



**PERCEPTION OF PARENTS ABOUT THE NEED OF NUTRITIONIST
FOR THEIR CHILDREN (1-5 YEAR) FROM PUBLIC SECTOR
HOSPITAL FAISALABAD**

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ABSTRACT

Balanced nutritional diet is extremely important for every individual from infancy to throughout adulthood life, to be physically fit and able to execute daily tasks in best possible way. Every nutrient has specific function in a body for different aspects of life. Infant body needs are different from other age group individuals. For the early 6 months the nutritional requirements are being fulfilled by mother milk, but after 6 months infants' need more balance and nutritional diet to maintain healthy growth. After infancy when infant enter into other stage of his or her life which is childhood their nutritional requirements increase for healthy growth and development. During childhood their requirements are different and enhanced which need to be fulfilled for brain and all other body parts healthy development. To protect children from malnutrition all the body requirements need to be fulfilled by parents from nutrients that are present in food. Nutritionist play important role in balancing this need of children by guiding their parents. This study was conducted to evaluate the perspective of the parents about the need of the nutritionist for their infants. It should help policy makers and health department to formulate their plans in order to make sure the healthy development of the new generation. The study was conducted through survey, the data was collected through interview schedule to collect result-oriented data. The study was conducted in Faisalabad district where two major public sector hospitals were selected for data collection, seventy-five interviews from each hospital were conducted to formulate equal data sheet.

Introduction

Nutrition is the science affecting to the factor that involved in nourishing our body. It depends on specific relationship between our body and environment that we inhabit. It is environment that dictate our need and provide the substance that will do our nourishing. These nourishing substances are called nutrient that are required by our body for energy to do daily task (Nesse, R.M and Williams, 2012)

Nutrition is very important for every child development. According to world health organization (WHO, 2009) nutrition is the food that we take in order to maintain our body dietary needs and their constitute are called nutrients. Good nutrition is a keystone for good health. Macronutrients and micronutrients are the two types of nutrients while macronutrients include carbohydrates, protein, fat and micronutrients include vitamins, minerals. Our food provides us nutrients that we need for growth, energy, development, tissue repair and protection from illness, infection. So, nutrition describes all processes that is use by child to digest, absorb, transport, utilize and excrete food. We can enhance the development and growth of children by improving their nutritional needs in adequate amount which is required by children for healthy growth and development. About 6.6 million of children under 5 died in 2012 and more than 750 per hour (Nguyen and Lan, 2012). The academy of America for pediatrics recommended to introduced solid food to infants after 4 to 6 months with breastfeeding for at least 2 years (Huh *et al.*,2011). The rate of infant mortality in Pakistan is 55.8% which means 1000 infants death occur every year and rate of death under 5-year children are 62.8% (Saha and Soest, 2013).

Nutritionist play a very important role in this time period of infant life because new mother doesn't have any idea about the food and dietary choices for the infant and if the energy

requirement of infant after 6 months of life are not increase or replaced by healthy food then it may lead toward nutritional deficiencies that cause serious difficulties in later life of infant development. For first six months infant only required fats and protein which are present in human milk (American Dietetic Association, 2003).

To prevent from any kind of abnormality in later life parents or care giver should focus on their child nutritional status by visiting nutritionist. It is been recommended that infants should breastfeed their mother for first 26 weeks of their life. To prevent them from the risk of gastrointestinal infections and other allergies and it is also beneficial for mothers. After that time other semi solid food should also be added into the diet of infant to prevent their body from infection and make them strong for development. Between 4 to 6 months of age mother or care giver should introduce food other than mothers' milk to prevent them from disease, deficiencies, allergies and infections (Grimshaw *et al.*, 2013).

First 1-5 years of every child life are important because they are growing years of muscle mass and bone growth which is met by required amount of protein intake which is 1.5 to 2g/kg. sufficient amount of body fat and minerals like calcium are also important for bone health. Other nutrients like vitamins are also required for growth and repair of tissue (Achagh *rt al.*,2020).

Healthy nutrient intake during first 2 year of life is required for healthy development and growth. Taking good nutrition from the early ages help you to develop healthy dietary eating pattern. Parents and caregiver can take guideline from dietitian to help their children to start a healthy life. New parents required all kind of advice for infant nutrition because what one eat during infancy affects your body weight, health, immune system, aging and metabolic programming (Nauta *et al.*,2013).

Barnett and Belfield (2006) describe the stages of child development which include neonates, infants, toddlers, preschooler. At every developmental stage child requires protection and care from mother or care giver. The developmental process has influenced by genetics and environmental factors which plays very critical role in child development after birth. Mothers and care giver need to have information about these stages and they should know what strategies they should adopt. For all these information they should consult with nutritionist.

To prevent from any kind of abnormality in later life parents or care giver should focus on their child nutritional status by visiting nutritionist. It is been recommended that infants should breastfeed their mother for first 26 weeks of their life. To prevent them from the risk of gastrointestinal infections and other allergies and it is also beneficial for mothers (Grimshaw *et al.*,2013).

Obesity and overweight are related with malnutrition and they are also common world wild. If infant getting sufficient amount of nutrition and energy from the food then there is no chance of malnutrition but most commonly many mothers or care giver due to lack of information about the infant energy needs, they give their children food that may cause obesity in their later life. Obesity starts early because some mothers introduce solid food before 4 months that is not healthy for child growth and has long term effects on physical and physiological wellbeing of children. Infancy is a critical period for children growth that's why balanced energy is recommended (Lin *et al.*,2013). These are the objectives. To identify the need of nutritionist for child development. To determine the current situation of nutritionist in child health. To analyze parent perception about nutritionist for their children.

Materials and methods

The research design is a ‘‘blueprint’’ that enable the research to come up with the solution to the problems encountered during the research. Therefore, the main objective of this chapter is to explain tools and techniques used for the collection, analysis and interpretation for data (Farooq, 2001).

Study area and population

Faisalabad districts were selected for the study. Survey-based study was carried out at Allied Hospital and DHQ Hospital Faisalabad. Parents of the infants under treatment at DHQ and Allied hospitals of Faisalabad were served as study population these public hospitals were taken on the basis of largest capacity in the study area.

Study Sample

The sample of 150 respondents was derived from total population. The data was taken from the parents of 1-5 years old children, which were selected randomly. The research instrument contains questions about parents' knowledge about nutrients, which kind of food their children should take from infancy throughout childhood, what kind of food they should not allow their children, their knowledge about malnutrition, perception about nutritionist need and children related disorders.

Data Collection

Through face-to-face interviews with parent's data was collected from both hospitals. Although the interview was constructed in English, the questions were administrated in national language (Urdu) for the convenience of interviewees to get the required information with maximum accuracy. Due to less knowledge about nutrients and nutritionist a great deal of time had to spent in explaining the purpose of study. There are a lot of parents who have no idea about malnutrition in children and also its great impact on their children health.

Statistical analysis

After collection of data, it was statistically analyzed by using Python for frequency, percentage. Descriptive analysis of each question was also used for better results

Results and discussion

To identify the need of nutritionist for child development.

This question is about nutrient and food a child may or may not need with mother's milk. After 6 month of age infant should experience semi solid food because only milk doesn't fulfill their adequate body requirement (Stephen *et al.*, 2012). This question is from mothers or care giver than what did they think their child should need other nutrient or food during breastfeeding. This question contains four options yes, no, may be and don't know.

Table 1. If your child is on breast feeding then do you think he or she required any other nutrient or food.

Response	No.	Percentage (%)
a. Yes	75	50
b. no	30	20
c. May be	40	26
Nan	5	3
Total	150	100

This question is related with previous question. This question contains four options growth, weight gain, maintenance, digestion and nan for those who didn't fill up this question.

Table 2. For which factor did your child required other nutrient or food during breastfeeding.

Response	No.	Percentage (%)
a. Growth	112	74
b. Maintenance	11	7
c. weight gain	11	7
d. Digestion	10	6
Nan	6	4
Total	150	100

This question is also related with pervious 2 questions. In this question we asked parents about the nutrient that they think their child

required during breastfeeding. According to WHO (2009) all macro and micro nutrients are required by child for healthy development. This question contains four options carbohydrates, protein, fat and all of them.

Table 3. Which nutrient did your child required during breastfeeding?

Response	No.	Percentage (%)
a. Carbohydrates	15	10
b. Protein	10	6
c. fat	24	16
d. all of them	101	67
Total	150	100

This question is about source of food. Which source of food according to parents are healthy for their child healthy development. The quality of food and nutrients are contributing factor to maintain and promote health (Cuervo *et al.*, 2007). This question contains four options natural, canned, processed and don't know.

Table 4. What is the major source of food that you think important for a healthy development of your child?

Response	No.	Percentage (%)
a. Processed	11	7
b. canned	22	14
c. natural	94	62
d. doesn't know	23	15
Total	150	100

This question is about malnutrition which is under and over nutrition. Malnutrition is a

condition that result in children due to lack intake of major nutrient. Malnutrition effects 20 million children around the globe and contribute to half of children death under five in Africa and Asia (Fatima *et al.*, 2021). This question contains four options under-nutrition, over-nutrition, both and don't know.

Table 5. Do you know what is malnutrition?

Response	No.	Percentage (%)
c. Both	65	44
d. don't know	85	56
Total	150	100

This question is also about malnutrition that according to parents did malnutrition has any effect on their children growth pattern. Child mortality and morbidity are the adverse consequences that is associated with poor growth in first years of life (Caulfield *et al.*, 2004). This question contains four options yes, no, may be, don't know.

Table 6. Do you think malnutrition has any effect on your child growth?

Response	No.	Percentage (%)
a. Yes	54	36
b. no	34	22
c. may be	21	14
d. Don't know	41	27
Total	150	100

This question is related with pervious question that according to parent how much malnutrition effect the growth of their child. Under nutrition during early childhood have long term consequences in life (Barker, 2006). This question contains four options 30%, 50%,

80%, 100% and nan for those who didn't fill this question.

Table 7. How much malnutrition effect on your child growth?

Response	No.	%Percentage (%)
a. 30 %	56	37
b. 50%	30	20
c. 80%	24	16
Nan	40	26
Total	150	100

To determine the current situation of nutritionist in child health.

This is an important question which also cover objective of this study. This question is from parent that did they met any nutritionist before. This question contains four options yes, no, 1 time and more than 1 time.

Table 8. Have you ever met a nutritionist before?

Response	No.	Percentage (%)
a. Yes	35	23
b. no	94	62
c. 1 time	21	14
Total	150	100

This question is about food intake of children. About 30% respondent answer better and 6% respondent answer same.

Table 9. Food intake

Response	No.	Percentage (%)
Nan	95	63
a. Better	46	30
c. Same	9	6
Total	150	100

This question is about formula intake of children. About 20% respondents answer better, 16% respondent answer same and 62% respondent didn't fill this question.

Table 10. Formula intake.

Response	No.	Percentage (%)
Nan	94	62
a. Better	31	20
c. same	25	16
Total	150	100

This question is about physical activity and what kind of changes did parents feel after visiting nutritionist.

Table 11. Physical activity.

Response	No.	Percentage (%)
Nan	93	62
a. Better	32	21
c. Same	25	16
Total	150	100

This question is about fluid intake and what kind of change in fluid intake did parent feel in their child after visiting nutritionist.

Table 12. Fluid intake.

Response	No.	Percentage (%)
Nan	94	62
a. better	26	17
c. same	30	20
Total	150	100

This question is about weight and what kind of change in weight did parent measure after visiting a nutritionist.

Table 13. Weight

Response	No.	Percentage (%)
Nan	95	63
a. Better	36	24
c. Same	19	12
Total	150	100

To analyze parent perception about nutritionist for their children.

This question is about nutrition role in child growth and according to parents what did they think about nutrition role in their children growth pattern. Good nutrition is a keystone for good health (WHO, 2009). This question contains four options Yes, no, May be and don't know

Table 14. Do you think nutrition has any role in your child growth?

Response	No.	Percentage (%)
a. yes	94	62.66
b. Maybe	46	30.66
c. No	10	6.66
Total	150	100

This question is about nutritious meals a child should have in a day and what did parents think their child should take. A child should have 3 meals and 2 healthy snacks (Darmody, 2021). every day This question contains four options 1, 2, 3 and more.

Table 15. How many nutritious meals do you think a child should have in a day?

Response	No.	Percentage (%)
a. 1	0	0
b. 2	58	38
c. 3	11	7
d. More	81	54
Total	150	100

This question is about milk which is a great source of calcium, vitamin D and other vitamins and minerals. In this question we asked parents that what did they think how many times their child should drink milk in a day. This question contains four options 1, 2, 3 and more.

Table 16. How many times your child drink milk in a day.

Response	No.	Percentage (%)
a. 1	5	3
b. 2	23	15

c. 3	58	38
d. more	64	42
Total	150	100

This question is also about milk and its role in body. In this question according to parents did milk play any role in their child growth. Milk may provide unique health benefits (Grenov and Michaelsen, 2018). This question contains four options yes, no, may be, don't know.

Table 17. Do you think milk has any role in your child growth?

Response	No.	Percentage (%)
a. Yes	133	88
c. May be	17	11
Total	150	100

This question is about parents' knowledge of nutrient and according to parents what did they think their child required any other nutrient after six months of age. For healthy growth and development, it is important to consume healthy nutrients at all stages of life (WHO, 2003). This question contains four options yes, no, may be, don't know.

Table 18. Do you know what are the major nutrients that your child required after six months of age?

Response	No.	Percentage (%)
a. Yes	119	79
b. no	5	3

c. May be	16	10
d. Don't know	10	6
Total	150	100

This question is related with previous question in which we asked parents about what are the major nutrient that your child need. This question contains four options carbohydrates and protein, vitamins and minerals, fat, all of them and nan for those respondents who didn't fill this question.

Table 19. What are these nutrients that your child needs?

Response	No.	Percentage (%)
a. Carbohydrates and protein	27	18
b. vitamins and minerals	45	30
c. Fat	5	3
d. all of them	68	45
Nan	5	3
Total	150	100

This question is about nutritionist that what did parents think about nutritionist role in their child healthy development. This question contains four options yes, no, may be and don't know.

Table 20. Do you need nutritionist for your child healthy development?

Response	No.	Percentage (%)
a. Yes	25	17
b. no	68	45
c. May be	32	21
d. Don't know	25	17
Total	150	100

This question is from parents that what is their major concern about their child growth. This question contains four options height and weight, body posture, eye sight, intelligence.

Table 21. What is your major concern about your child growth?

Response	No.	Percentage %
a. Height and weight	92	61
b. intelligence	17	11
c. Body posture	18	12
d. Eye sight	18	12
Nan	5	3
Total	150	100

This question is about nutrition that what did parents think that their concerns related to their children health are fulfilled by nutrition. This question contains four options yes, no, may be and don't know.

Table 22. Do you think your concern regarding your child growth nullified through nutrition?

Response	No.	Percentage (%)
a. Yes	116	77
b. No	5	3
c. may be	29	19
Total	150	100

This question is related with previous question that how much nutrition nullified

parents' regarding concern about their children growth. This question contains four options 30%, 50%, 80% and 100%.

Table 23. Did your regarding concern about your child growth nullified through nutrition.

Response	No.	Percentage (%)
a. 30%	14	10
b. 50%	60	40
c. 80%	45	30
d. 100%	31	20
Total	150	100

CONCLUSION

This study concluded that there is a need for parents to consult nutritionist regarding healthy development of their children throughout life.

Every child should be observed during all stages of childhood to prevent malnutrition and other health related disorders.

According to this study only 23% of parents felt the need to pay visit to a nutritionist for their children healthy development.

Authors' contributions

Conceived and designed the experiments: Amna Aziz. Performed the experiments: Amna Aziz. Analyzed the data: Dr. Sidra Altaf Contributed materials/ analysis/ tools: Amna Aziz Wrote the paper: Amna Aziz.

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