

Table No 1 Health problems in preschool children:

Health Problems	Total No. of Preschool children	Percentage.
Normal	80	32
Diarrhoea	60	24
Viral fever	30	12
Digestion problem	30	12
Gastric problem	28	11.2
Skin infection	22	8.8

**Table No 2 Food Handling practices at workplace by Mothers.**

Sr. No.	Activity (Washing)	No. of Samples before intervention programmes		No of samples after intervention programmes	
		Yes	NO.	Yes	No
1	Food containers	22(11%)	58(29%)	48(24%)	32(16%)
2	Serving counters	15(7.5%)	65(37.5%)	55(37.5%)	25(17.5%)
3	Utensils	30 (15%)	50 (55%)	62 (31%)	18 (9%)
4	Work surface	48(24%)	32(16%)	58(29%)	22(11.0%)
5	kitchen clothes	20(10%)	60(30%)	64(32%)	16(8.0%)
6	Hands before Cooking or serving	31(15.5%)	49(24.5%)	75(37.5%)	5(2.5%)



The above study result shows that there was a positive impact of education and training on aspect of personal hygiene and safe food handling practices of the parents. The result showed that many of parents were not aware of general knowledge and hygiene practices to follow during food preparation. An intervention programme of education and imparting training on parents has shown a positive impact on the outcome of the practices of food safety & security.

Conclusion:

It was concluded that Nutrition education & intervention programmes has a positive impact on food habit & food safety practices of food handlers at work place. Before intervention programme most of the children were facing many health problems but after training to food handlers it may improve the health status of preschool children.

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Reference

1. K.F. Michaelsen, L. Weaver, F. Branca, A. Robertson, Feeding and nutrition of infants and young children. Guidelines for the WHO European Region, with emphasis on the former Soviet countries. WHO regional publications. European series. (2003), p. 87 View Record in Scopus Google Scholar
2. S.S. Gidding, B.A. Dennison, L.L. Birch, S.R. Daniels, M.W. Gilman, A.H. Lichtenstein, et al. Dietary recommendations for children and adolescents: a guide for practitioners Pediatrics, 117 (2006), pp. 544-559 View Record in Scopus Google Scholar
3. Normy żywienia zdrowych dzieci w 1-3. roku życia – stanowisko Polskiej Grupy Ekspertów. Część I – Zapotrzebowanie na energię i składniki odżywcze Standardy medyczne, 9 (2012), pp. 313-316 Google Scholar
4. Normy żywienia zdrowych dzieci w 1-3. roku życia – stanowisko Polskiej Grupy Ekspertów. Część II – Omówienie poszczególnych składników odżywczych Standardy medyczne, 9 (2012), pp. 319-324 Google Scholar
5. F. Haschke, N. Haiden, P. Detzel, B. Yarnoff, B. Allaire, E. Haschke-Becher Feeding patterns during the first 2 years and health outcome Ann Nutr Metab, 62 (Suppl. 3) (2013), pp. 16-Cross Ref View Record in Scopus Google Scholar

6. C. Agostoni, C. Braegger, T. Decsi, S. Kolacek, B. Koletzko, W. Mihatsch, et al. Role of dietary factors and food habits in the development of childhood obesity: a commentary by the ESPGHAN Committee on Nutrition *J Pediatr Gastroenterol Nutr*, 52 (2011), pp. 662-669 View Record in Scopus Google Scholar
7. L.L. Hayman, J.C. Meininger, S.R. Daniels, B.W. McCrindle, L. Helden, J. Ross, et al. Primary prevention of cardiovascular disease in nursing practice: focus on children and youth: A scientific statement from the American Heart Association Committee on Atherosclerosis, Hypertension, and Obesity in Youth of the Council on Cardiovascular Disease in the Young, Council on Cardiovascular Nursing, Council on Epidemiology and Prevention, and Council on nutrition, physical activity, and metabolism *Circulation*, 116 (2007), pp. 344-357 American Dietetic Association: nutrition guidance for healthy children ages 2 to 11 years *J Am Diet Assoc*, 108 (2008), pp. 1038-1047 Koletzko, R. von Kries, R. Closa, J. Escribano, S. Scaglioni, M. Giovannini, et al. (2009), Can infant feeding choices modulate later obesity risk? *Nutr*, 89 (Suppl.) (2009), pp. 1502-1508, Google Scholar
8. WHO (2014) Infant and young child feeding. Fact sheet No 342 Google Scholar
9. J.T. Dwyer, N.F. Butte, D.M. Deming, A.M. Siega-Riz, K.C. Reidy Feeding Infants and Toddlers Study 2008: progress, continuing concerns, and implications *J Am Diet Assoc*, 110 (Suppl. 12) (2010), pp. 60-67 Google Scholar
10. N.F. Butte, M.K. Fox, R.R. Briefel, A.M. Siega-Riz, J.T. Dwyer, D. M. Deming, et al. Nutrient intakes of US infants, toddlers, and pre-schoolers meet or exceed Dietary J Am Diet Assoc, 110 (Suppl. 3) (2010), pp. 27-37 Google Scholar
11. G. M. Subba Rao, R. V. Sudershan, P. Rao, M. Vishnu Vardhana Rao, and K. Polasa, "Food safety knowledge, attitudes and practices of mothers: findings from focus group studies in South India," *Appetite*, vol. 49, no. 2, pp. 441-449, 2007. View at Publisher · View at Google Scholar · View at Scopus S. Henson and T. Reardon, "Private agri-food standards: Implications for food policy and the agri-food system," *Food Policy*, vol. 30, no. 3, pp. 241-253, 2005. View at Publisher · View at Google Scholar View at Scopus F. A. Chekol, M. F. Melak, A. K. Belew, and E. G. Zeleke, "Food handling practice and associated factors among food handlers in public food establishments, Northwest Ethiopia," *BMC Research Notes*, vol. 12, no. 1, 2019. View at Publisher
12. View at Google Scholar A. Abdullahi, A. Hassan, N. Kadarman, A. Saleh, Y. B. Shu'aibu, and P. L. Lua, "Food safety knowledge, attitude, and practice toward compliance with abattoir laws among the abattoir workers in Malaysia," *Journal of General Internal Medicine*, vol. 9, pp. 79-87, 2016. View at Publisher · View at Google Scholar
13. M.K. Fox, E. Condon, R.R. Briefel, and K.C. Reidy, D.M. Deming Food consumption patterns of young preschoolers: are they starting off on the right path? *J Am Diet Assoc*, 110 (Suppl. 3) (2010), pp. 52-59 CrossRef Google Scholar]