



Practices in use for cosmetic and dietary products with role of hygiene in the children of Haryana region: A survey report

Rani M^{*1}, Manisha², Lather A², Neelam Pawar³

^{1,3}Faculty, Chaudhary Bansi Lal University, Bhiwani, INDIA

²Faculty, Vaish Institute of Pharmaceutical Education and Research, Rohtak, INDIA

ABSTRACT

Background: The poor oral hygiene practices and lack of parental guidance leads dental health issue along with frequent exposure to different packed cosmetic and dietary products. The carcinogenic substances used in the formulation of oral hygienic products are the main risk factors for health. There is lack of awareness about selection and uses of cosmetic and dietary products in children due to inappropriate supervision and assistance for e.g. toothpaste, mouthwashes etc. The relationship between milk and other dairy products and body fats in children, did not appear to change during childhood except in the preschool years. The results of previous study suggested that food-hygiene practices of mothers might have an important impact on the prevalence of infectious disease among children. Hence, the present study was designed and conducted for determination of awareness and present status about the use of these products in children of both urban and rural areas. This study consists of basic questions about habits and practices for cosmetic, dietary products and hygiene process for children by their parents.

Objective: To determines the consciousness of parents in rural and urban areas for their children's health, hygiene, beauty and nutritional values.

Material and methods: For considering awareness about products, type of products and perceptions after use of products and psychology about child care product of parents the questionnaire form was designed. The study form consist 23 basic questions about habits and practices of cosmetic, dietary products and hygiene process for children by their parents. The forms were filled by randomly selected parents who have children's of age day 1 to 10 years old. Total 200 forms have been filled, out of which each 100 forms by urban and rural area's parents. All forms were validated, analyzed and results were expressed in percentage form.

Conclusion: In rural area 90% parents are highly conscious about look of child but in urban area only 50%. Only 62% urban parents prefer cosmetics as compared to 99% rural parents with a thought that their child needed cosmetics. The 52 % parents of urban area and 48 % in rural area used branded cosmetic products with a myth that the specific and a particular product is better in quality and safe for use. Rural area parents are only 12% aware about hygiene care while in urban area this rate was found to be 47%. The 30% parents of urban area selected food products for dietary value of their child. In rural area 96 % parents use both food and drink products in dietary care of child as compare to 55 % parents of urban area. Urban area parents use junk foods more as compared to rural area parents that may be due to preference of taste over nature of products.

Keywords: Health, nutrition, hygiene, cosmetic, Herbal, branded.

Introduction

It is estimated that milk and milk products consumption are increasing worldwide because they have great nutritional quality. This leads to a universal problem of consumption of microbial contaminated milk products. The milk and dairy products have an excellent growth medium for microbes due to their high nutritious value. In the world annually 20 million cases caused due food borne microbial disease. In the last two decades, foodborne illnesses from consumption of dairy products have been mainly implicated with *C.jejuni*, *E. coli* 0157:H7, *L. monocytogenes*, and *S. enteritica* etc. (Pal M *et al.*, 2013). Milk and milk products are important source of energy, but their contamination either by microbes (e.g. *Achromobacter*, *Acinetobacter*, *Alcaligenes*, *Bacillus*, *Clostridium*, *Enterobacter*, *L.monocytogenes* etc) (Lather .A *et al.*, 2012; Lather .A *et al.*, 2020). The contamination of milk and dairy products by microbial agents is a worldwide problem. It is well recognized that hygiene plays a pivotal role in the safety of foods and protects the health of the consumer. Ensure that during production, packaging, handling, processing storage and distribution area should be free of contamination. Therefore hygienic conditions should be maintained to ensuring the safety of food products. It is mentioned that cleaning and sanitation of milk products contact surfaces contribute around 60% of the total contamination in a dairy plant. The shelf-life of milk is extended by different methods like storage of fresh milk on room temperature only for 3 hours, at 5°C on refrigerator the shelf life of milk can be extended up to 24 hours. According to pasteurization method it can be extend for 4-7 days. By the treatment of Ultra-high temperature the shelf life of milk could be extended for few months (Pal M *et al.*, 2018)

Health of children affects the future of society as they are the coming generation of our society. The health quality is mainly due to food intake, hygienic habits and less affected by use of cosmetic products in children. The parents are the builders of child health

and behaviors. Cosmetics and skin care products have been considered as allergenic for children due to added chemicals related allergic reactions. The less chemical composition containing substances are preferred for children as their skin is very sensitive and delicate (Husain et. al., 2019; Lather A et.al., 2015). The objective of the study is to estimate the level of food safety, personal hygiene, cosmetics safety handling knowledge and practices among parents of urban area as well as rural areas. The exercise of proper personal hygiene is an essential part of our daily life. In rural area the people may not understand what is personal hygiene and how affects our health. The prevention of communicable diseases is done by proper personal hygiene processes. We must learn how the proper practices of personal hygiene are useful for control and prevention of public health diseases that are popular in our society. The concept of personal hygiene is commonly used in public and medical health practices. Personal hygienic is done at individual and society level. The personal hygienic is associated with cleanliness of body and cloths. Personal hygiene is defined as the conditions which promotes sanitary endeavors in person. Everybody has been taught and learned from others and the hygienic habits of individual indicate standards of their life. Generally, the practice of personal hygiene is practiced to prevent or reduce the event and expansion of communicable diseases (Takanashi et al., 2009).

The growth of harmful bacteria is observed in mouth that is due to deposition of small pieces of food products after mechanical breakdown in mouth. The left debris of breakdown food sticks to the surface of teeth, gums and mouth cavity which are the sites of bacterial growth (Lather A et.al., 2021). The decaying process on these areas produce a sticky material known as plaque which is further converted into a hard, yellowish, calcified deposit on the teeth which consists of organic secretions and food breakdown products which results tooth decay. This results poor oral hygienic conditions as observed by unpleasant smelling breath and gum infections (Lather A et.al., 2015). For proper development and functioning of body appropriate amount nutrients are required at every stage of life. Nutrition standards are developed by considering age, sex and physical activity of consumptive person. The rule of nutrition standard development depends on proportions between the consumption of various food products and sources of food products at stage of intense growth and development. At the bottom of the healthy nutrition pyramid mentioned products are fruits, vegetables, cereal, milk and milk products (Niedworok et al., 2016). For the development and proper growth of children food is necessary. The unwanted impact on dental health status and cause serious health problems due to excessive intake of low molecular carbohydrates constitutes (Doichinova et al., 2015).

Dairy foods and milk are healthy foods and considered as nutrient-rich foods because they serve as good sources of vitamin D and calcium as well as protein and other essential nutrients. They provide magnesium, potassium, phosphorus, vitamin B₁₂, vitamin A and vitamin B₂. Calcium is widely known to be associated with the formation and maintenance of bones, mainly in growing children. Over 99% of body's calcium is found in teeth and bones. Calcium is also an important and indispensable micronutrient for nerve transmission, muscle function and hormonal secretion. Inadequate intake of calcium can keep your child from attaining peak bone mass, make their bones weak and results osteoporosis like problems. Hence, including calcium-rich foods in your child's diet is compulsory. Dairy products especially milk are good sources of calcium besides being good sources of Vitamins A and D, protein as well. Milk is very essential source of calcium in the diets of children aged 1 to 10 years. Regular intake of milk increases mineral content and bone mineral density (Amin et al., 2008; Zahra et al., 2013).

Material and methods-

Data collection:-Collection of survey data through face to face interaction with questionnaire based form filling.

Sampling technique used: Random data collection by questionnaire.

Sample Size: A sample size is 200 parents including 100 from urban area and 100 from rural area.

Place of study: One purposively selected rural area and urban area of district Hisar, Haryana, India.

Duration of study: Four months

Study population (Children age): Parents of children upto 10 year old from urban and rural area.

Study tool: A pre-designed and structured questionnaire application.

Sample of questionnaire-

Q1. How many children you have?

Q2. Age of children-

Questionnaires based on cosmetics used for children

Q3. How much conscious are you about look of your child?

Q4. Which of the following cosmetics you use for your child?

Q5. Do you think your child needs cosmetics?

Q6. How many times you use cosmetic products for your child?

Q7. What you think about use of cosmetics for your child?

Q8. Are you aware of side effects of cosmetics?

Q9. Which type of products you use for your child?

Questionnaires based on products used for hygienic purpose

Q10. How much conscious you about hygienic conditions of your child?

Q11. Which of the following products you use for hygienic conditions of your child?

Q12. How many times you use these products for your child?

Q13. Which type of products you use for your child?

Q14. Which type of toothpaste do you use for your child?

Questionnaires based on health supplements

Q15. How much conscious are you about health of your child?

Q16. Which of the following products you use for your child?

Q17. Which of the following food products you use for your child?

Q18. Which type of products you prefer for your child?

Q19. What you think about the use of food products for your child?

Q20. How many times you use food products for your child?

Q21. Which of the following drink (milk) products you prefer for your child?

Q22. What you think about the use of use of drink products for your child?

Q 23. How many times you use drink products for your child?

Aim and objective-

- A) To determines the consciousness of parents of both rural and urban areas for their children’s health, hygienic, beauty and nutritional values.
- B) To evaluates the publicity of cosmetic usages and to assess the experiences byparents of urban and rural areas for their children.
- C) To determines the purpose of use of cosmetics by parents for their children
- D) To determines the purpose of use of cleaning articles or bathroom products by parents for their children
- E) To determines the purpose of use of food products and drink products by parents for their children.

Results-

Educational qualification of Parents involved in study-

Total parents up to secondary level education were 34% in urban as compared to 87% in rural area, graduate were 38% in as compared to 12% of rural area parents. Postgraduates were 22% in urban area as compared to 1% in rural area. Above post-graduation 5% parents of urban area as compared to 0% of rural area as represented in **Table 1** and graphical representation has been shown in **Figure 1**.

Table 1:-Educational qualification of Parents

S.N.	Qualification	Urban (%)	Rural (%)
1.	Up to secondary	34	87
2.	Graduate	38	12
3.	Postgraduate	22	01
4.	Above post-graduation	05	00

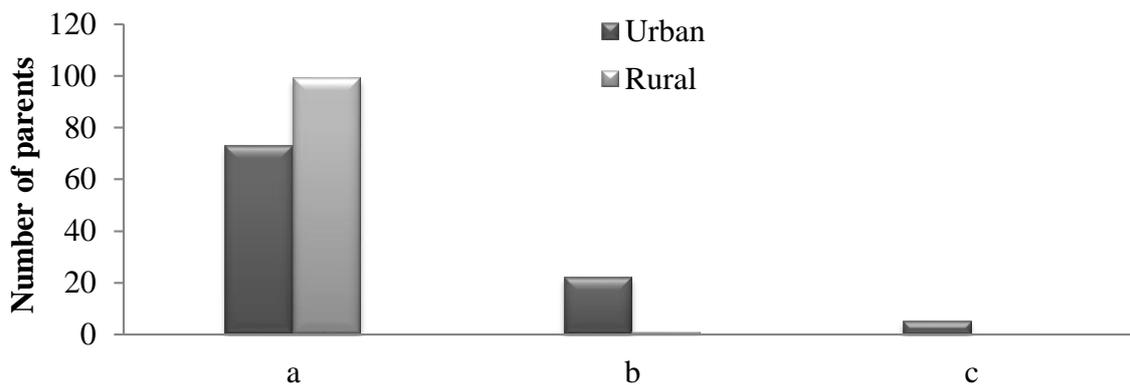


Figure1:-Qualification level of parents of urban and rural area

Q1. Number of children belongs to parents included in study?

Urban area parents who have number of child (1) were of 51% as compared to 27% of rural area parents. Urban area parents who have number of children (2) were 41% as compared to 60% of rural area parents. Urban area parents who have number of children (3) were found to be 8% as compared to 13% of rural area parents as represented in **Table 2** and **Figure 2**.

Table 2:-Number of children belongs to parents

S.N.	No. Of child	Urban (%)	Rural (%)
1.	No. of child = 1	51	27
2.	No. of children = 2	41	60
3.	No. of children = 3	08	13

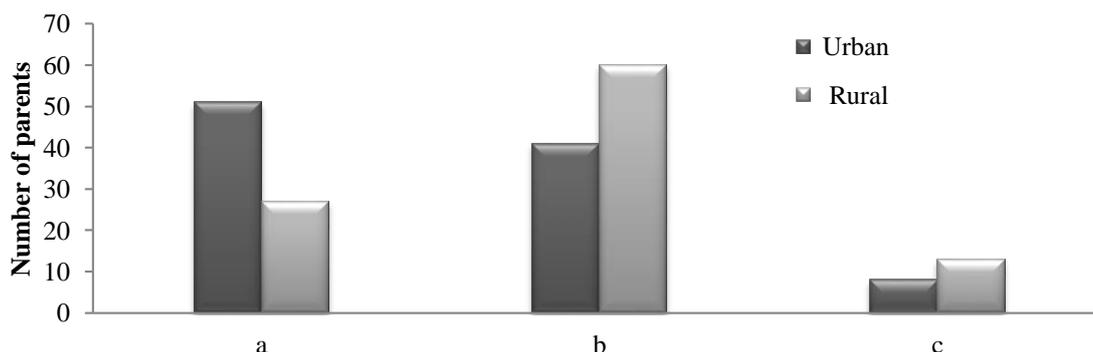


Figure2:-Number of children of parents in urban and rural area

Q2. Age of children included in study?

Percentage of children of age group 0-1 year is 23%, age group >1-2 year is 24%, age group >2-3 year is 26%, age group >3-4 year is 19%, 4-5 year is 22%, >5-6 year is 10%, >6-7 year is 18%, >7-8 year is 5%, >8-9 year is 3% and >9-10 year is 6% of urban area parents. % of children of age group >0-1 year is 11%, age group >1-2 year is 29%, >2-3 year is 11%, >3-4 year is 25%, >4-5 year is 22%, >5-6 year is 29%, >6-7 year is 13, >7-8 year is 14%, >8-9 is 10% and >9-10 is 4% of rural area parents as represented in **Figure 3** and graphically shown in **Table 3**.

Table 3:-Age of children

S.N.	Age in years	Urban (%)	Rural (%)
1.	0-1 year	23	15
2.	>1-2 year	24	29
3.	>2-3 year	26	11
4.	>3-4 year	19	25
5.	>4-5 year	22	22
6.	>5-6 year	10	29
7.	>6-7 year	18	13
8.	>7-8 year	05	14
9.	>8-9 year	03	10
10.	>9-10 year	06	04

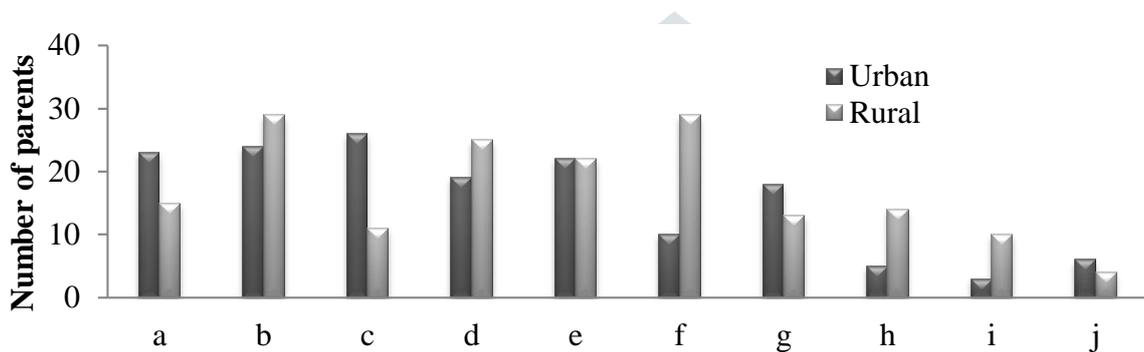


Figure3:-Ages of children in urban and rural area

A) Questionnaires based on cosmetics used for children-

Q3. Consciousness of the children towards the use of cosmetics involved in study?

Level of consciousness in urban area parents about look of their child for very highly is 34% but in rural area parents is 10%, for highly is 50% of urban area and 90% of rural area parents, for less is 12% and very less is 4% in urban area parents as compared to 0% in rural area as represented in **Figure 4** and graphically shown in **Table 4**.

Table 4:-Consciousness of the children towards the use of cosmetics

S. N.	Consciousness of children	Urban (%)	Rural (%)
1.	Very highly	34	10
2.	Highly	50	90
3.	Less	12	00
4.	Very less	04	00
5.	Not at all	00	00

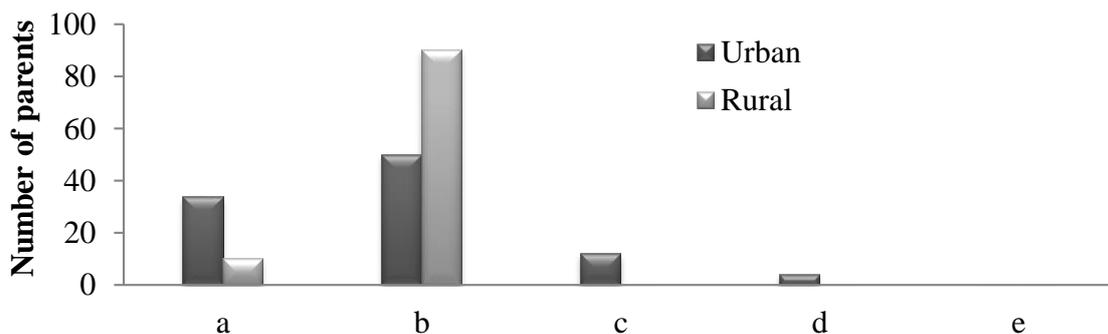


Figure4:-Level of consciousness of parents of urban and rural area about look of their children

Q4. The following cosmetic products use by parents for children involved in study?

Percentage of parents in urban area who use body lotion, creams, kajal, perfumes, powder, body oil and any other is 88%, 44%, 64%, 23%, 55%, 46% and 4% respectively as compared to use of cosmetics 88%, 76%, 75%, 23%, 86%, 68% and 0% by parents of rural area as represented in **Figure5** and graphically shown in **Table 5**.

Table 5:-The following cosmetic products use by parents for children

S.N.	Uses of cosmetic products	Urban (%)	Rural (%)
1.	Body lotion	88	88
2.	Creams	44	76
3.	Kajal (Mascara)	64	75
4.	Perfumes	23	23
5.	Powder	55	86
6.	Body oil	46	68
7.	Any other	04	00

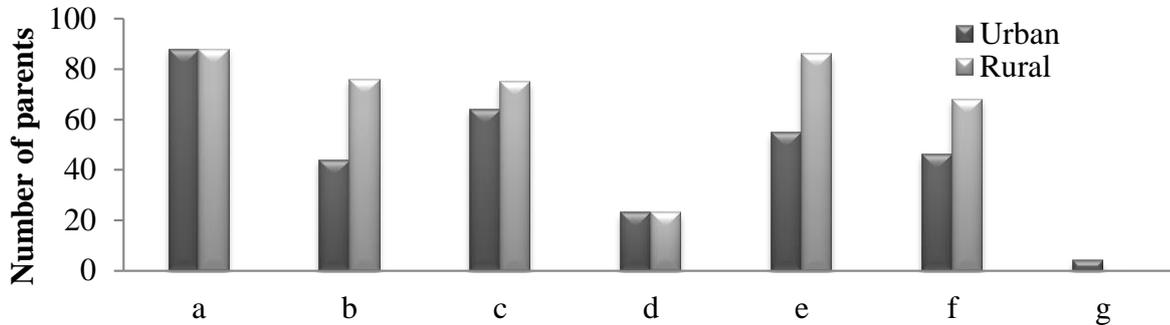


Figure5:-Number of parents of urban and rural area who use different types of cosmetic products

Q5.Awareness about the parents for needs and use of cosmetics for children?

A 62% parents of urban area think their child needs cosmetics as compared to rural area parents 99%. Only 1% of rural area parents thought their children not need cosmetics as compared to urban area 38% as represented in **Figure 6** and graphically shown in **Table 6**.

Table 6:-The Awareness of parents about the needs and use of cosmetics for children

S.N.	Awareness of cosmetic products	Urban (%)	Rural (%)
1.	Yes	62	99
2.	No	38	01

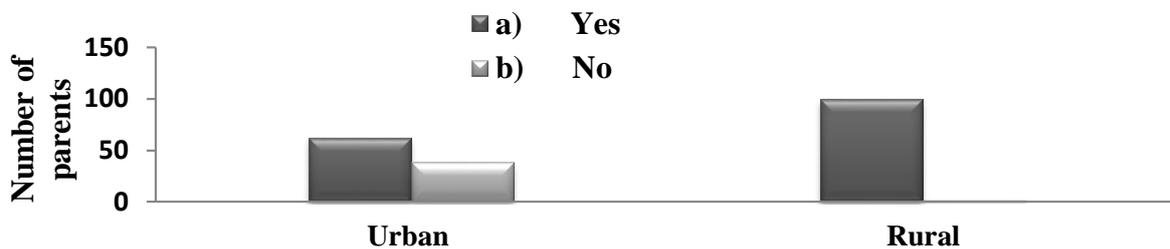


Figure6:-Number of parents of urban and rural area who think needs and use of cosmetics for their children

Q6. Frequency of use of cosmetic products used by parents for children involved in study?

Total % of parents in urban area use cosmetics for their child hourly, daily, twice daily, weekly, monthly and occasionally are 1, 56, 14,11, 2 and 16% respectively as compared to use by parents of rural area 0, 93, 4, 3, 0 and 0% as represented in **Figure 7** and graphically shown in **Table 7**.

Table7:-Frequency of use of cosmetic products used by parents for children

S.N.	Frequency of uses	Urban (%)	Rural (%)
1.	Hourly	01	00
2.	Twice Daily	14	04
3.	Daily	56	93
4.	Weekly	11	03
5.	Monthly	02	00
6.	Occasionally	16	00

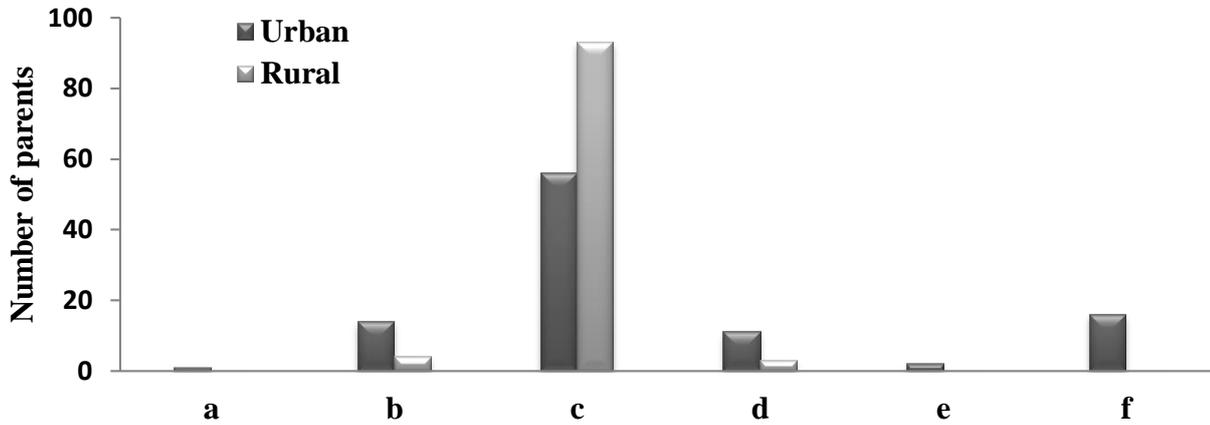


Figure7:-Frequency of use of cosmetics by parents of urban and rural area for their children

Q7. Awareness of parents about the use of cosmetics for children involved in study?

Percentage of thoughts of urban area parents for purpose of use of cosmetics for health conscious is 33% as compared to 68% of rural area, for to enhance beauty is 9% as compared to 1%, for fragrance is 4% as compared to 0%, for any other 20%, for to enhance beauty along with for fragrance is 5% as compared to 0%, for health conscious along with for fragrance is 6% as compared to 0% of rural area parents as represented in **Figure 8** and shown in **Table 8**.

Table 8:-Awareness of parents about the use of cosmetics for children

S.N.	Awareness about cosmetic products	Urban (%)	Rural (%)
1.	Health conscious	33	68
2.	To enhance beauty	09	01
3.	For fragrance	04	00
4.	Any other	20	00
5.	To enhance beauty + For fragrance	05	00
6.	Health conscious + To enhance beauty	17	25
7.	Health conscious + For fragrance	06	00
8.	Health conscious + To enhance beauty + For fragrance	06	06

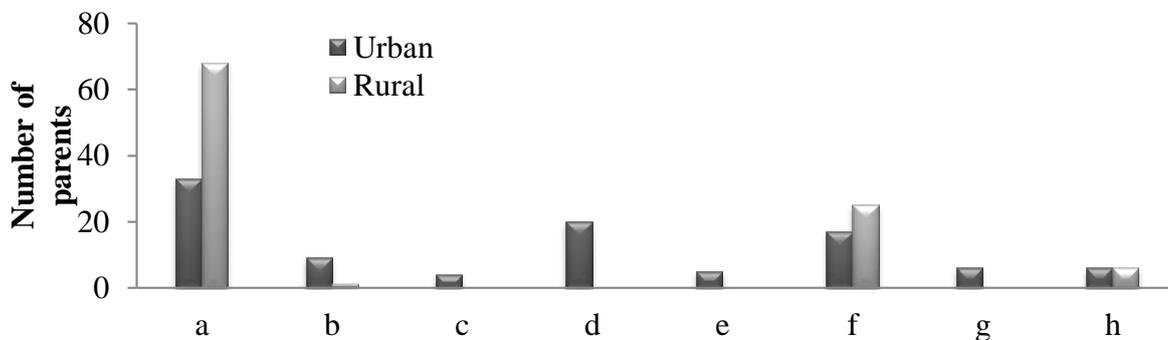


Figure8:-Percentage of purpose of cosmetic products use by parents of urban and rural area for their children

Q8. Awareness of the parents causes the side effects due to uses of cosmetics involved in study?

A 97% of urban area parents are aware about side effects of cosmetics in comparison of rural area 90%. And 3% of urban area parents not aware about side effects of cosmetics as collated to 10% of rural area as represented in **Figure 9** and graphically shown in **Table 9**.

Table 9:-Awareness of the parents causes the side effects due to uses of cosmetics

S.N.	Awareness	Urban (%)	Rural (%)
1.	Yes	97	90
2.	No	03	10

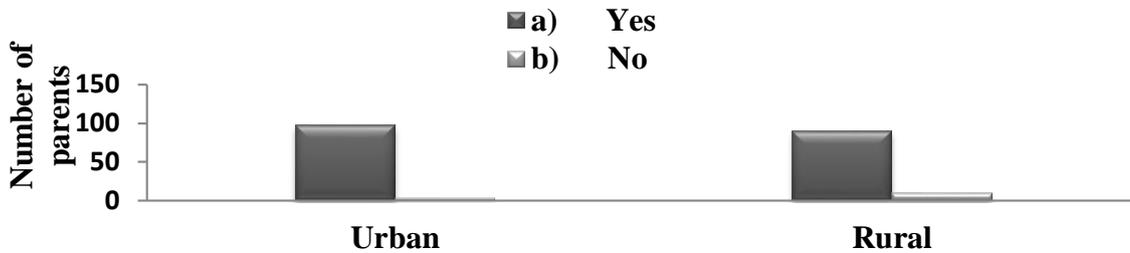


Figure9:-Percentage of parents of both urban and rural area towards side effects of cosmetics

Q9. Type of products the parents used for children involved in study?

Urban area parents select cosmetic products for their children 52% branded products as compared to 48% by rural area parents, 20% general products by urban area parents as compared to 44% of rural area parents, 10% home made by urban area parents as compared to 0% of rural area, 6% herbal products by urban area parents as compared to 2% of rural area parents, 12% of above two types products by urban area parents as compared to 6% of rural area parents, above three products are selected by urban area parents as compared to 1% of rural area parents as represented in **Figure 10** and graphically represent in **Table 10**.

Table 10:-Type of products the parents used for children

S.N.	Types of products	Urban (%)	Rural (%)
1.	Branded	52	48
2.	General products	20	44
3.	Home made	10	00
4.	Herbal	06	02
5.	Any other	00	00
6.	More than two combination	12	06
7.	More than three combination	00	01

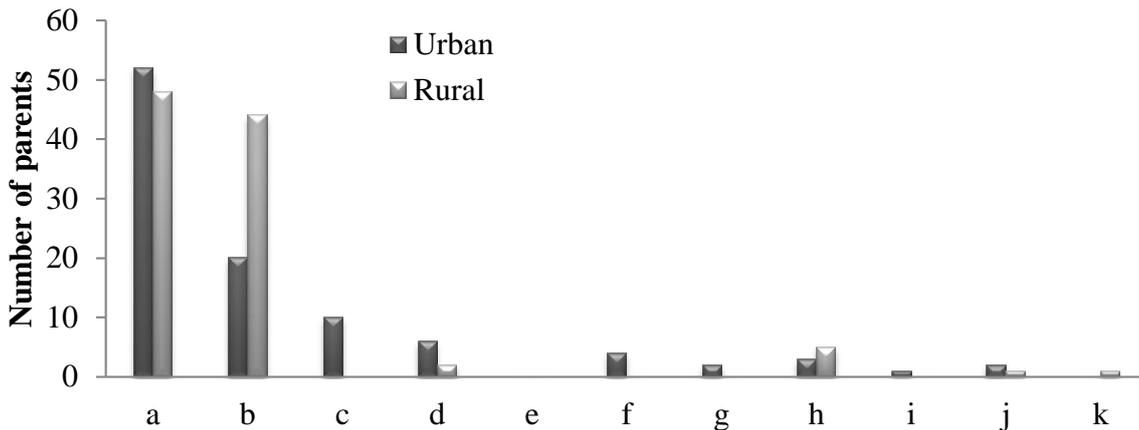


Figure10:-Percentage of types of cosmetic products used by parents of both urban and rural area for their children

B) Questionnaires based on products used for hygienic purpose-

Q10. Consciousness of parents about hygienic conditions of children involved in study?

Level of consciousness of urban area parents about hygienic conditions 47% very highly as compared to 12% of rural area parents, 48% highly as compared to 88%, 5% less as compared to 0% as represented in **Figure 11** and graphically shown in **Table 11**.

Table 11:-Consciousness of parents about hygienic conditions of children

S. N.	Consciousness of parents	Urban (%)	Rural (%)
1.	Very Highly	47	12
2.	Highly	48	88
3.	Less	05	00
4.	Very less	00	00
5.	Not at all	00	00

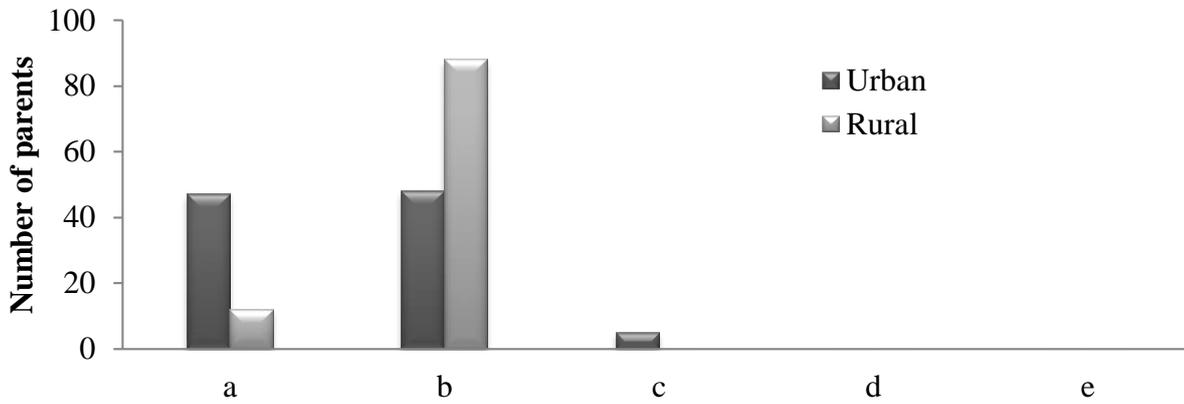


Figure11:-Percentage of consciousness of parents of both urban and rural area towards hygienic conditions of children

Q11. Types of products used by parents for hygienic conditions of children involved in study?

The number of products selected by urban area parents is comparatively high as compared to rural area parents as soap 74% as compared to 82%, shampoo 56% as compared to 77%, hand wash 63% as compared to 59%, diapers 36% as compared to 23%, toothpaste 55% as compared to 64% as represented in Figure 12 and graphically represent in Table 12.

Table12:-Types of products used by parents for hygienic conditions of children

S.N.	Types of products used	Urban (%)	Rural (%)
1.	Soap	74	82
2.	Shampoo	56	77
3.	Hand wash	63	59
4.	Diapers	36	23
5.	Toothpaste for oral hygiene	55	64
6.	Any other	00	00

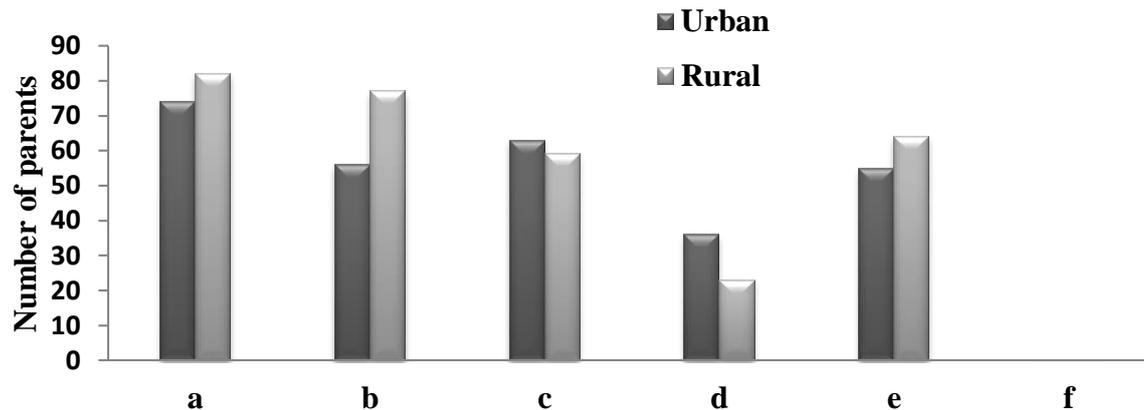


Figure12:-Percentage of types of products used by parents of urban and rural area for their children

Q12. How many times you use these products for your child involved in study?

By urban area parents hygienic products used as hourly (2%), daily (59%), twice daily (35%), weekly (03%), monthly (01) respectively as compared to rural area 0%, 95%,4%, 0% and 0% respectively as represented in Figure 13 and graphically shown in Table 13.

Table 13:-After how many times parents used these products on children

S.N.	Frequency of products used	Urban (%)	Rural (%)
1.	Hourly	02	00
2.	Twice daily	35	04
3.	Daily	59	95
4.	Weekly	03	00
5.	Monthly	01	00

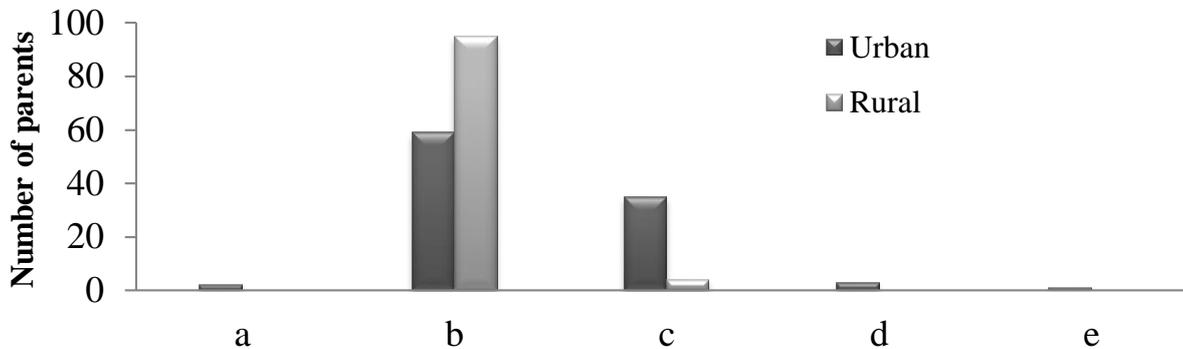


Figure 13:- Percentage of frequency of use of products by parents of urban and rural area for their children

Q13. Which type of products you use for your child involved in study?

Urban area parents select hygienic products 56% branded as compared to 47% by rural area parents, 31% natural as compared to 50%, 4% homemade as compared to 0%, branded in addition to natural 4% as compared to 0% by rural area parents, 4% of natural products in addition to homemade as compared to 3% and 1% of branded in addition to homemade as compared to 0% of rural area parents respectively as represented in **Figure 14** and represented in **Table 14**.

Table 14:-Which type of products used by parents for children

S.N.	Type of products	Urban (%)	Rural (%)
1.	Branded	56	47
2.	Natural	31	50
3.	Homemade	04	00
4.	Any other	00	00
5.	Branded + Natural	04	00
6.	Natural + Homemade	04	03
7.	Branded+ Homemade	01	00

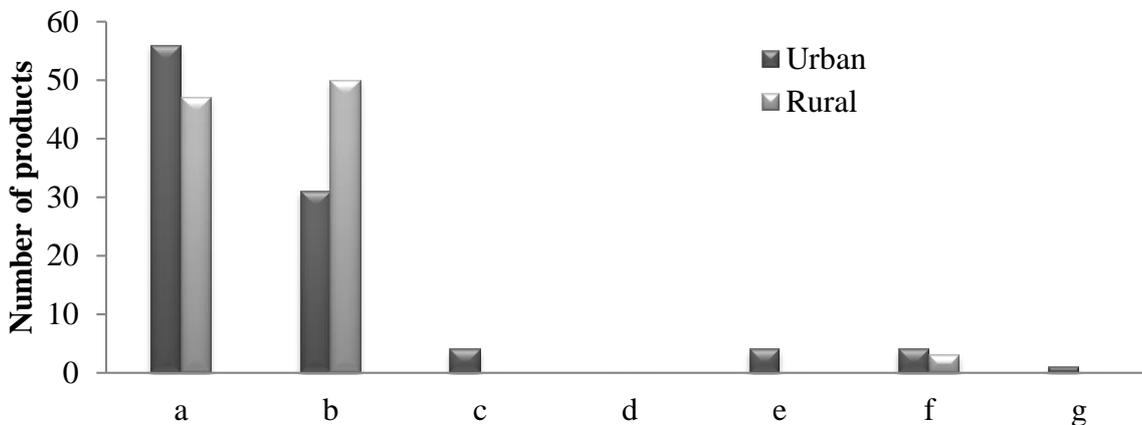


Figure14:- Percentage of nature of products preferred by parents of rural area and urban area for their children

Q14. Which type of toothpaste do you use for your child involved in study?

Use of flavoured toothpaste by urban area parents is 41% as compared to 66% by rural area parents, normal 35% as compared to 24% and no specific 24% as compared 10% by rural area parents as represented in **Figure 15** and graphically shown in **Table 15**.

Table 15:-Which type of toothpaste used by parents for children

S.N.	Type of toothpaste	Urban (%)	Rural (%)
1.	Flavoured	41	66
2.	Normal	35	24
3.	No specific	24	10

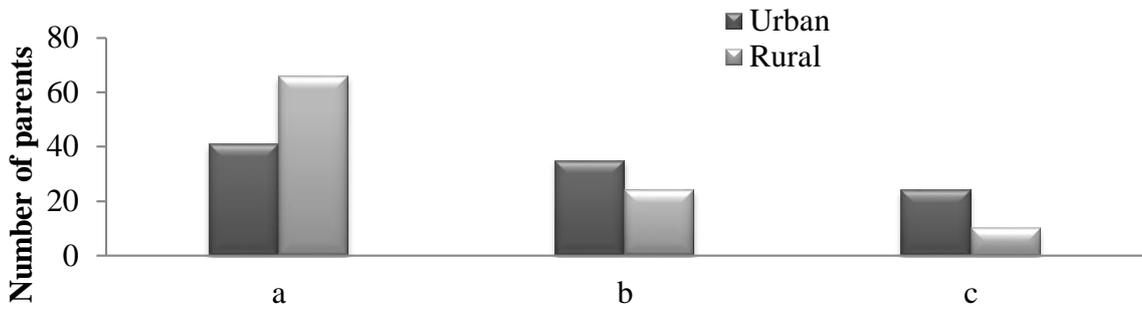


Figure15:- Percentage of types of toothpaste selected by parents of both urban and rural area for their children

C) Questionnaires based on health supplements –

Q15. How much conscious are you about health of your child involved in study?

Level of consciousness of parents of urban area 54% very highly as compared to 10% of rural area parents, 43% highly as compared to 90% and 3% less as compared to 0% of rural area parents as represented in Figure 16 and graphically shown in Table 16.

Table 16:-How much conscious are you about health of your child

S.N.	Conscious about health	Urban (%)	Rural (%)
1.	Very highly	54	10
2.	Highly	43	90
3.	Less	03	00
4.	Very less	00	00
5.	Not at all	00	00

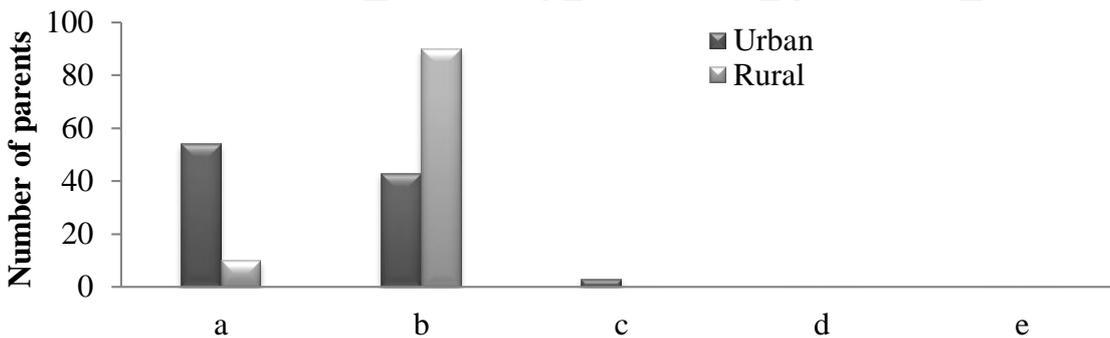


Figure16:- Percentage of consciousness of parents of urban and rural area about health of their children

Q16. Which of the following products you use for your child involved in study?

The parents of urban area select food products alone 30% as compared to 4% by parents of rural area, drink products alone 15% as compared to 0% and food products in addition of drink products 55% as compared to 96% by parents of rural area as represented in Figure 17 and graphically shown in Table 17.

Table 17:-Which of the following products you use for your child

S.N.	Products used	Urban (%)	Rural (%)
1.	Food products	30	04
2.	Drink products	15	00
3.	Food products + Drink products	55	96

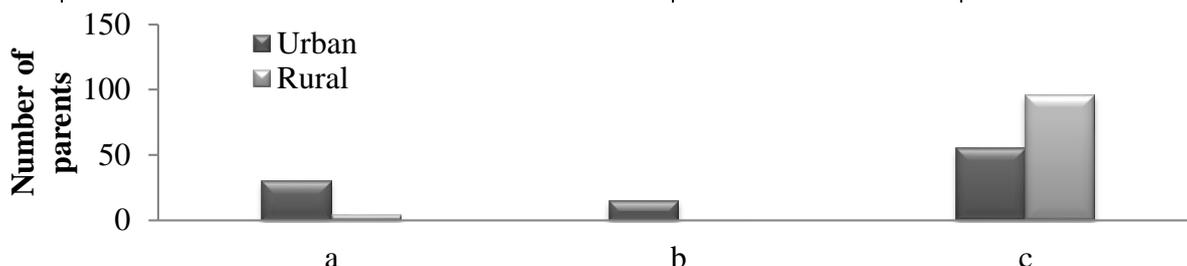


Figure17:-Number of products used by parents of urban and rural area for nutrient value of their children

Q17. Which of the following food products you use for your child involved in study?

Urban area parents select food products 22% pasta as compared to 10% by rural area parents, 23% soups as compared to 6%, 82% biscuits as compared to 75%, 64% juice as compared to 59%, 36% noodles as compared to 37% and any other 8% as compared to 0% by rural area parents as represented in Figure 18 and graphically represent in Table 18.

Table 18:-Which of the following food products you use for your child

S.N.	Food products used	Urban (%)	Rural (%)
1.	Pasta	22	10
2.	Soups	23	06
3.	Biscuits	82	75
4.	Juice	64	59
5.	Noodles	36	37
6.	Any other	08	00

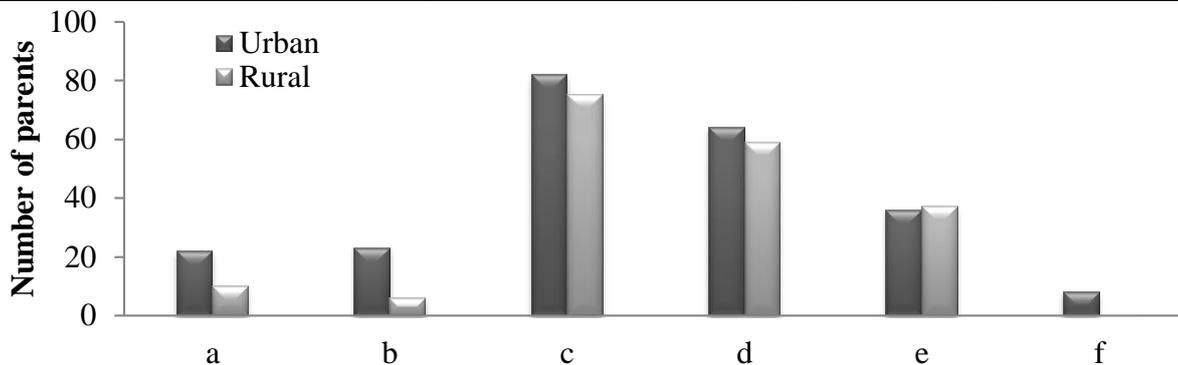


Figure18:- Types of food products selected by parents of urban area and rural area

Q18. Which type of products you prefer for your child involved in study?

Urban area parents use hygienic products as branded (36%), homemade (36%), herbal (5%) any other (1%), any two type products (19%), any three type products (1%) as compared to rural area parents choices branded (48%), homemade (9%), herbal (36%), any other (0%), any two type products (7%), any three type products (0%) respectively as represented in **Figure 19** and graphically shown in **Table 19**.

Table 19:-Which type of products you prefer for your child

S.N.	Preference of products	Urban (%)	Rural (%)
1.	Branded	36	48
2.	Homemade	36	09
3.	Herbal	05	36
4.	Any other	01	00
5.	More than two types products	19	07
6.	More than three types products	01	00

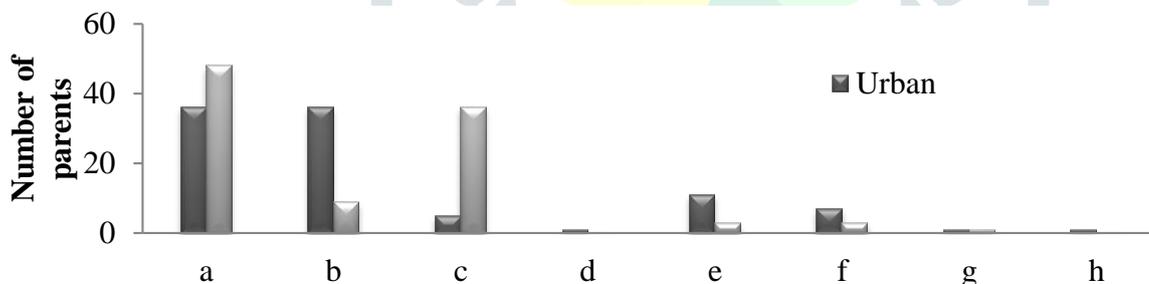


Figure19:- Nature of food products selected by parents of urban area and rural area for their children

Q19. What you think about the use of food products for your child involved in study?

Percentage of urban area parents about food products use for their children as 23% use for nutrition as compared to 21% of rural area parents thought, for balanced diet 20% as compared to 0%, for taste 7% as compared to 0%, for nutrition and balanced diet 10% as compared to 36%, for nutrition and for taste 16% as compared to 30%, for balanced diet and for taste 2% as compared to 0% and for nutrition, balanced diet and for taste 21% as compared to 13% as represented in **Figure 20** and represented in **Table 20**.

Table 20:-What you think about the use of food products for your child

S.N.	Use of products	Urban (%)	Rural (%)
1.	For nutrition	23	21
2.	Balanced diet	20	00
3.	For taste	07	00
4.	Any other	00	00
5.	For nutrition + Balanced diet	10	36
6.	For nutrition + For taste	16	30
7.	For nutrition + For taste	2	00
8.	Balanced diet + For taste + balanced diet	21	13

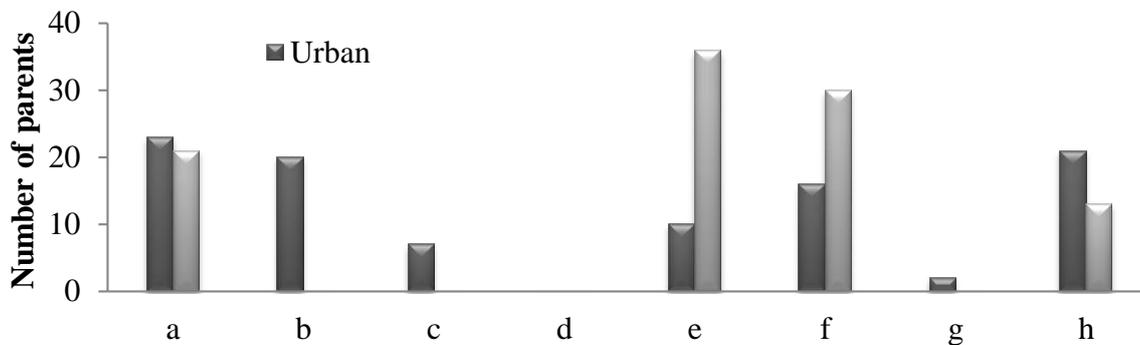


Figure20:- Percentage of purpose of use of food products used for children by parents of both urban and rural area

Q20. How many times you use food products for your child involved in study?

Urban area parents use pasta daily 15% as compared to 10% by rural area parents, twice daily 3% as compared to 1%, weekly 0% as compared to 1%, monthly 3% as compared to 0%; soups once as compared to, twice as compared to, occasionally as compared to; biscuits daily as compared to, twice daily as compared to, thrice daily as compared to, quaternary as compared to, weekly as compared to; Juice once daily 42% as compared 36%, twice daily 25% as compared to daily 34%, thrice daily 7% as compared to 3%, quaternary daily 1% as compared to 0%, weekly 5% as compared to 1%; noodles once daily 28% as compared to 39%, twice daily 10% as compared to 4%, thrice daily 0% as compared to 1%, weekly 6% as compared to 0%, monthly 1% as compared 0%; any other milk product daily 2% as compared to 0%, kinder joy weekly 1% as compared to 0%, pizza monthly 1% as compared to 0% as represented in **Figure 21** and graphically represent in **Table 21**.

Table 21:-How many times you use food products for your child

Types of products		Urban (%)	Rural (%)
a)	Pasta -		
(1)	Once daily	15	10
(2)	Twice daily	03	01
(3)	Weekly	03	00
(4)	Monthly	00	01
b)	Soups -		
(1)	Once daily	21	19
(2)	Twice daily	09	03
(3)	Occasionally	04	00
c)	Biscuits -		
(1)	Once daily	33	27
(2)	Twice daily	50	50
(3)	Thrice daily	05	13
(4)	Quaternary daily	04	00
(5)	Weekly	01	02
d)	Juice -		
(1)	Once daily	42	36
(2)	Twice daily	25	34
(3)	Thrice daily	07	03
(4)	Quaternary daily	01	00
(5)	Weekly	05	01
e)	Noodles-		
(1)	Once daily	28	39
(2)	Twice daily	10	04
(3)	Thrice daily	00	01
(4)	Weekly	06	00
(5)	Monthly	01	00
f)	Any other -		
(1)	Milk product daily	02	00
(2)	Kinder joy weekly	01	00
(3)	Pizza monthly	01	00

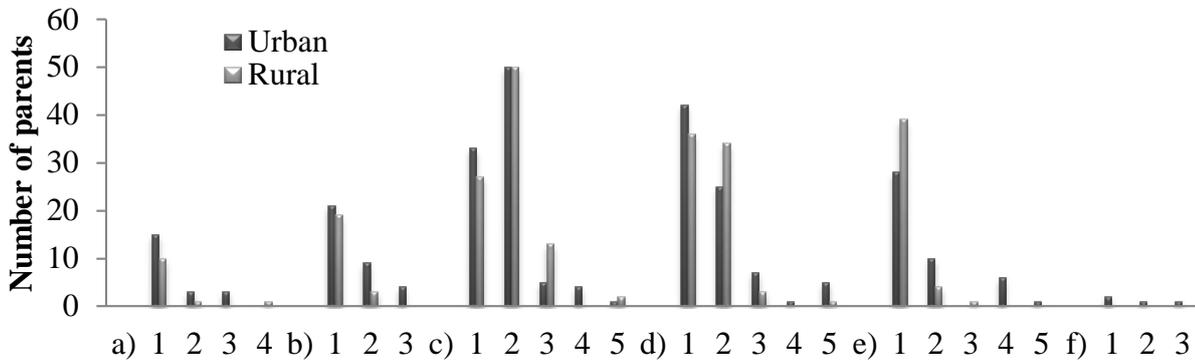


Figure21:- Representation of frequency of use of food products by parents of urban area and rural area

Q21. Which of the following drink (milk) products you prefer for your child involved in study?

Parents of urban area choose various drink products as bournvita 31% as compared to 61% of rural area parents, horlicks 22% as compared to 4%, complain 18% as compared to 8%, any other 9% as compared to 0%, above mentioned any two products 8% as compared to 7% and above mentioned three products 0% as compared to 2% by rural area parents respectively as represented in Figure 22 and graphically shown in Table 22.

Table 22:-Which of the following drink (milk) products you prefer for your child

S.N	Preference of milk products	Urban (%)	Rural (%)
1.	Bournvita	31	61
2.	Horlicks	22	04
3.	Complain	18	08
4.	Any other	16	17
5.	Nothing	09	00
6.	More than two products	08	07
7.	More than three products	00	02

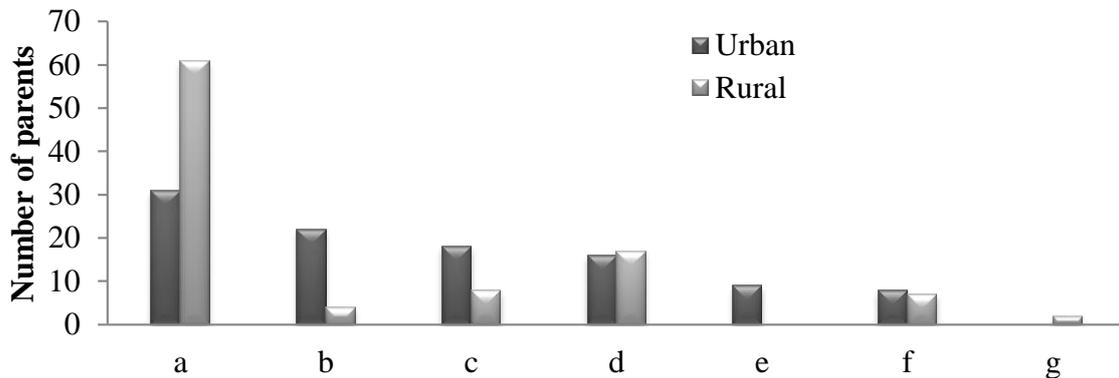


Figure22:-Representation of types of drink products (milk products) by parents of urban and rural area

Q22. What you think about the use of use of drink products for your child involved in study?

Urban area parents use drink products for nutrition purpose 16% as compared to 4% of rural area parents, for body growth 21% as compared to 0%, for taste 5% as compared to 1%, for immunity 4% as compared to 0%, any other (no specific purpose) 10% as compared to 0% of rural area parents. Parents of urban area use drink products 14% more than any two purpose 14% as compared to 11% of rural area parents; 17% more than three purpose as compared to 71% and more than four purposes or all-purpose 13% as compared to 16% by rural area parents represented in Figure 23 and graphically shown in Table 23.

Table 23:-What you think about the use of use of drink products for your child

S.N.	Use of drink products	Urban (%)	Rural (%)
1.	For nutrition	16	04
2.	For body growth	21	00
3.	For taste	05	01
4.	For immunity	04	00
5.	Any other	10	00
6.	More than two purposes	14	11
7.	More than three purposes	17	71
8.	More than four purposes	13	16

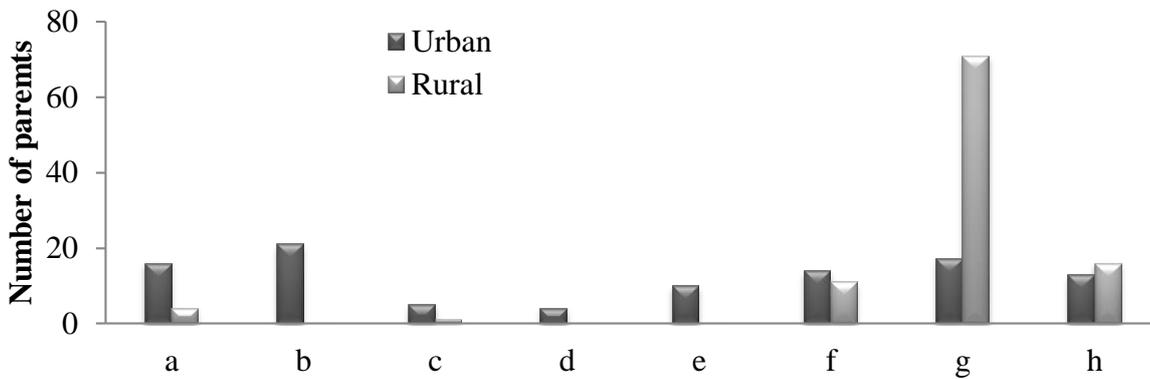


Figure23:- Represents % of purpose of drink products use by urban area and rural area parents

Q23. How many times you use drink products for your child involved in study?

Urban area parents use drink products hourly 2% as compared to 25% by rural area parents, daily 53% as compared to 54%, twice daily 36% as compared to 16% and any other 9% as compared to 5% by rural area parents represented in **Figure 24** and graphically shown in **Table 24**.

Table 24:-How many times you use drink products for your child

S.N.	Use drink products	Urban (%)	Rural (%)
1.	Hourly	02	25
2.	Daily	53	54
3.	Twice Daily	36	16
4.	Any other	09	05

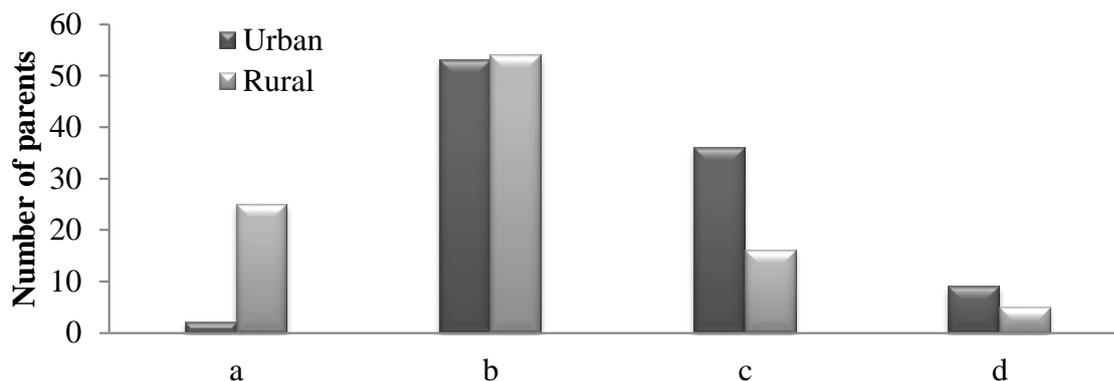


Figure24:-

Represents frequency of use of drink products by parents of urban area and rural area

Discussion-

A face-to-face questionnaire based forms of 100 parents from each urban and rural area were filled, collected and analyzed. Parents of urban area were having higher qualification as compared to rural area parents. In this study the number of parents who have children of age 0-7 year were comparatively higher than age 7-10 year, but the number of children of age 0-7 year and 7-10 year were comparatively equal from both areas urban and rural coincidentally in random collected data. Parents of urban area were comparatively less conscious about look of their child as compared to the parents of rural area. Rural area parents prefer large number of cosmetics use with high frequency for their children than urban area. A 38% of urban area parents thought that cosmetics are not useful in health care of skin as compared to 1% of rural area parents. And that may be as the urban area parents have less time for their children by any reason for example outdoor jobs etc. As the number of parents of rural area prefers more use of cosmetics for their child hence this is due to their myth of health consciousness purpose of cosmetic products. The study also supported by literature as major awareness about cosmetic product increased by TV channels (Bhagwat et al., 2012). This can be result of their thoughts as use of cosmetic enhance beauty and improve look of child hence in collected data the thought of needs of cosmetics for child, the % of parents of rural area is comparatively higher than urban area parents. From result it has been observed that there was a major different between thought that no need of cosmetics for children between % of urban and rural area parents.

Urban area parents thought that their child does not need any cosmetics that can be due to their education level and can be due to their thought as look not so more important. As urban area parents who are less conscious about look of child are 12% as compared to 0% of rural area and for very less consciousness is 4% in urban area parents as compared to 0% in rural area. But from study it's clear that all parents either of rural or urban area who prefers cosmetics were also attentive for intentions of use of cosmetics. The dispersion for selection of cosmetics depends on sex, age, skin tone and education standard. Some products have been used frequently for example creams, body lotions, but toothpaste, kajal and perfumes were used generally used one or two times daily (Biesterbos et al., 2013). The parents of urban area preferred branded products comparatively higher than rural area parents but rural area parents not more specific towards types of products. The urban area parents might think that branded products have best in quality and safety. The % of urban area's parents who preferred herbal products was higher than rural area parents this can

be result of their qualification standard which improves their attentiveness towards natural resources and avoid of chemicals. The % of parents of urban area also prefers homemade beautifying agents high as compared to rural area. Now a day rural area peoples are more attracted towards readymade products available in market that can be the result of advertisement impact and their state of thought as waste of time and work to prepare products as the similar products already available in market. The use of cosmetics for fragrance and beauty improvement has been already described in previous study (Comiskey et al., 2015).

Level of consciousness of urban area parents about hygienic conditions was found to be comparatively higher than rural area parents. Urban area parents were highly attentive towards sanitary conditions than look or beauty of child. Use of flavoured toothpaste by urban area parents was found to be higher than rural area parents, as urban area peoples mostly preferred some new available products in market as their myth of modernisation and status by use branded products. The hand-washing practices of the parents and children has been related to prevention of common unhygienic conditions, the unhygienic environment exposure induce several infections in children (Takanashi et al., 2009). From previous studies it has been confirmed that the increased in dental caries among preschool aged children has been increasing from previous years. The children must require proper oral hygienic practices for prevents of early dental problems (Kranz et al., 2012). American Academy of Pediatric Dentistry (AAPD) reported that children of age below 6 use toothpaste which contains less than 500 ppm concentration of fluoride. The use of toothpaste containing about 1000 ppm of fluoride causes fluorosis in children and in adults also. So, education of mothers is also essential for the selection of tooth pastes for their children. Mothers must be aware during selection of toothpaste for their children, not choose any toothpaste as they containing fluoride in high concentration. Generally available toothpaste in market has high concentration of fluoride than recommended concentration (Bennadi et al., 2014; Wright et al., 2014; Basch et al., 2016).

The parents of urban area uses food products higher then as compared to rural area parents but the rural area parents use both food and drink products higher than urban area parents. Urban area parents select food products-junk food comparatively higher than rural area parents. Urban area parents choose food products for their child about thinking taste of product as compared to rural area. But rural area parents choose food products highly for fulfilment of nutrition of their child. The selection of junk foods and frequency of use of junk food by urban area parents is higher than rural area parents. Parents of rural area choose drink (milk) products comparatively higher than urban area parents. As the parents of urban area thought about taste of child hence they prefer multiple combinations of drink products comparatively higher then rural area parents (Dougkas et al., 2019). During childhood milk and milk products are useful as they are rich in calcium, protein, phosphorus, and other micronutrients which promote neuronal, skeletal and muscular development and they relatively high saturated fat value (Visioli et al., 2014). The purpose of use of food and milk products is well known to both area parents. The food habits as consumption of junk foods by school going children results poor mental and physical health in them at growing stages. The food habits of child is more influenced by parenting style interventions to improve diet must be possible by parents awareness when they faced issues related to mental and physical health (Zahra et al., 2013; Das et al., 2015; Ashakiran et al., 2012; Datar et al., 2012). This is supported by previous study as parents have a very important role in educating and training children in healthy eating habits (Doichinova et al., 2015). The frequency of use of drink products is comparatively higher by rural area parents than urban area parents as everybody know that rural area people thought about health hence the villagers always use high amount of milk, curd, butter and some other products from natural origin.

Conclusion-

This study finds out the knowledge and practices of personal hygiene, food products and cosmetics among the children by their parents living in urban and rural area. The urban area parents preferred branded products more but the rural area more use natural products. Rural area parents are more conscious about look of child but urban area parents more careful about health and also sanitary conditions of their children as compared to rural area parents who are less solicitous about sanitary conditions. The purpose of use of cosmetics is less clear in rural area parents. The packed foods are used comparatively high by urban area parents than rural ones. Urban area parents used more drink products (formulated by milk) in high amount as compared to rural area for nutritional purpose. This study gives awareness about the side effect of cosmetic products used by the parents on children. The parents of urban area used more hygienic products as compare to rural area.

References-

1. Amin TT., Oral hygiene practices, dental knowledge, dietary habits and their relation to caries among male primary school children in Al Hassa, Saudi Arabia. *International Journal of Dental Hygiene* 2008; 6 (4), 361-370.
2. Amit Lather, Vikas Gupta, AK Chaudhary, Ranjit Singh, Parveen Bansal, Pankaj Ghaiye & Renu Bansal., *In vitro* evaluation of antimicrobial activity of *Kutajghanvati*- An Ayurvedic formulation. *Pak. J. Pharm. Science*. 2012; 25(3), 693-696.
3. Amit Lather, Anil Kumar, Vikash Kumar, Vikash, Renu Sherawat., Pharmacological Potential of Plants Used in Dental Care: A Review. *J. Herbal Drugs*. 2015; 5(4), 179-186.
4. Amit Lather, Sunil Sharma, Sarita Khatkar, Anurag Khatkar., Docking Related Survey on Heterocyclic Compounds Based on Glucosamine-6- Phosphate Synthase Inhibitors and their Antimicrobial Potential. *Current Pharmaceutical Design*. 2020; 26(15), 1650-1665.
5. Amit Lather, Sumit Sigroha, Anurag Khatkar., Phenolic acid derivatives as preservatives: synthesis, antioxidant, antimicrobial potential and preservative effectiveness. *IJPSR*. 2021; 12(10), 5526-5537.
6. Ashakiran S and Kiran D., Fast foods and their impact on health. *Journal of Krishna Institute of Medical Science University*. 2012; 1 (2), 7-15.
7. Basch H C and Kernan D W., Ingredients in children's fluoridated toothpaste: a literature review. *Global Journal of Health Science*. 2016; 9 (3), 1.
8. Bennadi D, Kshetrimayum N, Sibyl S and Reddy K V C., Toothpaste utilization profiles among preschool children. *Journal of Clinical & Diagnostic Research*. 2014; 8 (3), 212-215.
9. Bhagwat A, Salunke M, Phutane K., Consumer Survey of Cosmetic Products. *IJPI's Journal of Hospital and Clinical Pharmacy*. 2012; 2, 19-26.

10. Biesterbos J, Dudzina T, Delmaar C., Usage patterns of personal care products: important factors for exposure assessment. *Journal on Food and Chemical Toxicology*. 2013; 55, 8-17.
11. Comiskey D, ApiA M, Barratt C, Daly J E, Ellis G., Novel database for exposure to fragrance ingredients in cosmetics and personal care products. *Regulatory Toxicology and Pharmacology*.2015; 72 (3), 660-672.
12. Das J., Fast food consumption in children: a review. *Medical and Clinical Reviews*. 2015, 1 (1).
13. Datar A and Nicosia N., Junk food in schools and childhood obesity. *Journal of Policy Analysis and Management*. 2012: 31 (2), 312-337.
14. Doichinova L, Bakardjiev P, Peneva.,Assessment of food habits in children aged 6-12 years and the risk of caries. *Biotechnology, Biotechnological Equipment*. 2015: 29 (1), 200-204.
15. Dougkas A, Barr S, Reddy S and Summerbell D C., A critical review of the role of milk and other dairy products in the development of obesity in children and adolescents. *Nutrition Research Reviews*. 2019: 32 (1), 106-127.
16. Husain K., A survey on usage of personal care products especially cosmetics among university students in Saudi Arabia. *Journal of Cosmetic Dermatology*. 2019: 18 (1), 271-277.
17. Kalicanin B, D Velimirovic., A study of the possible harmful effects of cosmetic beauty products on human health. *Biological Trace Element Research*.2016: 170 (2), 476-484.
18. Kranz M A, Rozier G R., Oral Health content of early education and child care regulations and standards. *Journal of Public Health Dentistry*. 2011: 71 (2), 81-90.
19. Niedworok G E, Calyniuk B, Kolasa I, Grajek M., Consumption of milk and milk products in the population of the upper Silesian agglomeration inhabitants. *Food & Nutrition research*. 2016: 60-10.
20. Pal M, Jadhav VJ., Microbial contamination of various milk products. *Beverage and Food World*. 2013; 40: 43-44.
21. Pal M, Devrani M, Pinto S., Significance of Hygienic Processing of Milk and Dairy Products. *Madridge Journal of Food Technology*. 2018; 3(2): 132-136.
22. Takanashi K, Chonan Y, Quyen T D and Poudel C K., Survey of food hygiene practices at home and childhood diarrhoea in Hanoi. *Journal of Health, Population and Nutrition*. 2009: 27 (5), 602-611.
23. Visioli F, Strata A. Milk., Dairy products and their functional effects in humans: a narrative review of recent evidence. *Advances in Nutrition. An International Review Journal*. 2014: 5 (2), 131-143.
24. Wright T J, Hanson N, Estrich C., Fluoride toothpaste efficacy and safety in children younger than 6 years. *Journal of the American Dental Association*. 2014: 145 (2), 182-189.
25. Zahra J, Ford T and Jordrell D., Cross-sectional survey of daily junk food consumption, irregular eating, mental and physical health and parenting style of British secondary school children. *Child Care Health Development*. 2014: 40 (4), 481-491.

