Original Research Paper

Home Science

A STUDY ON KNOWLEDGE OF WEANING FOODS AMONG RURAL MOTHERS OF INFANTS (6-12 MONTHS)

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| ABSTRACT As infants start growing, their appetite also starts increasing and requires more calories which can be | | | | |

done the introduction of solid foods step-by-step and this gradual transition from breast milk to solid food is known as weaning. The purpose of the study was to assess the level of knowledge, attitude and practices of rural mothers regarding weaning food. The study was conducted in selected rural areas of Trivandrum district. The data were collected from 100 mothers of infants aged between 6 to 12 months. A well-structured questionnaire was framed to collect the necessary details needed for the study from mothers. 70 per cent of questionnaires were given to the mothers through Google forms and 30 per cent of questionnaires were given directly as printed forms to the mothers those who have no internet access at their homes. Details regarding socio-economic status, anthropometry, immunization, nutrition of samples were taken using the tools. Also the mother's level of knowledge, attitude and practices on weaning were studied. The result revealed that the majority of mothers have good level of knowledge and attitude on weaning and in the case of practice, slight improvement is needed. Also there arises a strong doubt on the time of starting weaning. The nutritional status of infants were computed and found only moderate stunting.

KEYWORDS : weaning, exclusive breastfeeding, weaning foods, immunization

INTRODUCTION

The WHO recommends that the mothers should breast feed babies exclusively for the first six months and the breast feeding should continue with weaning till 2 years or beyond. Weaning before six months is not recommended as baby's digestive tract is not fully matured and weaning after 6 months is also not recommended as it may leads to deficiencies and malnutrition. Weaning is helpful for growth and development of the baby. Through weaning, the child learns to chew and swallow the food. Weaning also helps the child to explore the tongue, lip and jaw movements. When the baby is introduced to new solid foods, the digestive system of the child starts to develop and the baby starts developing like and dislike towards food. (www.mfine.com).

Akpor et al., (2020), opined that weaning is the process of gradually introducing an infant to adult foods while gradually withdrawing breast milk. The child is not abruptly taken off breast milk, the process of weaning should be started after the age of 6 months and natural weaning happens as the infant starts to accept increasing amounts and different variety of complementaryfeedings although still breastfeeding on request.

Improving the nutritional value of weaning foods by itself only will not eliminate the problems of poor weaning practices. Training and providing qualitative nutritional education should be given to mothers to change feeding practices and to improve the quality of the children's diet during weaning (Ogunsemore, 2006).

According to Kavitha et al, (2014), Initiating complementary feeds too early or too late can lead to malnutrition. Proper breast feeding and complementary feeding practices can prevent under five mortality by 19% (Aliyu, Duru, Lawal, Mohammed, 2014). Vyas et al (2014) explored that, that mothers in India are not able to start complementary feeding at the right time. So Knowledge of mother about these factors will help in planning interventions to improve feeding practices.

Objectives of the Study

1. To elicit the socio economic profile of the respondents

2. To assess the Knowledge of weaning food among mothers of Infants

Methodology

The area selected for the study was rural regions under Vellanad block and other rural areas of Trivandrum district. The list of Anganwadis registered under CDPO, Aryanad was collected and four Anganwadis are identified for the study and remaining was collected from other rural areas. A total of 100 mothers of infants in the age group of 6 to 12 months were selected for the study by using purposive sampling method. A well-structured questionnaire was framed to collect necessary information respondents. 70 questionnaires were send to mothers of samples through online platforms by Google forms. And remaining 30 questionnaires were given to mothers directly through Anganwadis those who do not have internet access. A KAP scale was used to assess the knowledge of mothers on weaning. It comprises of 10 statements each with positive and negative statements. A pilot study was carried out among 25 samples from the nearby locality, in order to check the feasibility of the tools developed. The collected data were analysed with the help of commercially available statistical package SPSS v.23.

RESULTS AND DISCUSSION I. Socioeconomic profile of the Respondents

| SL. | Variables | Frequency | Percent |
|-----|------------------------|-----------|---------|
| NO | | | (%) |
| 1 | Age of the samples | | |
| | 6-8 months | 45 | 45% |
| | 9-12months | 55 | 55% |
| 2 | Gender of the samples | | |
| | Boys | 50 | 50% |
| | Girls | 50 | 50% |
| 3 | Educational details of | | |
| | upto 10th | 21 | 21% |
| | upto 12th | 13 | 13% |
| | undergraduate | 41 | 41% |
| | postaraduate | 23 | 23% |

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| | Others | 2 | 2% | | | |
|---|---------------------------------|----|-----|--|--|--|
| 4 | Educational details of mother | | | | | |
| | upto 10th | 9 | 9% | | | |
| | upto 12th | 23 | 23% | | | |
| | undergraduate | 40 | 40% | | | |
| | postgraduate | 27 | 27% | | | |
| | Others | 1 | 1% | | | |
| 5 | Occupational details of father | | | | | |
| | Government | 19 | 19% | | | |
| | Private | 32 | 32% | | | |
| | Farming | 19 | 19% | | | |
| | Others | 30 | 30% | | | |
| 6 | Occupationa l details of mother | | | | | |
| | Government | 5 | 5% | | | |
| | Private | 20 | 20% | | | |
| | Student | 4 | 4% | | | |
| - | Housewife | 71 | 71% | | | |

Regarding the age, half (55%) of the infants belonged to the age group of 9 to 12 months. years. The gender wise breakup reveals that equal (50%) were boys and girls. Regarding educational qualification of the infants, Mothers (41%) Fathers (40%) are completed their under graduation courses in varies stream of education. 32% of the infants fathers were private employees, and nearly three fourth (70%) of the infants mothers are house wives. Thus the analysis reveals that all the mothers of the infants were educated. As per census data the Kerala knows as 100% literate states. The study is coinciding with census report of Trivandrum district.

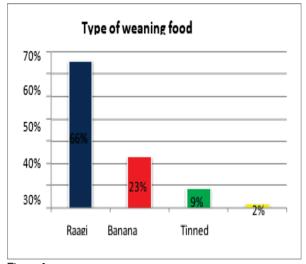
Table 2 Monthly Income Of The Family

| SL NO | Income | No. of samples | Percent |
|-------|-----------------|----------------|---------|
| 1 | Below 10,000 | 27 | 27% |
| 2 | 10,000 - 20,000 | 19 | 19% |
| 3 | 20,000 - 30,000 | 22 | 22% |
| 4 | Above 30,000 | 32 | 32% |

Table 2 shows that 27 percent of families had monthly income below Rs 10,000, 19 percent of families had monthly income of 10,000- 20,000, 22 percent of families had monthly income 20,000-30,000 and 32 percent of families have high monthly income above 30,000. Low income may affect the diet of family members. 46 percent of samples belong to nuclear family, 49 percent belong to joint family and 5 percent of samples have single parent.

II. Types of Weaning Foods

Weaning foods are semi solid foods which are introduced to baby during weaning period. The type of weaning food may vary based on regions and other factors and it shows in Figure 1.



III. Knowledge of Mothers of Infants (6-12 Months) on WeaningFood

In order to assess the knowledge on weaning food among mothers of infants (6-12 months, ten statements were considered. Since the responses of infants mothers were asked to state their level agreement on weaning food in a 4 point ranking scale (4: Strongly Agree; 3: Agree; 2: Disagree; 1: Strongly Disagree), 40 being the highest score of the respondent 10 bing the lowest score of the respondent.

| Table 3 Knowledge | of Mothers | of Infants | (6-12 Months) | on |
|-------------------|------------|------------|---------------|----|
| Weaning Food | | | | |

| SL NO | STATEMENT | GLY AGREE (%) | AGR EE (%) | DISAG REE (%) | STRON GLY DISAG REE (%) |
|----------|---|---------------------|------------------|---------------------|----------------------------------|
| 1 | Complementary feeding or weaning is the transformation of food patterns to a semi solid consistency along with breast feeding at the age of 6 months. | 50 | 39 | 11 | 0 |
| 2 | Early introduction of complementary foods (before 6 months)make your child healthier. | 11 | 32 | 50 | 7 |
| 3 | There is no need to start complementary feeding at the age of 4 months | 23 | 48 | 28 | 1 |
| 4 | Delay in the introduction of complementary feeding affect the growth of your child. | 31 | 53 | 14 | 2 |
| 5 | Homemade complementary foods should be properly stored in hygienic conditions | 66 | 33 | 1 | |
| 6 | Experimenting with different food ingredients is good for complementary feeding | 25 | 60 | 12 | 3 |
| 7 | In the initial stage of complementary feeding it is advisable to paste food in a mixer. | 15 | 72 | 12 | 1 |
| 8 | It is advisable to paste food after 1 year also. | 10 | 20 | 55 | 15 |
| 9 | Diversity in complementary feeding improves the nutrient quality and palatability. | 37 | 62 | | 1 |
| 10 | Cereal –pulse and Amylose rich food are good for weaning that enhances better nutrition | 37 | 57 | 5 | 1 |

Table 3 reveals that the level of knowledge of mothers on weaning. Majority of mothers have good knowledge on weaning.

From the table, ANOVA showed that there do not exist any significant difference in the knowledge of mothers on weaning based on type of family (F=1.231, P>0.05). The average knowledge of mothers on weaning who belongs to the category single parent, joint, nuclear are 29.20 ± 0.20 ,

Figure 1

 31.18 ± 0.36 , 31.13 ± 0.45 , 31.06 ± 0.27 respectively. Thus all the groups reported same level of knowledge of mothers on weaning.

Table 4: Test Of Significance (ANOVA) For The Comparison Of Knowledge Of Mothers On Weaning Based On Type Of Family

| | Sum of | df | Mean | F | P Value |
|----------------|---------|----|--------|-------|---------|
| | Squares | | Square | | |
| Between Groups | 18.26 | 2 | 9.13 | 1.231 | 0.296NS |
| Within Groups | 719.38 | 97 | 7.42 | | |
| Total | 737.64 | 99 | | | |

NS: Not Significant (P>0.05)

Table 5: Test Of Significance (ANOVA) For The Comparison Of Knowledge Of Mothers On Weaning Based On Education Details Of Mother

| | Sum of Squares | | Mean Square | F | P Value |
|----------------|-------------------|----|----------------|-------|------------|
| Between Groups | 20.09 | 2 | 10.045 | 1.358 | 0.262 |
| Within Groups | 717.55 | 97 | 7.397 | | NS |
| Total | 737.64 | 99 | | | |

From the table, ANOVA showed that there do not exist any significant difference in the mean among the knowledge of mothers on weaning based on education details of mother (F=1.358, P>0.05). The average knowledge of mothers on weaning who have education up to10th, up to 12th and graduates are 30.00 ± 0.73 , 30.77 ± 0.43 , 31.38 ± 0.38 respectively. Thus all the groups reported same level of knowledge on weaning.

Table 6: Test Of Significance (ANOVA) For The Comparison Of Knowledge Of Mothers On Weaning Based On Monthly Income

| | Sum of | D. F. | Mean | F | Р |
|----------------|---------|-------|--------|--------|---------|
| | Squares | | Square | | Value |
| Between Groups | 63.95 | 3 | 21.317 | 3. 038 | 0.033 * |
| Within Groups | 673.69 | 96 | 7.018 | | |
| Total | 737.64 | 99 | | | |

NS: Not Significant (P>0.05)

From the table , ANOVA showed that there exists significant difference in the mean among the knowledge of mothers on weaning based on monthly income (F=3.038, P<0.05). The average knowledge of mothers on weaning with monthly income below 10,000, 10,000-20,000, 20,000-30,000, above 30,0000 are 30.14 ± 0.46 , 31.26 ± 0.67 , 30.64 ± 0.52 , 32.13 ± 0.51 respectively . Thus all the groups reported different level of knowledge on weaning.

Table 6: Sheffe's Post Hoc Test of knowledge of mothers on weaning based on monthly income

| Group 1 | Group 2 | MD | Р | |
|--|----------------|--------|---------|--|
| Below 10,000 | 10,000- 20,000 | -1.125 | 0.560NS | |
| Below 10,000 | 20,000- 30,000 | -0.498 | 0.931NS | |
| Below 10,000 | Above 30,000 | -1.995 | 0.045* | |
| 10,000-20,000 | 20,000- 30,000 | 0.627 | 0.903NS | |
| 10,000-20,000 | Above 30,000 | -0.870 | 0.740NS | |
| 20,000-30,000 | Above 30,000 | -1.497 | 0.263NS | |
| *: Significant $(D < 0.05)$ NS: Not significant $(D > 0.05)$ | | | | |

*: Significant (P<0.05), NS: Not significant (P>0.05)

Sheffe's Post Hoc test revealed that the significant pairwise mean differences is also significant for below 10,000 and above 30,000 (MD=-1.995, P<0.05). But no significant variations is observed between below 10,000 and 10,000-20,000(MD=- 1.125, P>0.05), below 10,000 and 20,000-30,000(MD=-0.498, P>0.05), 10,000-20,000 and 20,000-30,000(MD=-0.627, P>0.05), 10,000-20,000 and above 30,000(MD=- 0.870, P>0.05) and 20,000-30,000 and above 30,000(MD=-1.497, P>0.05).

CONCLUSION

The findings from the result showed that the majority of the mothers have good knowledge about feeding and weaning of their infants. The study also shows that the level of knowledge, of mothers have no significant relation with type of family, and educational status of mothers. But they have a significant relationship with monthly income. The mothers of samples have slight confusion about the time at which weaning should be introduced. As a result the infants are weaned earlier at 4 months. But at that time the child's digestive system is not fully developed, so early weaning affects the digestion of the infants. Also the amount of required breast milk would also decrease if weaning is introduced earlier.

REFERENCES

- Akpor et al., (2020). Feeding and weaning practices among mothers of underfive children in selected primary health care centres in Ado-Ekiti, Ekiti, Nigeria. Available from: https://www.researchgate.net/ publication/ 338866105_Feeding_and_weaning_practices_among_mothers_of_underfive_children_in_selected_primary_health_care_centres_in_Ado-Ekiti_Ekiti_Nigeria[accessed]ul 24 2023].
- Aliyu I, Duru C, Lawal TO, Mohammed A. (2014). Breastfeeding and weaning practices among Nigerian women. J Med Invest Pract.; 9(4):140-3.
- Kavitha S, Nadhiya C, Parimalavalli R.(2014). Study of complimentary feeding practices among mothers of infants aged six months to one year, J Med Invest Pract, 5(2):29-35.
- Ogunsemore, O. S. (2006). Weaning foods and their impact on child-feeding practices among low-income Nigerian mothers. Food and Nutrition Bulletin, 327-334.
- Vyas S, Kandapal SD, Semwal J, Chauhan S, Nautiyal V. (2014). Trends in weaning practices among infants and todlers in hilly terrain of a newly formed state of India, Intern J Prevent Med. 5(6):741-8.