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Effectiveness of Video Assisted Teaching Module on knowledge regarding weaning among Mothers of children aged between 6 months to 2 years at selected rural areas of Bangalore South District.

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Abstract :

Aim: To determine the effectiveness of the video-assisted-teaching module on knowledge regarding weaning among mothers of children aged between 6 months to 2 years.

Materials and Methods: This study used one-group pre-test, post-test design. Mothers with the ages of six months to two years participated in this study, from rural areas of Bangalore South District. Adopted Sample size to carry the study is 60 mothers with children ages six months to two years. A self-administered closed ended knowledge questionnaire was used to collect data.

Results: Following data collection, the mean, median, and percentage are used to arrange and analyze the data. 38.33% of participants had average knowledge, according to the pre-test percentage distribution of mothers based on their knowledge, 28.33% mothers were having poor knowledge, 25% mothers were having good knowledge, 8.33% mothers had very poor knowledge with mean pre-test 47.9% (14.37±4.85). After video assisted teaching module 100% mothers were having very good knowledge with mean post-test 95.26% (28.58±0.92) and there are no participants with good, average, poor, or very poor weaning knowledge whose children are between six months and two years old. The effectiveness of the video-assisted teaching module was demonstrated by the statistically significant difference between the pre-test and post-test scores of knowledge ($t=23$, $p<0.05$). At the 0.05% level of significance, a significant association seen between knowledge scores of mothers and selected demographic variables including children age and religion.

Conclusion: After post-test mothers improved their knowledge regarding weaning. So that study comes to the conclusion that video assisted teaching module can be used in community and maternal health settings and is a useful way to improve mothers understanding of weaning.

Index Terms **- Effectiveness, Video assisted teaching module, Knowledge, Weaning.**

Introduction

Weaning is Crucial as breast milk alone is inadequate to satisfy infants nutritional requirements six month after birth. In an effort for the child to reach its full genetic potential, it helps to meet its growing nutritional needs for overall children development and growth. Breastfeeding for the initial six months of life, the right moment to wean, and the quality of weaning food during the process of weaning greatly impact children health and dietary habits for the rest of their lives.[1]

Weaning is adventitious in lowering premature infant mortality rate. Accurate knowledge and competent assistance from the family, community, and healthcare system are essential for appropriate weaning practices. Insufficient knowledge about suitable diets and weaning techniques is frequently a more significant cause of malnutrition in early childhood and infancy.[2]

As stated by UNICEF, In 2023, almost 4.8 million children under five died. This means that in 2023, 13,100 children under the age of five will pass away every day.[3] An estimated one million children die each year as a result of undernutrition.[4] Under-five mortality can be reduced by 19% with appropriate breastfeeding and supplemental feeding techniques. Accurate information and knowledgeable assistance from the family, community, and healthcare system are essential for appropriate weaning feeding.

Insufficient knowledge regarding suitable diet and dietary habits is frequently a stronger indicator of malnutrition than insufficient food supply. Information of mothers regarding these factors will surely help in preparing strategies to enhance feeding habits. Numerous research studies have shown that Indian mothers are unable to begin weaning feeding at the appropriate period.[5,6].

India accounts for the majority of under-five deaths and underweight children. In 2023, approximately one lakh children under-five in India perished as a result of growth-related issues.[7]

According to the Office of the registrar- General of India's 2023 Sample survey Registration Survey (SRS), the infant mortality rate in India is 25 per 1000, whereas in Karnataka it is 14 per 1000 live births.[8]

Malnutrition is one of the leading causes of infant mortality. Malnutrition, diarrhoea, and stunted growth result from under-nutrition, which can cause immunodeficiency, kwashiorkor, marasmus, and potentially fatal chronic infections.[9]

Inappropriate feeding habits causes malnutrition and feeding issues, which eventually raise children mortality and morbidity rates. Malnutrition accounts for 60% of under-five deaths globally each year, with poor feeding practices accounting for more than two-third of these deaths.[10]

A per report of WHO and UNICEF, improper infant feeding and care practices remain a major global concern with long-term social and economic implications. Being in large part, it is a created by man, it needs to be taken into account as a disgrace to science and technology and a burden on our progress.[11]

Hence with the aim to determine the effectiveness of Video Assisted Teaching Module on knowledge regarding weaning among mothers of children aged between 6 months to 2 years from rural areas of Bangalore South district, Karnataka was planned.

Objectives

1. To assess the knowledge about weaning among mothers of children aged between 6 months to 2 years.
2. To determine the effectiveness of video-assisted-teaching module on knowledge regarding weaning among Mothers of children aged between 6 months to 2 years.
3. To find out the association between knowledge with their selected socio-demographical variables.

MATERIALS AND METHODS

The present study was conducted on a quantitative research approach and pre-experimental one group pre-test, post-test without control group research design. A pre-test was conducted on mothers of children aged between 6 months to 2 years using validated structured knowledge questionnaire. The sample size was 60 mothers. Mothers of children ages 6 months to 2 years received an intervention in the form of a video-assisted-teaching module on weaning knowledge. The efficiency of the teaching module was evaluated by a post-test using the same validated structured knowledge questionnaire. The data were collected by structured closed ended knowledge questionnaire. Descriptive statistics like frequency distribution, mean, median, and percentage as well as inferential statistics like chi-square and Fisher's exact test were used for data analysis and interpretation.

RESULTS

Part A: Description of Demographic variables of the Mother of children aged between 6 months to 2 years.

With reference to age, the majority of mothers belonged to the 20-25 years group (45%), followed by the 26-30 years group (41.66 %). Smaller proportions were observed among mothers aged 31-35 years (11.67%) and 36 years and above (1.67%)

In terms educational status, majority of mothers had completed primary education (35%), followed by secondary education (26.67%), mothers with no formal education (23.33%). The smaller proportions were observed among mothers with degree and above (8.33%) and PUC (6.67%).

With respect to religion, a majority of mothers belonged to Hindu (78.33%), followed by Christian (11.67%), The remaining mothers were distributed across Muslim (8.33%) and others (1.67%).

Regarding the type of family, most mothers belonged to nuclear families (58.33%), whereas the rest were from joint families (36.67%) and extended families (05%)

In terms of occupation, most mothers were housewives (75%), followed by mothers with agriculture (13.33%). Smaller proportions were engaged in other occupations.

With respect to family monthly income, the majority of mothers reported an income in the 10,001-15,000rs (40%) category, followed by 15,001-20,000rs (28.33%). The remaining were distributed among other income categories.

With regard to the no. of children in the family, the majority of mothers had two children (40%), followed by those with one children (38.33%). Three children (16.67%). The remaining were reported among other categories.

Regarding age of children in the family, the majority belonged to the age group between 6-12 months (45%), followed by those in the 13-18 months (40%). The remaining children were in the age group of 19-24 months.

Part B: Baseline assessment of mothers knowledge levels based on pre-test scores.

The degree of weaning knowledge among mothers of children aged 6 months to 2 years revealed that the majority had average knowledge 38.33%, whereas 28.33% mothers had poor knowledge, following mothers with good knowledge 25% and merely 8.33% participants had very poor knowledge.[Table 1]

(N=60).

Serial number	Score interval	Knowledge category	Pre-test	
			Frequency	Percentage (%)
1.	**0-6**	**Very poor**	05	8.33
2.	**7-12**	**Poor**	17	28.33
3.	**13-18**	**Average**	23	38.33
4.	**19-24**	**Good**	15	25
5.	**25-30**	**Very good**	0	0.00
Total			**60**	**100**

Table 1:- Formulated knowledge by the investigator based on pre-test score distribution

Part C: Effectiveness of the video assisted teaching module on maternal knowledge regarding weaning among mothers of children aged between 6 months to 2 years.

Before video assisted teaching module, the majority of mothers had average knowledge regarding weaning (38.33%). Following the module, a substantial improvement was observed, with most mothers demonstrated very good knowledge (100%).[Table 2]

(N=60)

Serial number	Score interval	Knowledge category	Pre -Test		Post -Test	
			Frequency	Percentage (%)	Frequency	Percentage (%)
1.	**0-6**	**Very poor**	05	8.33	00	00
2.	**7-12**	**Poor**	17	28.33	00	00
3.	**13-18**	**Average**	23	38.33	00	00
4.	**19-24**	**Good**	15	25	00	00
5.	**25-30**	**Very good**	0	00	60	100
Total			**60**	**100**	**60**	**100**

Table 2 :-Percentage distribution of mothers based on their level of knowledge during pre-test and post-test.

Part D: Association between the Knowledge levels and selected socio-demographic variables.

The association between the knowledge scores of mothers and the chosen sociodemographic variables is determined using the chi-square and fisher exact tests.

The computed chi-square value for the sociodemographic characteristics, such as age, education, religion, family type, occupation, family month income, number of children in family, age of children in family are 0.6494, 0.1695, 4.4209, 3.1981, 0.1492, 0.4714, 0.6432and 4.4106. The table value of chi-square is 3.84. The computed value of Chi square for religion and age of children in family are greater than the table value of chi square and indicates there was a significant association. Chi-square values for age, education, family type, occupation, monthly family income and number of children in the family are lower than chi square table values, indicating that there was no significant association between the chosen sociodemographic variables and their weaning knowledge. $P<0.05$.[Table 3]

(N=60)

SL. NO.	Socio-Demographic variables	df	χ^2 Calculated value	χ^2 Table value	Association
1.	Age	1	0.6494	**3.84**	Not significant
2.	Education	1	0.1695	**3.84**	Not significant
3.	Religion	1	4.4209	**3.84**	Significant
4.	Family type	1	3.1981	**3.84**	Not significant
5.	Occupation	1	0.1492	**3.84**	Not significant
6.	Monthly family income	1	0.4714	**3.84**	Not significant
7.	Number of children in family	1	0.6432	**3.84**	Not significant
8.	Age of children in family	1	4.4106	**3.84**	Significant

Table 3 :- Association between the knowledge levels and selected socio-demographic variables.

DISCUSSION

The present study mothers of children between the ages of six months and two years were assessed regarding weaning and evaluated the effectiveness of a teaching module. The results showed that the majority of the mothers had average knowledge at baseline, indicating gaps in awareness regarding appropriate weaning practices. There was noticeable increase in the knowledge after the video-assisted teaching module, indicating the efficacy of video assisted teaching module. These findings are consistent with earlier studies that reported improved maternal knowledge after video assisted teaching module. The studies influenced me to conduct this present study as follows.

A study conducted with a aim to evaluate the effectiveness of education video intervention in increasing weaning knowledge among rural mothers. The study used a quasi-experimental one-group pre-test and post-test design. 60 mothers in a rural Kanpur district with infants ages 0-4 years, selected as per convenient sampling technique. With regard to pre-test, most of the mothers had average knowledge,70.0% and few with good knowledge 26.66% regarding weaning and 17.33 ± 4.95 was mean score. In the post-test, none of the participants had low knowledge, while the majority of mothers of infants, or 83.33%, had excellent knowledge. The mothers score increased to 33.0 ± 4.76 on video-assisted teaching module, which was at the $P< 0.001$.[12]

CONCLUSION

Following in-depth analysis of the data, it is recognized that only 38.33% mothers of children aged between 6 months to 2 years were having average knowledge. It is possible for the mothers with average knowledge to raise the healthy children. Therefore, more research can be done utilizing various teaching approaches to attain the best possible understanding of weaning. Additionally, the researcher advices future researchers to carry out comparable studies on a larger scale with other demographic factors using various methods in various states.

RECOMMENDATIONS

Bases on the findings of the study following recommendations are made.

- To compare the findings, a comparable study may be conducted in various states or countries.
- To generalize the results, the same study might be conducted again with a larger sample.
- It is possible to suggest a similar study utilizing an alternative teaching approach.

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